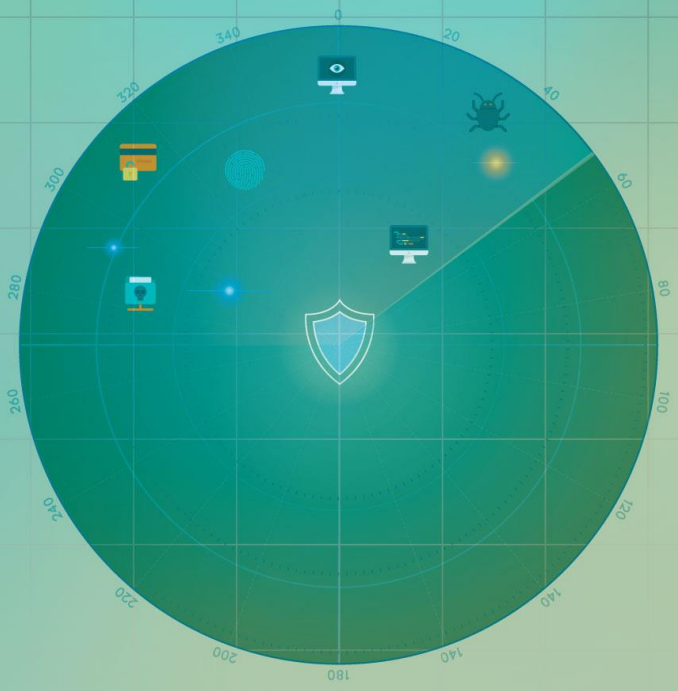
TLP: WHITE

Malware Threat Intelligence Report for Bangladesh Context, 2021



DIGITAL SECURITY AGENCY

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BANGLADESH COMPUTER COUNCIL
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Report Period: Jan,2021 - Dec, 2021

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BGD e-GOV CIRT

Bangladesh e-Government Computer Incident Response Team

Cyber Threat Intelligence

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About this Report

The goal of this report is to provide actionable intelligence regarding threat actors and the malware or other tools they use for reconnaissance, delivery, exploitation, and so forth in order for security operations teams to be empowered to more quickly detect and respond to this specific threat. This information is also intended so that security operations teams can utilize the intelligence in this report in order to set up preventative measures for their IT asset/network/system/cyber resources.

This threat intelligence report is based on analysis from the BGD e-GOV CIRT team in which we examine TOP malware families specific for Bangladesh context for the period of January,2021 to December,2021. The malware families which are listed in this report were detected by BGD e-GOV CIRT's analysis from its various trusted sources.

Top active ransomware in Bangladesh (period of January,2021 to December,2021) are:

- Zeppelin
- Egregor
- Ryuk
- Neer
- REVIL
- CONTI

Top Malware family in Bangladesh (period of January, 2021 to December, 2021) are:

- RedLine Stealer
- Panda
- Keybase
- Necurs Botnet
- Sality
- QBot
- KASABLANKA
- Sombra or SombRAT
- Emotet
- AZORult
- KPOT Stealer
- Oski Stealer
- FormBookFormgrabber
- Loki PWS
- Nexus Stealer
- TrickBot
- Kinsing
- Outlaw hacking group cryptocurrency miners

Advanced Persistent Threat (APT) threats in Bangladesh:

- APT41
- NXSMS
- HAFNIUM
- DARK HALO
- TRANSPARENT TRIBE
- APT28
- PATCHWORK
- APT-C-61
- APT C-35 (DoNot Team)
- Sidewinder
- RedDelta
- SYSTEMBC TA
- BASILISK
- Lazarus
- Silence
- OceanLotus

General Definition

Ransomware is malicious software that infects a computer and prevents users from accessing it until a ransom is paid. For numerous years, ransomware variations have been noticed, and they frequently try to extort money from victims by presenting an on-screen alert. The user's systems have been locked or the user's files have been encrypted, according to these notifications. Users are informed that access will not be restored unless a ransom is paid. Individuals are regularly requested to pay a ransom in virtual money such as Bitcoin.

Malware (malicious software) is any software intentionally designed to cause damage to a computer, server, client, or computer network (by contrast, software that causes unintentional harm due to some deficiency is typically described as a software bug). A wide variety of types of malware exist, including computer viruses, worms, Trojan horses, ransomware, spyware, adware, rogue software, and scareware.

Trojan horses

A Trojan horse is a harmful program that misrepresents itself to masquerade as a regular, benign program or utility in order to persuade a victim to install it. A Trojan horse usually carries a hidden destructive function that is activated when the application is started.

Stealer/Info Stealer

An information stealer (or info stealer) is a Trojan that is designed to gather information from a system. The most common form of info stealer gathers login information, like usernames and passwords, which it sends to another system either via email or over a network. Other common information stealers, such as keyloggers, are designed to log user keystrokes which may reveal sensitive information.

Cryptomining malware

Cryptomining malware, or cryptocurrency mining malware or simply cryptojacking, is a relatively new term that refers to software programs and malware components developed to take over a computer's resources and use them for cryptocurrency mining without a user's explicit permission.

Attack Vector

In cyber security, an attack vector is a pathway or method used by a cyber attacker to illegally access a network or computer in an attempt to exploit system vulnerabilities.

Indicator of compromise (IOC)

Indicator of compromise (IoC) in computer forensics is an artifact observed on a network or in an operating system that, with high confidence, indicates a computer intrusion.Typical IoCs are virus signatures and IP addresses, MD5 hashes of malware files, or URLs or domain names of botnet command and control servers.

Command and Control (CnC) Server

A command-and-control (C&C) server is a computer controlled by an attacker or cybercriminal which is used to send commands to systems compromised by malware and receive stolen data from a target network. Many campaigns have been found using cloud-based services, such as webmail and file-sharing services, as C&C servers to blend in with normal traffic and avoid detection.

Dropper

A dropper is a kind of Trojan that has been designed to "install" some sort of malware (virus, backdoor, etc.) to a target system. The malware code can be contained within the dropper (single-stage) in such a way as to avoid detection by virus scanners or the dropper may download the malware to the target machine once activated (two stage).

Backdoor

A backdoor is a typically covert method of bypassing normal authentication or encryption in a computer, product, embedded device. Backdoors are most often used for securing remote access to a computer, or obtaining access to plaintext in cryptographic systems. From there it may be used to gain access to privileged information like passwords, corrupt or delete data on hard drives, or transfer information.

Bot

Malware bots are used to gain total control over a computer.

Remote access Trojan (RAT)

A remote access Trojan (RAT) is a malware program that includes a back door for administrative control over the target computer. RATs are usually downloaded invisibly with a user-requested program -- such as a game -- or sent as an email attachment. Once the host system is compromised, the intruder may use it to distribute RATs to other vulnerable computers and establish a botnet.

DDoS

A distributed denial-of-service (DDoS) attack is a malicious attempt to disrupt the normal traffic of a targeted server, service or network by overwhelming the target or its surrounding infrastructure with a flood of Internet traffic.

Spyware:

Spyware is unwanted software that infiltrates your computing device, stealing your internet usage data and sensitive information.

Advanced persistent threat (APT)

An advanced persistent threat (APT) is a stealthy threat actor, typically a nation state or state-sponsored group, which gains unauthorized access to a computer network and remains undetected for an extended period.

The whole purpose of an APT attack is to gain ongoing access to the system. Hackers achieve this in a series of stages.

Stage One: Gain Access

Like a burglar forcing open a door with a crowbar, cybercriminals usually gain entry through a network, an infected file, junk email, or an app vulnerability to insert malware into a target network.

Stage Two: Establish a Foothold

Cybercriminals implant malware that allows the creation of a network of backdoors and tunnels used to move around in systems undetected. The malware often employs techniques like rewriting code to help hackers cover their tracks.

Stage Three: Deepen Access

Once inside, hackers use techniques such as password cracking to gain access to administrator rights so they can control more of the system and get even greater levels of access.

Stage Four: Move Laterally

Deeper inside the system with administrator rights, hackers can move around at will. They can also attempt to access other servers and other secure parts of the network.

Stage Five: Look, Learn, and Remain

From inside the system, hackers gain a full understanding of how it works and its vulnerabilities, allowing them to harvest the information they want at will.

Hackers can attempt to keep this process running — possibly indefinitely — or withdraw once they accomplish a specific goal. They often leave a back door open to access the system again in the future.

Ref: https://www.kaspersky.com/resource-center/definitions/advanced-persistent-threats

Network signatures/Rules

A signature is a set of rules that an IDS and an IPS use to detect typical intrusive activity. Rules are a different methodology for performing detection, which bring the advantage malware detection. Developing a rule requires an acute understanding of how the vulnerability actually works.

Threat level: High

indicates a severe risk of hacking, virus, or other malicious activity resulting in widespread outages and/or significantly destructive compromises to systems

Threat level: Medium

indicates a significant risk due to increased hacking, virus, or other malicious activity that compromises systems or diminishes service.

