SANS ISC: Hancitor activity resumes after a hoilday break - SANS Internet Storm Center SANS Site Network Current Site SANS Internet Storm Center Other SANS Sites Help Graduate Degree Programs **Security Training Security Certification Security Awareness Training Penetration Testing Industrial Control Systems Cyber Defense** Foundations DFIR Software Security Government OnSite Training SANS ISC InfoSec Forums

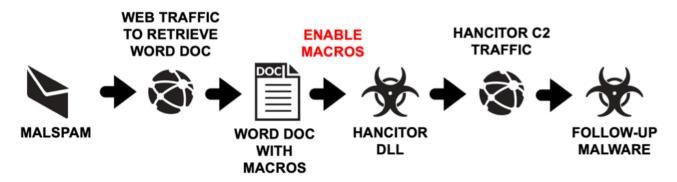
sc.sans.edu/forums/diary/Hancitor+activity+resumes+after+a+hoilday+break/26980/

Introduction

Campaigns spreading Hancitor malware were active from October through December 2020, but Hancitor went quiet after 2020-12-17. On Tuesday 2021-01-12, criminals started sending malicious spam (malspam) pushing Hancitor again. Some people have already tweeted about this year's first wave of Hancitor. See the links below.

Today's diary reviews recent Hancitor activity from Tuesday 2021-01-12, where we also saw Cobalt Strike after the initial infection.

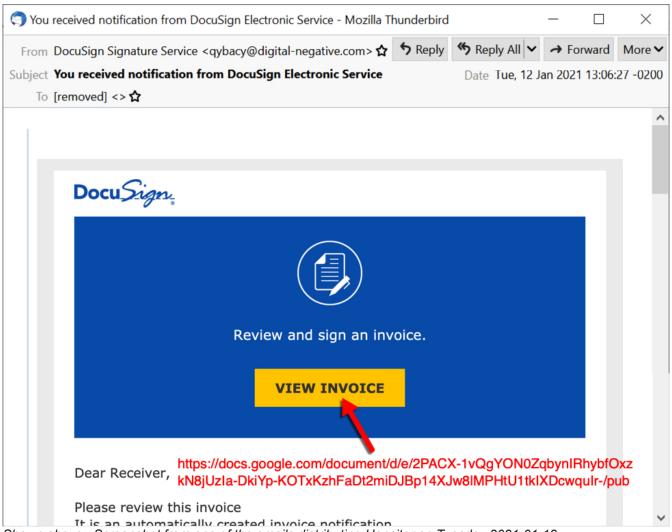
HANCITOR INFECTION - CHAIN OF EVENTS



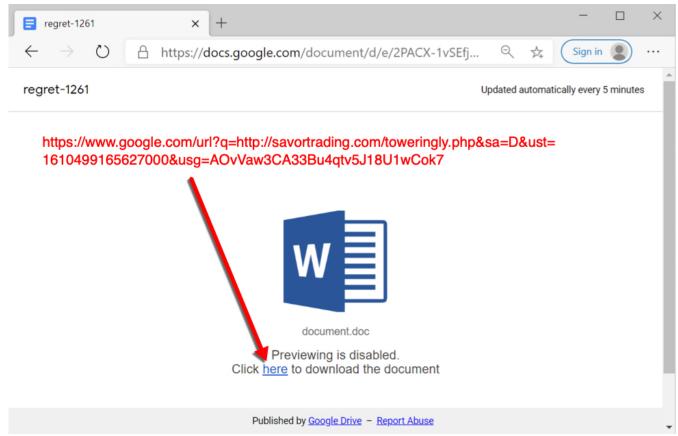
Shown above: Flow chart for recent Hancitor infection activity.

The malspam

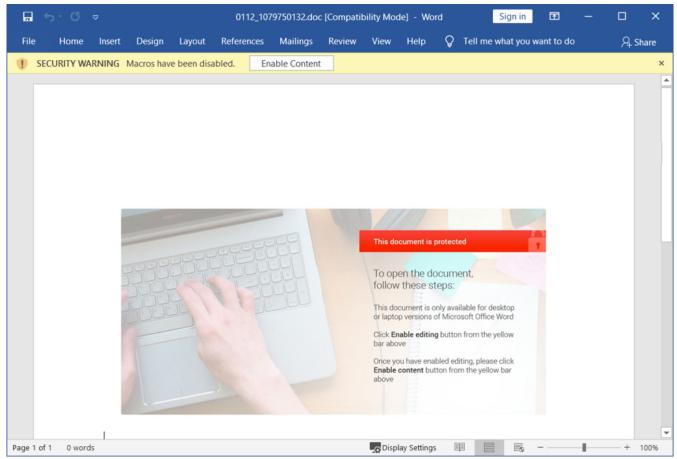
On Tuesday 2021-01-12, malspam spreading used the same fake DocuSign template we saw several times last year. These emails have a link to a Google Docs page.



Shown above: Screenshot from one of the emails distributing Hancitor on Tuesday 2021-01-12.