Ransomware: Zeppelin

Zeppelin Ransomware is offered as ransomware-as-a-service (RaaS) by buransupport seller. At the beginning, burransupport sold its Ransomware under the name Buran but lately he changed topic name to Zeppelin.

Attack Vectors

RDP, VPN vulnerabilities, and phishing.

Indicators of Compromise (IOCs)

CnC:

216[.]249[.]104[.]215
45[.]142[.]213[.]167
iplogger[.]ru
iplogger[.]org
btcxchange[.]online
bad_sysadmin(at)protonmail[.]com
Vsbb(at)firemail[.]cc
Vsbb(at)tutanota[.]com
buratino(at)firemail[.]cc
buratino2(at)tutanota[.]com
ran-unlock(at)protonmail[.]com
ranunlock(at)cock[.]li
buratin(at)torbox3uiot6wchz[.]onion
wp[.]com
cox[.]net
198[.]54[.]117[.]244
autograf[.]pl
stack-sonar[.]com
208[.]67[.]222[.]222
208[.]67[.]220[.]220
4[.]2[.]2[.]1

MD5:

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Ransomware: Egregor

Egregor is a ransomware variant belonging to the Sekhmet malware family that has been active since September 2020.The ransomware organization infiltrates businesses, grabs data, and then encrypts everything. The intricacy of their attacks, their ability to infect a wide spectrum of victims, and a large increase in their activities indicate that Egregor ransomware operators have become more sophisticated. In terms of negotiating with victims, Egregor is perhaps the most aggressive ransomware family. Its operators only allow you 72 hours to get in touch with them. If the ransom is not paid, the information is made public on the attacker's website, "Egregor News."A separate chat function given to each victim is used to negotiate and agree on the ransomware payment. Bitcoin is used to make the payment.

Attack Vectors

Remote Desktop Protocol(RDP)
Phishing Emails
Software / Hardware Vulnerability

Indicators of Compromise (IOCs)

CnC:

91[.]199[.]212[.]52
49[.]12[.]104[.]241
45[.]153[.]242[.]129
185[.]238[.]0[.]233
Crt[.]sectigo[.]com
hxxp://49[.]12[.]104[.]241:81/78.bin
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MD5:

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SHA1:

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e27725074f7bc55014885921b7ec8b5319b1ef8f
ed5b60a640a19afe8d1281bf691f40bac34eba8a
f0215aac7be36a5fedeea51d34d8f8da2e98bf1b
f7bf7cea89c6205d78fa42d735d81c1e5c183041
5a346fb957abeba389424dc57636edcacc58b5ba
901cee60fba225baf80c976b10dfa1684a73f5ee
a6259615ea10c30421e83d20f4a4b5f2c41b45b8
03cdec4a0a63a016d0767650cdaf1d4d24669795
4ea064f715c2a5f4ed68f57029befd8f406671dd
ac634854448eb8fcd3abf49c8f37cd21f4282dde
7bc6c2d714e88659b26b6b8ed6681b1f91eef6af
0579da0b8bfdfce7ca4a45baf9df7ec23989e28b
3a33de9a84bbc76161895178e3d13bcd28f7d8fe
f7bf7cea89c6205d78fa42d735d81c1e5c183041
986f69a43e0bf174f73139785ec8f969acf5aa55
f1603f1ddf52391b16ee9e73e68f5dd405ab06b0
5a346fb957abeba389424dc57636edcacc58b5ba
901cee60fba225baf80c976b10dfa1684a73f5ee
a6259615ea10c30421e83d20f4a4b5f2c41b45b8
4ea064f715c2a5f4ed68f57029befd8f406671dd
f73e31d11f462f522a883c8f8f06d44f8d3e2f01
ac6d919b313bbb18624d26745121fca3e4ae0fd3
95aea6b24ed28c6ad13ec8d7a6f62652b039765e
a786f383dfb90191aa2ca86ade68ee3e7c088f82
631924a3567390a081dbd82072a6fc3a185c5073
1be22505a25f14fff1e116fafcaae9452be325b1
a2d5700def24c3ae4d41c679e83d93513259ae4a
34a466a0e55a930d8d7ecd1d6e6c9c750082a5fe
2edaa3dd846b7b73f18fa638f3e1bc3a956affa4

SHA256:

072ab57f9db16d9fb92009c8e10b176bd4a2eff01c3bc6e190020cf5a0055505
1a722cde21a4338b26bc37401ef963022d97cea141c985e6615a10287f8d02ff
28f3f5a3ea270d9b896fe38b9df79a6ca430f5edab0423b3d834cf8d586f13e6

2d01c32d51e4bbb986255e402da4624a61b8ae960532fbb7bb0d3b0080cb9946
386cf4e151bc7510c3333eb1a5c96ab1b7becd8cfb94bcb76e93458078daf66f
3dba9fbef8f8a42ecfa65022b8a3c54738d15ef67c666272078b58b3c9a0a414
410afc5daebd7b39410b046286b814bb5fb5f9139167cd310bc59cc4461d4083
49b3d9c3bd6b6a13f89f0e849d80531454cc5cd259cbb7c8a806c67cd403575e
5455d104e693445dce5567236f4e047617bae7f09d5ca8699a838c2d17d37fb3
561092877e91f2741ed061cbe7a57d1af552b600c6654ccc588cb6bff7939152
605c2047be7c4a17823ad1fa5c1f94fd105721fce3621dc9148cd3baf352938e
7222c8acc69a7598989c335d528b366f801a41b434cbf928c6aef01f8e54f57a
7caed5f406445c788543f55af6d98a8bc4f0c104e6a51e2564dd37b6a485cc18
9fffabede0ef679970666f04184340437cd70bc8fe870ee8174713ececf32398
b027467332243c8186e59f68ff7c43c9e212d9e5074fedf003febcfedad4381a
b81d2293b43decd5a401487da952deb32cbb53f118882b97b457a14c67029247
c1c4e677b36a2ee6ae858546e727e73cc38c95c9024c724f939178b3c03de906
c9d46c319ed01c183598f7b9a60b9bca34b2eea989f4659e9aa27c7a1bf8681c
e3ef50749f144bfd7f5d7d51aaa9e2332b706c4d8ac130fdc95f50662525f6e0
f1ba626b8181bd1cd84f47f70838d9fa4d8117fac3bd07cbd73cb6f73b1297f8

Ransomware: Ryuk

Ryuk ransomware operators continue to strike key infrastructure and exact hefty ransom payments from susceptible groups, including a recent attack on a large health-care company. Ryuk ransomware attacks using remote desktop protocol (RDP) endpoints to carry out school ransomware assaults.

Attack Vectors

Phishing Emails

Related Tools

Cobalt Strike
SharpHound (BloodHound)
Rubeus
Adfind
Vsftpd
SystemBC
GMER
Kerbrute

Indicators of Compromise (IOCs)

CnC:

5[.]2[.]64[.]172
88[.]119[.]174[.]128
149[.]28[.]215[.]46
http://mn[.]fastbloodhunter[.]com/templates
mn[.]fastbloodhunter[.]com
fastbloodhunter[.]com
chainnss[.]com
krdgxojtymnlphxqdeec[.]com
217[.]8[.]117[.]17
uqwmftwyagxukjrhjlnp[.]com
51[.]159[.]31[.]94
ehuxktuwpkmqyqyqvrtv[.]com
imagn[.]at
lastcost2020[.]com
freebreez[.]com
exjlgnxcdadvjhkfptka[.]com
lastcost2020[.]info
advjhkfwkkhnbaetobcx[.]com
quartanam[.]com
karamelliar[.]org

rkbthfiysckqfbiqbfmu[.]com
lastcost2020[.]org
wuktmlbilrsbvsbkdetb[.]com
dogrunn[.]com
glosavrmibdlidbrcrax[.]com
omkmsefdhyngxknhtuqb[.]com
rrleuleuetijabsnqsgn[.]com
ncbdyfstrvneupadwlim[.]com
vfmawfotjeqprnvfmawf[.]com
tvlmfacgscbjlndewpxn[.]com
litlblockblack[.]com
yrsfuaegsevyffrfsgpj[.]com
baetobcxgrumftquoygp[.]com
hbamefphmqsdgkqojgwe[.]com
wdwrhikolxfwyyhwwfut[.]com
dglnvraldgkqqfognlcf[.]com
51[.]159[.]57[.]157
ehhnhaspefjhrdgcixyb[.]com
uwddrbivhweeoihvfytq[.]com
142[.]93[.]7[.]219
hconpltdkqibpgdfhwar[.]com
amagank[.]com
fkpryushemtfiekasjco[.]com
hjlomyevtehbnoossxtc[.]com
91[.]241[.]19[.]51
tpxhoiywfoxlqlcdhgmi[.]com
itqssosgjbloiuuuuumd[.]com
lxsltjemrnvfmvdonvyw[.]com
glnvrmhedrburkntpkfc[.]com
wfotjeqprnvfmawfotje[.]com
mawfotjeqprnvfmawfot[.]com
185[.]176[.]27[.]133
olpons[.]com
217[.]8[.]117[.]90
notsweets[.]net
banlo[.]org
xevgtmfndrukjftkldax[.]com
vaktorianpackif[.]com
gunzo[.]org
owxcvctdqlclytkthawh[.]com
azoraz[.]net
gnyhwaxlqowpkyewtgli[.]com
xdrnuhhhgfgfgbkbsggd[.]com

yvibvuyolrfeegaophef[.]com
lastcost2020[.]in
ujgkeowdqrptlcsnxdsl[.]com
vilfrsoycxfpcaftpwfn[.]com
obcxgrumftquoygpwkhn[.]com
xetowijhldtmdvkfpumb[.]com
hoxfqvlgoabyfspvjimc[.]com

MD5:

120cf4d1f8e624642afa69869ae1af6b
e9dc058440d321aa17d0600b3ca0ab04
097cb948a1f011f5de11579849a08db5
e8673c8a299d1647ead6f3da4565ac54
553a3cbe0b19e58c5d48e9b0396690bf
a661aeb906f044b100f557a47f6003a1
1737388ce8b0b5fc2dbc22f5b7352b7c
8b44470c7ff69ae671ff6e04550ee15f
ab52b38a4f5393e5bf919b75c0abdbdf
d99731e275a92ae306fdbb09b5bd4d24

SHA1:

5ac1c7baacbdb59c55263f0d685f54ec0a688c1b
71015f9c281038d63bf7cd45894550c1a26c6b53
15bafbd10d9bb078839da143510aacd540fab480
607f6034eae83b6546060cff5085d79b0bb0a7cd
e62135254b3a51f0180e70a11e4c3ad4a59f81c4
123f9a7487cd0fdd772f0e7bb19e70d1ee3a32e7
1fe162d6461405f7bd2c8def91e547cf85b28638
a36676950f35f1255935a0fc8467bb28ff625edb

SHA256:

ff5e6fbf14c5eb35c1b4f24e4b08b30ba2e512a4b25ab7b652f0567edb94097e
edd0675e0fcce16ae7cbb1f10fbb8407ca5e0a188eab9682f43744c95e09f1c9
e8a3e804a96c716a3e9b69195db6ffb0d33e2433af871e4d4e1eab3097237173
d0d7a8f588693b7cc967fb4069419125625eb7454ba553c0416f35fc95307cbe
c9b06152ac1c851eaed84ee052c374341ed89d9a6e5a5d97bd0e4b941c01a274
c8076d0aa251a8c767e5f4c32c29588d46ffbed1709acaf9ca38b9d02ef7e276
c1f753047a0a5679aea0f675846364ea2f1fc4f9370f6caa89d0bfb1feb561f1
ba2a96dae66324df5bbb0751a04c538722ad49daa12d51625f8a1890608b1168
d7333223dcc1002aae04e25e31d8c297efa791a2c1e609d67ac6d9af338efbe8
9a11e1b2a6821857e1990a004447e35692d04e5b7d237697fbcc90b5198e3719
92f124ea5217f3fe5cbab1c37a961df0437d5a9cbde1af268c60c4b3194b80ed

6c7f43434e5db8703c0a47dedeeab976159d8704bfbe2e4ff65405f38d508e9d
4685e91b859b372b955c11d8d68fd562fad478520a2f4a05c46d1fe6fb991b61
3f58610586c87bb8b9f2e93768c5f289fe39ca8570902165df5d340bedc62247
32e51accf5a30da12e43b3c7f83867577fcd6fb363d7773a743ab1bbb9653d06
21cb81424dc1921344bd1cd9ad7c870fbcaadbe2e9f499d7863e9a06d7de6ee0
0d6a7a2c2d9ae89bf54f199fb63c67424d6e242777060971ee53b62dedad4096
0856b3c06805d3935b1db325c4e9c9131572b4cf09f07d989911495807775cab

Ransomware: Neer

Seems to be that Neer Ransomware is a STOP/DJVU Ransomware what uses a .neer file extension. This virus aims to encrypt all personal files on victim's computer using RSA Salsa20 cipher, mark each file with ".neer" extension and drop _readme.txt notes in every containing folder.

Attack Vectors

Infected email attachments (macros),
Torrent websites,
Malicious ads,
Unofficial activation and updating tools.

Related Tools

SmokeLoader

Indicators of Compromise (IOCs)

CnC:

astdg[.]top

Ransomware: REVIL

REVIL (also known as Sodinokibi, Unknown, UNKN) is a ransomware that was discovered in April 2019. REVIL uses a hybrid scheme, applying both symmetric and assymetric encryption (Salsa20), which stores a public key in the registry to encrypt data, and a private key for decrypting files. Presumably, it is selling on undergrounds forums as "private ransomware" by UNKN seller. Because it is selling as an affiliate revenue system, it allows other cybercriminals to spread it through several vectors. Malefactors used to exploit a zero-day vulnerability found in Oracle WebLogic (CVE-2019-2725), which allows attackers to easily gain full access to the server using an HTTP connection. Also they used a former Windows zero-day vulnerability CVE-2018-8453 to elevate itself to admin access on infected systems. It can be delivered to the victim's computer by Malicious spam, phishing campaigns with links or attachments. It is known that it was delivered via Rig EK. On June 2019 it was delivered by accessing networks via RDP (remote desktop protocol) and then utilizing MSP's (Managed Service Provider) console to drop Sodinokibi installers on end points.

Attack Vectors

Phishing emails with malicious attachments
Compromised RDP (Remote Desktop Protocol) credentials and
Exploitation of vulnerabilities in various public-facing services

Related Tools:

Cobalt Strike
Mimikatz
Crackmapexec
Psexec

Indicators of Compromise (IOCs)

CnC:

http://dnpscnbaix6nkwvystl3yxglz7nteicqrou3t75tpcc5532cztc46qyd[.]onion/
http://xsstorweb56srs3a[.]onion/threads/48608/
http://mellowc[.]sbddev[.]com/MR10[.]exe
dnpscnbaix6nkwvystl3yxglz7nteicqrou3t75tpcc5532cztc46qyd[.]onion
decoder[.]re
aplebzu47wgazapdqks6vrcv6zcnjppkbxbr6wketf56nf6aq2nmyoyd[.]onion
decryptor[.]cc
xsstorweb56srs3a[.]onion
mellowc[.]sbddev[.]com
smalleststores[.]com
cikawemoret34[.]space
cloudmetric[.]online

nomovee[.]website
54[.]39[.]233[.]132
185[.]193[.]141[.]248
45[.]67[.]14[.]162
185[.]234[.]218[.]9
178[.]20[.]41[.]149
195[.]189[.]99[.]74
161[.]35[.]109[.]168
45[.]86[.]163[.]78
206[.]189[.]10[.]247

MD5:

06674255566d1522c27f4e269a6e97de
ec6b5973bc90fcb387f63065c5392bfb
512b538ce2c40112009383ae70331dcf
0aa7a8c026553f595305d1f1d01a5f26
843911f67cf9f70ab708372a8d30de30
9b637e90a4fcd86f2070d60a4f42cc52
c927366d400a423f890b32bce6a0aa78
b80cbbee9676aa8c647066a2e97e1d0f
7fcbb3e0b3eca4f8afb052b64cee0823
fac2cf669daebaf56f2fd4b3e0da10c0
58c390fe5845e2bb88d1d22610b0ca61
cf79091ecc42a35689672b62e7f968ec
d449ab67b3a1c5c897048152429a7695
70d38d27bb438dd5712a942bcde3378f
5a01c407a8be2ac6a004d2c40a75264e
4c49ed010405b8ce42a75645ce67aeed
898c2b98cf810791ef0bd43df742112b
85ef958ee1a5cf9ea9d84385e25cb9c5
581fc5f7185e165284acd5e17737e533
dbe2e46d3f7d2bcd0a40927a67a133dd
7d82a9c9035cae8e37a754ac77e6c8d1
524fa132dfb6611ff5bb48486274ee8f
bfa13b57730fa93e578ee65bcca21da6
6dc266627079d874d817794dc2e46d52
db8b26bc4d47e6b9e9667d22845503b5
e6566f78abf3075ebea6fd037803e176
727a6d6f23d0837dd94d85d04952b84e
784919d8dfc5a3924734802502b481d5
1a6820fec1c45cd9c928533090e7908d
54ea3dffb3907e363e8fbb4947169da0
2f10742d0db002473c128822e1e4a86a

18f64d441c8dced086e35e5bd8000dfb

SHA-256:

45f91f803de1ef2558514a8a21c279ada5bb5ad4242c2941f3c982d0bc34e3d4
8dd620d9aeb35960bb766458c8890ede987c33d239cf730f93fe49d90ae759dd
0496ca57e387b10dfdac809de8a4e039f68e8d66535d5d19ec76d39f7d0a4402
dc6b0e8c1e9c113f0364e1c8370060dee3fcbe25b667ddeca7623a95cd21411f
df2d6ef0450660aaae62c429610b964949812df2da1c57646fc29aa51c3f031e
1fe9b489c25bb23b04d9996e8107671edee69bd6f6def2fe7ece38a0fb35f98e
d55f983c994caa160ec63a59f6b4250fe67fb3e8c43a388aec60a4a6978e9f1e
66490c59cb9630b53fa3fa7125b5c9511afde38edab4459065938c1974229ca8
d5ce6f36a06b0dc8ce8e7e2c9a53e66094c2adfc93cfac61dd09efe9ac45a75f
cc0cdc6a3d843e22c98170713abf1d6ae06e8b5e34ed06ac3159adafe85e3bd6
81d0c71f8b282076cd93fb6bb5bfd3932422d033109e2c92572fc49e4abc2471
d8353cfc5e696d3ae402c7c70565c1e7f31e49bcf74a6e12e5ab044f306b4b20
8e846ed965bbc0270a6f58c5818e039ef2fb78def4d2bf82348ca786ea0cea4f
e2a24ab94f865caeacdf2c3ad015f31f23008ac6db8312c2cbfb32e4a5466ea2
796800face046765bd79f267c56a6c93ee2800b76d7f38ad96e5acb92599fcd4
ea1872b2835128e3cb49a0bc27e4727ca33c4e6eba1e80422db19b505f965bc4
3d375d0ead2b63168de86ca2649360d9dcff75b3e0ffa2cf1e50816ec92b3b7d
d6762eff16452434ac1acc127f082906cc1ae5b0ff026d0d4fe725711db47763
C1A4878CBD32046E2FD73BBD910C62354C22BA5E53F10451420FD2F7E778A90C
CB77DC3AE2CEE170F3BD49148BF71080688E8CA3096AF1A07CC26677FB246404
1529519A30988F43B2A6ECE10F4115AB7EC282F25D3255F2A99A890E1C1C08DB
1D8D0EE5E83DA80F119E53527577A2B70D8A65282B3F9D011F178E34D3582823
1E22338DFB7BE3F01E2ACB28984039EF6381FC67AB8771E2EEF254687F3D0B96
3B5DD6038D9CB2DFD7D5089B629B1A3EFBC4A79EBDD1DC773B9790917E40849F
43AEF9C8395CB4BEBAED211E1A364CDF3074B80FF0A3150CD941A07977024B03
53178B6CF05DE5165B5B15C88426215B502DCC4C681E8C049E37E3BB503CBEC9
5DDE3386E0CE769BFD1880175168A71931D1FFB881B5050760C19F46A318EFC9
6A2BD52A5D68A7250D1DE481DCCE91A32F54824C1C540F0A040D05F757220CD3
7BE57F5067BB6DA0EF6804A49C8F4BA951E3E668E4B9C51AD492DF16C925A1B7
893FE5EFAFE1F89C93802840D71FFDA98D8F586220537CB03FA81B9F6D6044E0
ADEF0855D17DD8DDDCB6C4446E58AA9F5508A0453F53DD3FEFF8D034D692616F
BD034A6A4481AC8902E20F98350D47D06A035C57E5EA8A21D34BFE017EDB13DA
BF7114F025FFF7DBC6B7AFF8E4EDB0DD8A7B53C3766429A3C5F10142609968F9
D5F7964DC07BB3465FBC3A995FCADD623197716480F6B86518A5DFDAFC9F3AF7
E776DE801B898C65CBEF480CCEC47A60C1436E4BA1EA11F99EF2B90AB05961FF
7c7ad08931468eecb7a250a9108936976ce8b2eaae9489cf2a802580851b9f32
36fa3f72afc2dd6f206a295fc618038fef5e241bc48bd5451ac9bab9128734dd
9aec4ab2c722c0ce0a01fcb5ac05b3f3d014b3f233f4b96d8f5e0f7826011a9c
9f58b1fed5eef303f06e23f48c9359d2a74f51235677ae880bce67d76f5c827c
9fa3a004576f357b5174dd1c29ef7d13005d996d5f9fb4b86d6d978d1a4a84ae

861bc212241bcac9f8095c8de1b180b398057cbb2d37c9220086ffaf24ba9e08
90c9b6460c240177644d028458874167fedf7ca459381dde17d44446bb9ba501
6efd9aae5e112418bd43ab48ec4a1fce191c7503fcd11fdb95e89ad0217adb7a
6727edbb5d6abee908851a8c5fd7b4aca6d664634fdcdfc15e04502b960abbc5
17d153a225ea04a229862875795eeec0adb8c3e2769ba0e05073baaf86850467
c4a7f8b8046a6623cd7909bacb1cbef13471a4efd8adb4aedbf7fc1377ab502d
a3f077a4c29c522d9d70e3b22778c5a07239b6949562b37617e5ac913843076d
29e5da1f13de425e105f065be573793c41e5bf693cf874cdaac69bd85c499dfd
b613526b093b8ff750f04b920b307dbd340b1787b006a9689184d22bd348df33
cc0372ab1aba3269d4aab5a6ae0f0cb25138302dc7fa36db19fe7e1a9ad2e2d9
E8C1360A9B36EF1E4F93FC17D95963A47EC87AD3C3D85A5E0A16C29D00D53CD9
06B323E0B626DC4F051596A39F52C46B35F88EA6F85A56DE0FD76EC73C7F3851
139A7D6656FEEBE539B2CB94B0729602F6218F54FB5B7531B58CFE040F180548
26C499E3F9EC79AE91FCA43DD81F9D1302A913EE30474223F3F5320C10C4A4A0
34DFFDB04CA07B014CDAEE857690F86E490050335291CCC84C94994FA91E0160
412E951A350B84F8C0D0A2DB79029B4BBD6BE624656F2A739DB0FC00C6DBB52F
48CE9CC7A0539232C3B5C0E6D44206F145B530A108792F51143B9A3FCED446AC
7227CB2316B9E3B678698609B41BA67958D509FBF37C46CBDE714B105B71BD68
8C7E451F9D41AB36361AD516AF1AFC7ED985B7595FA77B6606775CB4686F9D1F
A376246E76EDB3F78FB5AFC32B7C250EB93AC658C75A14356644644D4FC93BAF
A9BBF8012630DC6BCD8ABAC51E45FF9EA185F4EF5FEA037A63CF36F1CCED7281
B2FF63F76AAEB73B02777C3B79022BA5A0DB2D44F61071AF808C4074E88ED6F7
1dc818f51827d89a545493921f8648299f3eb367c1e0354969ccaa9df7ce77b5
e405d4d827987638f2d8a60ebaca732dafaf9d6978187fcea12345fe24afaac7
D74CD044351030290F6AD8F70F91D51B6C39675CA3C70C45B5B0C5BD09589FF6
DDB62308575FC302245EF34D7C67EE95EEFB8A834201475DCDF490E24AA6A444
E4E83D2787545C363C909247592FA5513F6A9F330C13586A14B99D6B7BB60A99
F582A3E83181096236A5D63445CED2EA2F6F61BB9B4DDF82762DD2AE11C233A5
FB1358F4F00223FD5AA87BED22B29A65DCF7C1C26921750329EF67CBD1222B08
e281347d6faf8fa17e9bcd79d0f815187506c89e8bca9ffae78170e31ff07438
c9b04ec734151245774b54df09fc77011d703f4c93c277dbd26b998e7b6db29c
10071748cab19d1d637f24bbbb1e9fb677da5110d1cf91988436064b4694165c
4667251cbcc59ff16f6ba2ca25f78b30e88747c9d978841793265aa931119aba
7A4D05FCCC674B3E957F19E288D5149AC326C7197BDB4CCAC8055E81462A85E9
FB8B03748B617ACF0EE3B138C5B37E74EC396BC73DA3362D633862D7283742FD
6329693E5C61A2F0FA1A53BD177F5A332EF729050B3F109630B759C792F0B986
98FC76F4920BEF67830BE2D7D9C45FCFF4CA47C9003573708C5B1EDFE5A1B705
A1C58EE02858564BDBB8496EF4F9CEBAED39CF517F1C05240C79341DBD07AD95
A46B363018C0D60F3DAFE2D23341FA9D72D989CE4C35D2EC1198F98805D41B8A
A593E2CC6FE811D6BDA7750806FDF4692624E4545AA6451036769455AA9C02CE
A89E86FF5118A51337AD90686C9B5C1B986DD2BED51BBD22334D8A9D1DD89582
AB9755A71005534C3D54354BE77F304D7CB931B65A9DE9A3B0F5FF85F1118F95
ac3e29e3c35138e857bffbc8cf5f8414b71c5694e7e13abe59620d2bde408887