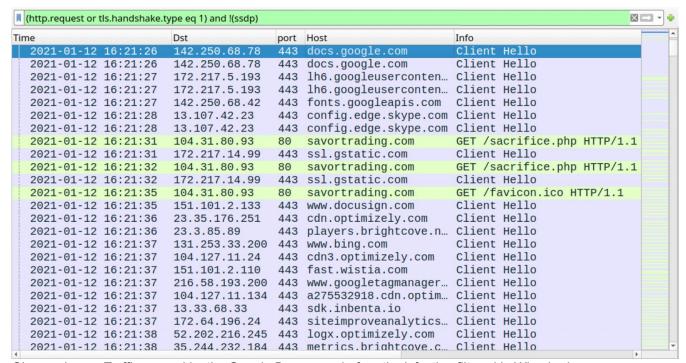
Shown above: Link from the email redirects to a page that can generate a Word document for Hancitor.



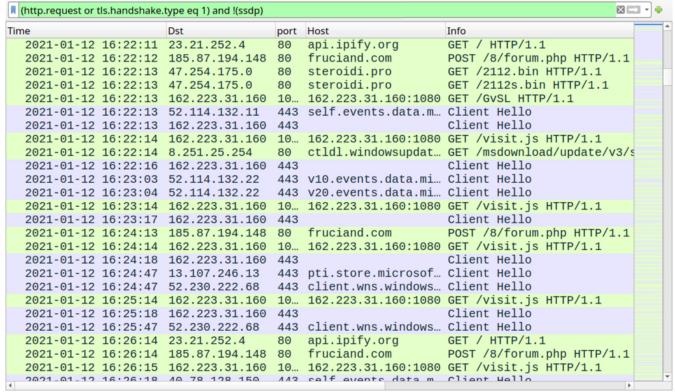
Shown above: Word document with macros for Hancitor.

Infection traffic

As you might expect, traffic to the Google Docs page and clicking on the link generates a great deal of related web activity, mostly HTTPS traffic. Shortly after the Word document is sent, we find indicators of Hancitor and Cobalt Strike malware. I've always seen Cobalt Strike when I test Hancitor in an Active Directory (AD) environment. if you're investigating an actual Hancitor infection, be aware that it will likely send Cobalt Strike if the victim host is signed into an work environment that uses AD.



Shown above: Traffic caused by the Google Docs page before the infection filtered in Wireshark.



Shown above: Hancitor and Cobalt Strike traffic within an AD environment.

Indicators of Compromise (IOCs)

The following are indicators associated with Hancitor infections from Tuesday 2021-01-12.

Date/time of the six messages:

- Tue, 12 Jan 2021 15:06:25 +0000 (UTC)
- Tue, 12 Jan 2021 16:06:06 +0000 (UTC)
- Tue, 12 Jan 2021 16:41:01 +0000 (UTC)
- Tue, 12 Jan 2021 16:48:35 +0000 (UTC)
- Tue, 12 Jan 2021 17:09:10 +0000 (UTC)
- Tue, 12 Jan 2021 18:06:56 +0000 (UTC)

IP addresses the malspam was received from:

- Received: from digital-negative.com ([179.154.63.198])
- Received: from digital-negative.com ([74.85.247.234])
- Received: from digital-negative.com ([181.137.227.228])
- Received: from digital-negative.com ([104.161.24.86])
- Received: from digital-negative.com ([23.236.75.32])
- Received: from digital-negative.com ([112.15.74.137])

Spoofed sending addresses:

- From: "DocuSign Signature Service" <qybacy@digital-negative.com>
- From: "DocuSign Signature and Invoice" <iqinica@digital-negative.com>
- From: "DocuSign Electronic Signature and Invoice Service" <eupanic@digital-negative.com>
- From: "DocuSign Electronic Signature " <uvizao@digital-negative.com>
- From: "DocuSign Signature Service" <nuxzoj@digital-negative.com>
- From: "DocuSign Electronic Signature Service" <zwtmicy@digital-negative.com>

Subject lines:

- Subject: You received notification from DocuSign Electronic Service
- Subject: You received notification from DocuSign Service
- Subject: You got notification from DocuSign Electronic Signature Service
- Subject: You got invoice from DocuSign Electronic Signature Service
- Subject: You got notification from DocuSign Service
- Subject: You received notification from DocuSign Electronic Signature Service

Links from the malspam:

- hxxps://docs.google[.]com/document/d/e/2PACX-1vSEfjWipv61XyrbNDn1neBUGeHzEPM35pYN5QRYrpUy4X-sbHybYEZ7b6Zf8yGyA_1e4wNj452FD_O/pub
- hxxps://docs.google[.]com/document/d/e/2PACX-1vTiMxxKYdtOy98JFAiBaNe1W-VVdRGcZOZurDYA1jhcat-mcbcA8Uw7m_v4BvJ-H3o9m7ML_TtRNPQP/pub
- hxxps://docs.google[.]com/document/d/e/2PACX-1vShuUk4DvIVthVxqc8UIUgZ7hOQzBQ1Dop8sXP73qBfS-JrlSrdlaZslExSyrr459kvaMmWbOAUkYii/pub
- hxxps://docs.google[.]com/document/d/e/2PACX-1vRQ8skYzE8fzy9FnmU06fNCSEBTGwdYCxE1_NyLjxTCG7uEhpFtmI_IWAtk1FFmuQyAReDSuUCdyCFs/pub
- hxxps://docs.google[.]com/document/d/e/2PACX-1vT_UMMUFR8J8lbN7rthTdttvciBU-17slZ2anuIq4A-8zT4xtF9ngzzyiEjlE8HSDZQ5tWu_w6HBFMf/pub
- hxxps://docs.google[.]com/document/d/e/2PACX-1vQgYON0ZqbynIRhybfOxzkN8jUzla-DkiYp-KOTxKzhFaDt2miDJBp14XJw8lMPHtU1tklXDcwqulr-/pub

URLs that returned script to create the Word docs:

- hxxp://savortrading[.]com/toweringly.php
- hxxps://libifield.co[.]za/figs.php
- hxxps://expertcircles[.]co[.]uk/assotiation.php
- hxxps://libifield[.]co[.]za/oilcan.php
- hxxp://3.133.244[.]105/irs.php

8 examples of downloaded Word docs (read: SHA256 hash - file name):

- 080bade36015dd79925bab0975ac0f30f18424bdd1e7836d63c2dee350bdbd69 0112 528419802.doc
- 2ac3b573d70c40c5c0fafe4e5914c723f2322a1c9cd76d232447654604ff8b76 0112 929792452.doc
- 385425e94ed8ac21d7888550743b7a2b89afbeb51341713adb6da89cd63b5aff 0112 203089882.doc
- 7b013a271432cc9dea449ea9fcf727ed3caf7ce4cc6a9ba014b3dd880b5668dd 0112 1079750132.doc
- 8bcf45c2de07f322b8efb959e3cef38fb9983fdb8b932c527321fd3db5e444c8 0112 1005636132.doc
- cab2a47456a2c51504a79ff24116a4db3800b099ec50d0ebea20c2c77739276d 0112_722674781.doc
- d6755718c70e20345c85d18c5411b67c99da5b2f8740d63221038c1d35ccc0b8 0112 153569242.doc
- ed3fa9e193f75e97c02c48f5c7377ff7a76b827082fdbfb9d6803e1f7bd633ca 0112_114086062.doc
- Note: Each of the above files is 753,152 bytes in size.

SHA256 for 8 examples of DLL files dropped by the Word docs:

- 00b2312dd63960434d09962ad3e3e7203374421b687658bd3c02f194b172bfe3
- 0941090d3eb785dbf88fbfafffad34c4ab42877b279129616a455347883e5738
- 43690eaf47245d69f4bda877c562852e4a9715955c2160345cb6cc84b18ca907
- 82c9bc479ea92c1900422666792877e00256996ce2f931984115598ed2c26f23
- 878319795a84ebfe5122d6fc21d27b4b94b3c28ad66679f841dec28ccc05e801
- c3e06473c4c3d801c962e6c90ccbcab3d532fb5a6649077ea09cd989edf45eaf
- cdcd5ee8b80d3a3863e0c55d4af5384522144011b071d00c9c71ae009305f130
- edabef17fce2aaca61dbd17a57baf780cd82a2b0189b0cf3c5a7a3ca07e94a44
- Note 1: Each of the above file is 570,368 bytes in size.
- Note 2: Each file was saved at C:\Users\[username]\AppData\Roaming\Microsoft\Templates\W0rd.dll

Traffic to retrieve the Word doc:

- port 443 docs.google.com HTTPS traffic
- 104.31.80[.]93 port 80 savortrading[.]com GET /sacrifice.php

Hancitor post-infection traffic:

- port 80 api.ipify.org GET /
- 185.87.194[.]148 port 80 fruciand[.]com POST /8/forum.php

Binaries used to infect host with Cobalt Strike:

- 47.254.175[.]0 port 80 **steroidi[.]pro** GET /2112.bin
- 47.254.175[.]0 port 80 steroidi[.]pro GET /2112s.bin

Cobalt Strike Post-infection traffic:

- 162.223.31[.]160 port 1080 162.223.31[.]160:1080 GET /GvSL
- 162.223.31[.]160 port 1080 162.223.31[.]160:1080 GET /visit.js
- 162.223.31[.]160 port 443 HTTPS traffic

Final words

Hancitor has been active and evolving for years now, and it remains a notable presence in our current threat landscape. This diary reviewed a recent infection on a vulnerable Windows host from malspam sent on Tuesday 2021-01-12.

Decent spam filters and best security practices should help most people avoid Hancitor infections. Default security settings in Windows 10 and Microsoft Office 2019 should prevent these these infections from happening. However, it's a "cat-and-mouse" game, with malware developers developing new ways to circumvent security measures, while vendors update their software/applications/endpoint protection to address these new developments. And malware distribution through email is apparently cheap enough to remain profitable for the criminals who use it.

A pcap of the infection traffic, some emails, and malware associated with today's diary can be found here.

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