9665fc91d90c5381540124f8be8ad57f302875a67ee2775e5c562f022a2a8231
08E7D0E983D0220D2A8461B92A47B7F124FB1A908E96AC764DE5C17CF4752860
0ecb96d743327c4da91708d5db3eabc2de16202ccf2d90738519ebda596586d1
da2a3c7f6226de957657318994e7937e1a6fdfcd92b8dd6e2a800406e8a8247a
25ac4873ae4f955032f8f0e8ed4ec78df2e2ce814454b7b5abd9489feb4e30c3
1556A1F0240524777400D348FEF71C6CB08E6AEFCCD5E941CD7A0BBF18C0154F
34A90353EB2A9DDE073ACC7C7AFDFDA485751796263D42A3AD7826F3D2F16760
3C110B159BED84231DCE840F02698F5E0EB894B1EC5E56C2AB85EDFAFAFDA0C8
DEEC8382BC1A851A74B7261D7971EC65436AE43F51260948FAFCC794594EF77B
0C71AD6BF359A83BD638A94403CE010B27DD7562EB8DA359A4316847E41C530E
1A2A7BB050304E33C3303990C456779DF8500730F3821D2842FCFDF5B39981D4
2CDE04820DE1C7CC080B36DB54B4F48E00629326716EB4678AAB2C8EAAAC8280
338E8F24EEB38B5EF67EF662B65D592C816EBA94DFAAAC856021DAC407DAF294
3EB7FDAACCFCD2C71F527C87B55FFC40BCA2ED82728593DBD44AE31B0B389C14
60F1FC7E684C71E0203D7E6EA7FCB691B5CD723A7DA6EF4E4E462AE7F262E857
FBA829759D359DEA91DB09AC8B4674237D8DBC57EC8B76A3EBF227DA9AE96535
7bafd5de1b6724962ab920f71031978a101055f061ae3cc21db8bb9fa64c5829
2ea781140f7e86c63b636249b5fdba9828661bdd846fd95c195c5b986b84a507
89d80016ff4c6600e8dd8cfad1fa6912af4d21c5457b4e9866d1796939b48dc4
10d24ce42d973516ebec5abad7d0e927c162ba313244992d398e40716ae10ed6
C9FBE5FA6363031BD15DEE006151DDF7D9921C415421479FEC2E9732E451B584
D66F94A9FEAA7AB3C06C6AFB7E2C00806607B17C77C068539E7C5F11A0447B00
E7F9C0229C0874C069C2F3DCF237E1EE334AC4F9BC955BE8146D07941FF35790
F80527B6AD651D82B59B018C2960AB4AF31891AAB4315F325920C010CCB38F7F
a89591555b9acb65353c2b854e582bc41db2fbc0eda2210b89a877d1862084df
1501f261a66eefce47dc47cb8a426107c4b694a41b5b9fd000d0ad2ea76d8e34
d0e9cd5dbdf59931d69e28c313931fac6bef83ec9f75bd84f6cb65c43f1646e7
dd05b24610d5f9513e68201a88cdb05391bfd061346a7274062d1416e8322ff6
a389e24bf0af9bc81b8133a600a2b6c875d32aa0885964d0b9f3ac6db5fee762
1937098609fbbda1b470811a7ffe5fa044058655722d84bd029050d54f2b1496
aad3f0a2dfc2bfce8da3523cc4a4a302d44415eb14da8586c10b09752b249c39
adaee1097aa4cf10b29b41d768483a9d587fb29b85ef3ca3ae26bbabf5829b92
afbb37a3ff2187905a09403d8d42f11b64b06f2a8918ad520b202abfb5559d02
8ff6b978077a7342464d84e2ddbeb558985545980b058f5bda064de852f8d928
fd5ced03c8f056439fd6a627c5ea4b3de5a4329e0bbd5d33fc50b61359b082a3
cebadaf95ea4de56b7cda20d417b030af7d5ca7657d1670c8acecb49f6e29c78
D4E2FBCC71F4D02D01747BDAC5806DC56E59CAE4409E47867F3365FF998E8803
788e59b2fb3c80323b55cc94dc61c9d61a2d490874014591d0a8d36958b3e2f6
0DAB0428B414B0440288A12FBC20DAB72339EF72FF5859E8C18D76DD8B169F50
510EB5EBDF01D199742A98E50DD00637C6B9AF6A22DB23635BD63D4B2BF9885E
5DEB8DB611178E0858435460FC7CFF9E3F2CA23766CD5F023155C1EB6CF3E58E
720FBE60F049848F02BA9B2B91926F80BA65B84F0D831A55F4E634C820BD0848
721A6E2F7EA7C72CD76FD00DCCE09BA9038C2629FEE19A9EB8B493D2419B0CE6

7E105447D0805615ED84971CEB96B2177C050AF2A7B4E396909109D9B6A4B9F3
69f38d5d3e6f1a2d110cfff202678426e1e2007260d0fbb1d58fa5a080d40db6
45b6349ee9d53278f350b59d4a2a28890bbe9f9de6565453db4c085bb5875865
2896b38ec3f5f196a9d127dbda3f44c7c29c844f53ae5f209229d56fd6f2a59c
64076294e761cee0ce7d7cd28dae05f483a711eafe47f94fe881ac3980abfd8f
b1b00f7b065e8c013e0c23c0f34707819e0d537dbe2e83d0d023a11a0ca6b388
56de41fa0a94fa7fff68f02712a698ba2f0a71afcecb217f6519bd5751baf3ed
538078ab6d80d7cf889af3e08f62c4e83358596f31ac8ae8fbc6326839a6bfe5

List of CVE commonly exploited by REVIL ransomware:

CVE-2018-8174

A remote code execution vulnerability exists in the way that the VBScript engine handles objects in memory, aka "Windows VBScript Engine Remote Code Execution Vulnerability." This affects Windows 7, Windows Server 2012 R2, Windows RT 8.1, Windows Server 2008, Windows Server 2012, Windows 8.1, Windows Server 2016, Windows Server 2008 R2, Windows 10, Windows 10 Servers.

CVE-2018-4878

A use-after-free vulnerability was discovered in Adobe Flash Player before 28.0.0.161. This vulnerability occurs due to a dangling pointer in the Primetime SDK related to media player handling of listener objects. A successful attack can lead to arbitrary code execution. This was exploited in the wild in January and February 2018.

CVE-2019-11510

In Pulse Secure Pulse Connect Secure (PCS) 8.2 before 8.2R12.1, 8.3 before 8.3R7.1, and 9.0 before 9.0R3.4, an unauthenticated remote attacker can send a specially crafted URI to perform an arbitrary file reading vulnerability.

CVE-2019-2725

Vulnerability in the Oracle WebLogic Server component of Oracle Fusion Middleware (subcomponent: Web Services). Supported versions that are affected are 10.3.6.0.0 and 12.1.3.0.0. Easily exploitable vulnerability allows unauthenticated attacker with network access via HTTP to compromise Oracle WebLogic Server. Successful attacks of this vulnerability can result in takeover of Oracle WebLogic Server.

CVE-2019-19781

An issue was discovered in Citrix Application Delivery Controller (ADC) and Gateway 10.5, 11.1, 12.0, 12.1, and 13.0. They allow Directory Traversal.

Ransomware: CONTI

Conti (also known as reshaev) is a private Ransomware-as-a-Service (RaaS), firstly it was identified in November 2019 (test version) / Februaly 2020 (in-the-wild). Like Ryuk, it is delivered via Trickbot. This malicious software is notable for its advanced capabilities such as fast encryption, anti-analysis, and direct execution. It contains command-line options to scan for local files as well as remote files over SMB shares. Conti also uses the Windows Restart Manager to free up files that are open by various applications. The ransomware uses AES-256 encryption and requires the victim to email the threat actor for the decryption key. Also, malefactors use a website for stolen data.

Attack Vectors

Phishing emails.
RDP (Remote Desktop Protocol) services.

Related Tools

RouterScan
Anydesk
Atera
Rclone
Cobalt Strike
Mimikatz

Indicators of Compromise (IOCs)

CnC:

http://94[.]140[.]115[.]219/3/https_8443_x64[.]exe
http://94[.]140[.]115[.]219/3/win32[.]dll
http://94[.]140[.]115[.]219/4/https64[.]exe
http://94[.]140[.]115[.]219/4/win64[.]dll
http://94[.]140[.]115[.]219/3/https_8443[.]exe
http://94[.]140[.]115[.]219/3/rundll[.]dll
http://94[.]140[.]115[.]219/4/P32[.]exe
http://94[.]140[.]115[.]219/3/P32[.]exe
http://94[.]140[.]115[.]219/3/p64[.]exe
http://94[.]140[.]115[.]219/3/run1[.]exe
http://94[.]140[.]115[.]219/4/http64[.]exe
http://94[.]140[.]115[.]219/4/run1[.]exe
http://94[.]140[.]115[.]219/4/rundll[.]dll
http://94[.]140[.]115[.]219/3/http64[.]exe
http://94[.]140[.]115[.]219/3/run2[.]exe
http://94[.]140[.]115[.]219/4/P64[.]exe
http://94[.]140[.]115[.]219/4/run2[.]exe

http://94[.]140[.]115[.]219/3/http_8080_x64[.]exe
http://94[.]140[.]115[.]219/4/https[.]exe
http://94[.]140[.]115[.]219/4/serv_http64[.]exe
http://94[.]140[.]115[.]219/4/win32[.]dll
http://94[.]140[.]115[.]219/3/http8080[.]exe
http://94[.]140[.]115[.]219/3/win64[.]dll
http://94[.]140[.]115[.]219/4/http[.]exe
htcltkjqoitnez5slo7fvhiou5lbno5bwczu7il2hmfpkowwdpj3q2yd[.]onion
fylszpcqfel7joif[.]onion
continewsnv5otx5kaoje7krkto2qbu3gtqef22mnr7eaxw3y6ncz3ad[.]onion
continews[.]best
conti[.]news
contirecovery[.]info
m232fdxbfmbrcehbrj5iayknxnggf6niqfj6x4iedrgtab4qupzjlaidÑ…[.]onion
baron8[.]com
www[.]doloreso[.]com
doloreso[.]com
217[.]12[.]218[.]109
94[.]140[.]115[.]219
45[.]89[.]127[.]214
217[.]12[.]208[.]251

SHA256:

844cc2551f8bbfd505800bd3d135d93064600a55c45894f89f80b81fea3b0fa1
2f334c0802147aa0eee90ff0a2b0e1022325b5cba5cb5236ed3717a2b0582a9c
d21c71a090cd6759efc1f258b4d087e82c281ce65a9d76f20a24857901e694fc
a390038e21cbf92c36987041511dcd8dcfe836ebbabee733349e0b17af9ad4eb
5a2e947aace9e081ecd2cfa7bc2e485528238555c7eeb6bcca560576d4750a50
8837868b6279df6a700b3931c31e4542a47f7476f50484bdf907450a8d8e9408
234e4df3d9304136224f2a6c37cb6b5f6d8336c4e105afce857832015e97f27a
d4a1cd9de04334e989418b75f64fb2cfbacaa5b650197432ca277132677308ce
1429190cf3b36dae7e439b4314fe160e435ea42c0f3e6f45f8a0a33e1e12258f
68858814ebe2dcf21fd87ebb5fca829806307774060cb7f587f54de6625f2b02
955c113925e19feeb274b2af43403dd24d6261134e642bc7af75842f1ea150dc
0c0367006e4886fb0272033e31411f3be9ea4920fcd486c13bb48bccda74f993
6c63f028e289006218ffdfd7da4a94ef392c5893f0794133bac8d11d83233ed6
3bb6e06259d51ce88cd29e0068dcaed1d8def78281c9c4bdae6368e82266bda2
1180c0c595731caacbe4524eb1a5d19e28e0de437d02e359de70a86e3fa40446
1280098d355a5f114a23534e678191cf5e10da3794eb15c1480e877c96dbe1a4
b0f911947a82ca2c26105153f949090d99057ebd4b755e031c55f6550de0be72
a653c0455dd11a84910fdd9bd557a7555dd6cade9940fdf68cb4537004032878
b7d0a1f0e28bec456130cdd437c15b03251cbf2d9f5e9c3029f9e4fa07e086e5
db26c6c86c6fcf12d1b717d27ddaba981aa3f2e14b6b7f3dce51ce488df6e035

534880b9771c8b1b85a3c219102eda69b5d5f2f79ed4489ec71a08df82836505
63c1bfd36bd4467da1cc63e03011fe238e7abc6df035d32da892283aa0481151
0e51c1fa362ccbb122b9182b4cd6f392a6ba3f9670d4e6cf9562d94964f83d45
93a1557f49f79b55cd1f071669a7f6a333f7217fd306a6a745d1ea299599423c
ba9f4ab1cb50d3ad97eb77bad7da4fa398fd2b94182c569a64d8aa045fcb80ae
c5d7453c37e4a882bd5e7e011d8f160e90a0e036669380defa11e3d3650d00f6
e59b3ab82e876786a7658cd102fd3e8d221c36375b1eea20a0ba4c29ccdfc6d0
bd47cc015a113fae8f86975c2e59e2342c971bae162648f84a628c313caf1eca
7feb4017a1b560ce08f82eca0c79f819c5bee755882e86a5e7913977fda8c564
375642507471572e8adba9a9de5b60e5dd231210673cc14c3a875ff27d5b5aa4
49e47d31d04d670f2e4adb6c3982b458e6d7d35661be201147989a006e249fd5
2cab234781956e75d5479ebd674d5e0343c648143701b2ea20e9c2ca3f7fcdca
ca0e949d720b728e9fe5114775cde4d35a21f9ddcbba1562f66f6e1bc8d5f5ad
ca8ac27ce32b9b6b8582ed9f74ea99382720abd0338a44ad456f15cbcfff63b9

Malware: KASABLANKA

KASABLANKA

In 2021 a well-known threat actor 'KASABLANKA' was discovered to target critical information infrastructure of Bangladesh. The specific campaign utilized type of Remote Access Trojan (RAT).

Indicators of Compromise (IOCs)

CnC:

107[.]180[.]73[.]34
134[.]122[.]120[.]22 [PTR Record: vps.lap-top[.]xyz]
116[.]203[.]37[.]39
107[.]180[.]73[.]135
94[.]130[.]110[.]78 [PTR Record: vps.corona-bd[.]com]
107[.]180[.]72[.]97
160[.]178[.]220[.]194
194[.]5[.]98[.]55
107.172.30[.]213
aktel[.]org
bkashagent[.]com
info[.]v-pn[.]co
piramidewebs[.]com
c0mputer[.]xyz
zepode[.]online
mybnp[.]club
imei[.]today
corona-bd[.]com
bkash[.]club
hxxps://lap-top[.]xyz/mobile/Lap-top%20Security_Setup.apk
hxxps://av24[.]co/Virus_Cleaner_Setup.msi
hxxp://bdpolice[.]co/answer-paper-demo.zip
hxxps://isiamibankbd[.]com/tv/TPTUMC.exe
hxxps://bangladesh-bank[.]com/PBVANA.doc
hxxp://bangladesh-bank[.]com/invoice.zip
hxxp://zep0de.com/viewticket.exe
hxxp://bracbank[.]info/munafa[.]php
hxxp://107[.]172[.]30[.]213/Flash.exe

MD5:

ec8d1d6562a210daac931879acbca7c4
50ee8d6a24c1e29d184ecec1eb205ecf
afcc83d0b6bb0e71d04fb54db253a9d9

6cfc723111d7001f8c14f0cd397dbd44
c39fc85c03b20e888abbd13678f9efe7
9b6b7f85c64ca54c9f755554d5af5a47
c7dfd9ada76552be7d8a566f39066702
9a0f72cdc9a2846da937676e1efe8bf4
90387cfd4c6ebfd992e383d6d66bf458
35a3319dcba68678d4e94c039780d4c1
afcc83d0b6bb0e71d04fb54db253a9d9
50ee8d6a24c1e29d184ecec1eb205ecf
ec8d1d6562a210daac931879acbca7c4
8c8b50499149c2ad20ba39a3a607423c
461e4b3868aede5b44578441ed352268
01ee65abddc83d85f56e646a77abdf81
09600ffd3bbfad0e397b2c4bf04037c5

SHA1:

e7d5f4dc247270747a170bf6b3575f8523b5520c
0d1ae8971ec43ba43cc58ee7d3e22ffa3ad278b2
78a5dbe3c8cd70f514d1854013c30d56240e34ad
634dd186ff28247da22a9c638a117f757ba4baae
cbbcef863a6e7865027ff358cf1a6dcdeaad0d36
c01ae69b433269bcc2fd30d2b9c8576041263ce9
9bcd9a33c051d36ab0acec41e37d394025982822
f8ea2215496e6ead5135cf0ff4936cdb11208c37
acdc857fc24b72927b550e365eb4d77f385b6a4d
0239655de78351669cb0d351accb9dbe858b4347
0d1ae8971ec43ba43cc58ee7d3e22ffa3ad278b2
78a5dbe3c8cd70f514d1854013c30d56240e34ad
e7d5f4dc247270747a170bf6b3575f8523b5520c
af45e8a08dc3666996223dc4794bbdf9beff6bec
99ee00c87c5631c1d70610f42951b3acf54b4a20
dad1cb6cf834896d90f4eda7ee7d2910bd762841
3e1b9638427c9a11ad6bc55a58f876a44c0e4bf5

SHA256:

e78546bb33df88c6be3afce32f5d13084295a6e0599b26c3b380d54318170d86
cf29981bfec0f0cf2abd54ae469c8795a3cf1e19c715ded329fdb2707f982407
91b6ea9fccb4eae21335588bc83dea09780a5b7e145721f7098baafa2072286a
52b6db0fec7f587505aabfe091d8e0751acd8d4f4d120eeba5519c25a6dd8673
977a9d25972b999ae3b12d12e12978f4d116b5fb713c76c57998be15b4172def
68b221360edf4802b470fbc86493025707cf4913cc15729f4bc6ec149a4dc7ba
59f29819d223e47099ca0f00fd6bc4335d7b95188d623bf0c78c8e594c0c69c7

fbb8a86f399491ea5633df62f66bec1e4d4d5531f1dff976da1a3091b8ea4f34
4fa5525008128f77562fbb64af82b2fbcbc6c0afe71d567470380dc4476184a9
4f319b2518d855803e678713cf4b6cae975ebdd60cc1174f1609bbb9ea76f007
01f44cdc139eca65f02bfe1a8918a0d073e89bc19350262dc9d10a564863fdfd
7a55844f86b49e103564750a37604954590d27686f7f7bc8e5ae6101e8e18424
ce2276bbb6423015a4f2e80f320e068b8f53f7c19a43fb0a6f9aa5784e716d6e
bf6f5a2730ced754907e277b590959d9c734681a07a466112c392e92d008fea3
4f319b2518d855803e678713cf4b6cae975ebdd60cc1174f1609bbb9ea76f007
c3afaf555eabe5e40dcb87d2c292491e561b2dadcb1998f508088ba3bcac6836
677db7d296e4bea770f99f34e70be72b8a2b910b661804592202f3a4834ef102
cf40e1ec36f44e20a9744e8038987527027e2a6ee7e96d9044842f92ece9d7e8
f169680d8f24694e2d99c9df31988511e212e088f4dc2854ef059915019e8348
70526973e70acef4a71f474b0e321b9e600a327522903ee6bfac4e6f07935f7f
2d317bcccea4739b2deefcc3b14cf5eafe147162f62c5ff1288db3635b5c3f10
fcbaf2e5ed0b1064da6a60101f231096164895328fd6c338b322b163d580b6e3

Malware: RedLine Stealer

RedLine Stealer

First observed in 2020 and advertised on various cybercriminal forums as a 'Malware-as-a-Service' (MaaS) threat, Redline is an information stealer mainly targeting Windows' victim credentials and cryptocurrency wallets, as well as Browser information, FTP connections, game chat launchers, and OS information such as system hardware, processes names, time zone, IP, geolocation information, OS version, and default language.

Lacking an out-of-the-box distribution method, recently observed Redline incidents appear to begin with the delivery of malicious document attachments sent via an indiscriminate unsolicited email (malspam) campaign, Twitter, and Instagram Direct Messaging. Mostly targeting service or content provider's individuals such as 3D artists and streamers, financial advisers.

Data Theft

The flexibility of Redline stealer enables the variety of potential content to steal and is not bound to serve one purpose only. However, the default setting includes the following as identified from recently analyzed samples:
Browsers: Google Chrome, Mozilla Firefox, Opera and those that are Chromium-based including Microsoft Edge.
Cryptocurrency Wallets: Redline searches for the commonly used filename wallet.dat
Hardware information: Processor, Graphic hardware, screen size.
OS information: Processes, Windows versions, Credentials.
Geolocation: city, country, zip code

Indicators of Compromise (IOCs)

CnC:

45[.]142[.]214[.]200:33753
185[.]183[.]32[.]200:47859
20[.]124[.]244[.]95:7917
185[.]82[.]126[.]188:80
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23[.]88[.]11[.]67:54321
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62[.]182[.]159[.]90:21566
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176[.]9[.]10[.]140:50422
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185[.]215[.]113[.]121:15386
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3[.]17[.]7[.]232:10655
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91[.]206[.]14[.]151:64591
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185[.]92[.]73[.]84:2378
5[.]196[.]97[.]178:15174
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185[.]209[.]28[.]55:65401
45[.]8[.]124[.]72:80
80[.]85[.]138[.]229:4064
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94[.]140[.]112[.]47:80
194[.]61[.]0[.]151:56384
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95[.]168[.]174[.]42:42482
195[.]133[.]18[.]66:51391
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50[.]18[.]71[.]252:12081
209[.]90[.]237[.]21:46536
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91[.]243[.]32[.]42:52075
185[.]215[.]113[.]109:44059
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185[.]183[.]32[.]184:80
185[.]7[.]214[.]127:32304
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138[.]124[.]186[.]108:11542
80[.]89[.]234[.]187:43303
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62[.]113[.]112[.]212:11375
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45[.]147[.]230[.]245:34585
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185[.]125[.]207[.]77:40170
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185[.]92[.]73[.]142:52097
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80[.]66[.]87[.]55:11327
94[.]103[.]9[.]167:61775
185[.]70[.]186[.]150:33967
45[.]9[.]20[.]104:6334
91[.]243[.]32[.]5:3677
91[.]243[.]32[.]14:7364
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64[.]56[.]67[.]136:55730
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185[.]244[.]181[.]71:2119
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185[.]215[.]113[.]17:7700
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dogspise[.]site
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greentry[.]site
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65[.]108[.]21[.]17:5417
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185[.]154[.]13[.]159:34854
185[.]215[.]113[.]107:61144
45[.]131[.]46[.]129:12509
185[.]92[.]73[.]84:80
37[.]230[.]112[.]47:49799
185[.]80[.]53[.]81:15667
185[.]215[.]113[.]55:36801
5[.]61[.]61[.]168:14462
193[.]163[.]113[.]105:26203
176[.]57[.]69[.]117:21596
77[.]232[.]38[.]34:44300
5[.]149[.]249[.]178:12509
212[.]86[.]102[.]139:32600
80[.]87[.]192[.]137:27018
65[.]108[.]1[.]219:28593

193[.]56[.]146[.]60:18243
195[.]2[.]93[.]217:60468
195[.]133[.]18[.]154:30491
87[.]251[.]71[.]64:80
87[.]251[.]71[.]44:80
185[.]173[.]39[.]234:36881
195[.]133[.]18[.]5:45269
37[.]0[.]8[.]37:3799
193[.]164[.]7[.]71:22541
45[.]156[.]21[.]113:63256
138[.]124[.]186[.]42:14462
95[.]216[.]43[.]58:40566
93[.]115[.]20[.]139:28978
77[.]232[.]38[.]163:41139
45[.]144[.]29[.]94:61419
185[.]92[.]74[.]142:80
45[.]67[.]231[.]218:15411
185[.]153[.]198[.]58:80
185[.]213[.]210[.]82:4505
92[.]246[.]89[.]6:38437
84[.]38[.]189[.]175:54144
45[.]147[.]197[.]123:31820
188[.]34[.]176[.]164:80
138[.]124[.]186[.]121:45760
205[.]185[.]123[.]105:20035
185[.]244[.]217[.]166:56316
3[.]17[.]66[.]208:58281
155[.]138[.]201[.]103:60259
92[.]119[.]113[.]20:20871
91[.]206[.]14[.]151:50125
51[.]91[.]193[.]179:5048
185[.]118[.]165[.]93:4476
185[.]237[.]98[.]178:62607
94[.]103[.]9[.]133:39323
194[.]15[.]46[.]144:36848
94[.]250[.]250[.]77:32413
45[.]156[.]21[.]209:56326
138[.]124[.]186[.]2:27999
141[.]94[.]188[.]139:43059
205[.]185[.]127[.]47:20078
188[.]119[.]113[.]86:40729
45[.]142[.]215[.]47:27643
45[.]82[.]178[.]241:35141

185[.]173[.]37[.]128:40504
138[.]124[.]186[.]180:39821
18[.]216[.]102[.]251:80
84[.]38[.]185[.]103:39821
77[.]232[.]43[.]170:14614
147[.]124[.]212[.]128:45499
185[.]250[.]151[.]254:3363
95[.]217[.]248[.]44:1052
185[.]215[.]113[.]104:18754
65[.]21[.]230[.]118:16782
65[.]108[.]20[.]195:6774
213[.]166[.]69[.]181:64650
45[.]133[.]1[.]81:45269
91[.]236[.]120[.]204:20853
91[.]142[.]77[.]155:5469
80[.]87[.]192[.]249:16640
185[.]215[.]113[.]15:6043
185[.]244[.]180[.]224:39957
65[.]108[.]4[.]54:11645
94[.]26[.]228[.]204:32917
92[.]222[.]145[.]232:61157
65[.]21[.]231[.]57:60751
178[.]132[.]3[.]103:80
135[.]181[.]142[.]223:30397
45[.]9[.]20[.]20:13441
65[.]21[.]236[.]62:47186
185[.]215[.]113[.]29:18087
45[.]142[.]214[.]210:80
http://45[.]142[.]214[.]210/IRemotePanel
109[.]234[.]38[.]212:6677
103[.]168[.]67[.]29:6677
91[.]235[.]129[.]177:80
172[.]67[.]221[.]58:80
144[.]76[.]112[.]41:26462
185[.]70[.]184[.]89:52823
179[.]43[.]176[.]44:80
65[.]21[.]3[.]192:35618
37[.]1[.]195[.]84:1515
94[.]103[.]80[.]219:62459
95[.]181[.]163[.]215:80
45[.]137[.]152[.]34:4762
85[.]209[.]89[.]238:6677
http://85[.]209[.]89[.]238:6677/IRemotePanel

188[.]119[.]113[.]80:15814
45[.]67[.]228[.]93:80
http://45[.]67[.]228[.]93/IRemotePanel
212[.]192[.]246[.]10:31954
ballablaq957[.]duckdns[.]org
92[.]222[.]145[.]236:60837
87[.]251[.]71[.]14:89
185[.]125[.]217[.]185:35200
185[.]167[.]97[.]37:30900
194[.]226[.]139[.]24:7732
104[.]21[.]15[.]108:80
http://lapes2049[.]eu/
45[.]147[.]197[.]145:34595
65[.]108[.]29[.]194:20525
45[.]133[.]217[.]203:23497
52[.]6[.]206[.]192:13994
45[.]133[.]217[.]148:65255
185[.]161[.]209[.]196:57754
45[.]132[.]104[.]3:18717
185[.]219[.]80[.]221:6677
http://185[.]219[.]80[.]221:6677/IRemotePanel
193[.]38[.]55[.]57:7575
91[.]142[.]79[.]218:9781
185[.]230[.]143[.]165:52046
141[.]95[.]23[.]25:58184
77[.]83[.]175[.]169:5180
185[.]180[.]231[.]69:42875
86[.]106[.]181[.]31:38670
195[.]2[.]78[.]163:55923
95[.]181[.]157[.]69:8552
185[.]125[.]18[.]49:80
31[.]44[.]3[.]94:62655
31[.]44[.]3[.]73:60798
95[.]181[.]155[.]204:35253
http://95[.]181[.]155[.]204:35253/IRemotePanel
185[.]204[.]109[.]146:54891
45[.]14[.]49[.]232:6811
185[.]117[.]75[.]123:80
94[.]103[.]82[.]22:49018
65[.]21[.]218[.]128:42806
95[.]181[.]157[.]130:11418
65[.]108[.]29[.]202:61024
45[.]14[.]49[.]246:18015

45[.]14[.]49[.]245:61619
65[.]21[.]141[.]215:8374
51[.]254[.]68[.]139:8067
94[.]103[.]83[.]88:60362
95[.]181[.]172[.]100:6795
195[.]2[.]78[.]238:6020
159[.]69[.]190[.]155:35975
193[.]38[.]55[.]35:16777
nyamekye778[.]duckdns[.]org
45[.]129[.]236[.]6:56220
141[.]95[.]23[.]41:62480
2[.]56[.]59[.]78:14716
193[.]0[.]179[.]66:80
89[.]38[.]131[.]227:47427
45[.]84[.]1[.]79:56124
51[.]254[.]68[.]137:49913
65[.]21[.]206[.]125:13957
185[.]53[.]46[.]140:38913
149[.]28[.]252[.]135:26948
45[.]140[.]147[.]31:22127
212[.]192[.]246[.]73:10854
91[.]142[.]77[.]189:45968
45[.]76[.]170[.]221:23953
185[.]215[.]113[.]29:8889
80[.]92[.]205[.]153:60983
86[.]105[.]252[.]21:34503
34[.]125[.]127[.]142:22010
45[.]14[.]49[.]200:27625
94[.]140[.]112[.]18:80
195[.]2[.]78[.]147:59722
185[.]186[.]142[.]245:1778
45[.]8[.]126[.]18:80
185[.]215[.]113[.]60:1751
45[.]66[.]8[.]61:58416
159[.]69[.]178[.]36:37556
45[.]67[.]231[.]50:59578
94[.]242[.]224[.]231:22141
80[.]85[.]140[.]26:45198
91[.]142[.]79[.]35:13400
103[.]246[.]146[.]247:3214
188[.]124[.]36[.]242:25802
51[.]89[.]92[.]99:5965
50[.]17[.]5[.]224:40355

34[.]118[.]24[.]142:6677
http://34[.]118[.]24[.]142:6677/IRemotePanel
77[.]220[.]212[.]176:35752
95[.]179[.]166[.]29:60101
135[.]181[.]123[.]52:52101
185[.]53[.]46[.]25:38743
136[.]243[.]179[.]78:23621
45[.]67[.]228[.]114:37288
185[.]224[.]132[.]232:64354
135[.]125[.]215[.]49:54405
193[.]56[.]8[.]53:25656
65[.]108[.]16[.]40:80
93[.]114[.]128[.]144:8165
elired957[.]duckdns[.]org
203[.]159[.]80[.]180:15808
45[.]14[.]49[.]111:26475
95[.]179[.]169[.]30:6677
http://95[.]179[.]169[.]30:6677/IRemotePanel
87[.]251[.]71[.]107:34919
207[.]32[.]217[.]143:39743
194[.]87[.]146[.]179:80
91[.]228[.]56[.]223:20793
87[.]251[.]71[.]145:12427
65[.]21[.]228[.]92:46802
185[.]53[.]46[.]25:18856
185[.]234[.]247[.]50:55567
46[.]8[.]19[.]177:41228
2[.]56[.]59[.]235:7188
207[.]154[.]240[.]76:80
157[.]90[.]116[.]11:29726
2[.]56[.]59[.]35:43636
45[.]14[.]49[.]128:16334
95[.]181[.]163[.]3:46303
77[.]83[.]175[.]99:4235
185[.]92[.]74[.]36:6049
185[.]215[.]113[.]111:55066
37[.]1[.]213[.]214:63028
77[.]232[.]38[.]125:50692
45[.]66[.]9[.]19:25061
80[.]89[.]229[.]97:7479
94[.]103[.]93[.]227:17436
109[.]248[.]175[.]60:80
168[.]119[.]101[.]124:32508

45[.]14[.]49[.]68:43238
5[.]8[.]248[.]83:61808
188[.]165[.]229[.]219:31829
193[.]56[.]146[.]78:54955
209[.]250[.]245[.]216:62660
194[.]226[.]139[.]70:31846
45[.]14[.]49[.]109:54819
77[.]220[.]214[.]232:13459
45[.]138[.]72[.]167:25882
45[.]82[.]176[.]76:43679
185[.]234[.]247[.]42:15495
178[.]32[.]202[.]118:43127
185[.]241[.]53[.]200:15520
185[.]234[.]247[.]190:34363
192[.]248[.]177[.]92:6677
http://192[.]248[.]177[.]92:6677/IRemotePanel
84[.]252[.]143[.]187:38919
45[.]140[.]146[.]214:3287
45[.]67[.]228[.]128:25676
2[.]56[.]59[.]235:61159
185[.]215[.]113[.]209:14536
34[.]94[.]44[.]44:45251
45[.]153[.]241[.]106:80
185[.]92[.]73[.]140:80
95[.]217[.]248[.]44:11695
212[.]114[.]52[.]76:6261
5[.]149[.]255[.]203:32800
188[.]119[.]113[.]123:58760
195[.]149[.]87[.]79:12439
77[.]246[.]144[.]104:80
193[.]38[.]54[.]112:4623
3[.]124[.]195[.]32:80
46[.]28[.]204[.]54:27605
80[.]92[.]206[.]111:80
45[.]76[.]34[.]239:6677
http://45[.]76[.]34[.]239:6677/IRemotePanel
185[.]53[.]46[.]25:21352
45[.]137[.]155[.]31:11556
141[.]136[.]0[.]194:80
80[.]89[.]230[.]42:5461
45[.]67[.]231[.]221:42619
193[.]124[.]57[.]100:4737
185[.]250[.]206[.]122:43180

185[.]23[.]108[.]82:20793
146[.]185[.]239[.]6:80
185[.]118[.]165[.]94:15838
51[.]254[.]69[.]209:48987
45[.]14[.]12[.]90:52072
104[.]21[.]79[.]131:80
37[.]0[.]8[.]184:2305
141[.]136[.]0[.]113:80
185[.]215[.]113[.]86:13625
91[.]245[.]253[.]6:16075
109[.]248[.]201[.]150:63757
23[.]105[.]131[.]166:2112
209[.]250[.]247[.]73:64156
149[.]202[.]65[.]221:64206
135[.]181[.]175[.]182:10628
50[.]17[.]5[.]224:80
193[.]188[.]22[.]4:45689
176[.]57[.]69[.]178:59510
95[.]217[.]114[.]110:20535
87[.]120[.]37[.]152:5605
213[.]166[.]68[.]170:16810
185[.]237[.]165[.]126:25598
95[.]217[.]159[.]87:4348
146[.]185[.]239[.]11:80
45[.]14[.]49[.]109:21295
141[.]136[.]0[.]182:80
104[.]21[.]5[.]49:80
http://gimpforimage[.]com/
172[.]67[.]145[.]186:80
95[.]215[.]207[.]87:3058
172[.]67[.]180[.]172:80
3[.]121[.]85[.]109:62340
194[.]169[.]160[.]30:80
45[.]93[.]4[.]12:80
193[.]56[.]146[.]22:47861
188[.]130[.]139[.]12:23747
188[.]120[.]238[.]188:28212
141[.]136[.]0[.]181:80
87[.]251[.]71[.]78:80
185[.]230[.]143[.]16:32115
185[.]250[.]206[.]82:21330
45[.]14[.]49[.]117:14251
212[.]224[.]105[.]82:80

109[.]234[.]34[.]165:22204
45[.]82[.]179[.]116:10425
95[.]217[.]140[.]34:18653
45[.]132[.]106[.]154:6492
45[.]140[.]147[.]111:22333
185[.]81[.]114[.]75:58642
45[.]76[.]235[.]60:49976
37[.]0[.]8[.]162:7225
104[.]21[.]24[.]246:80
185[.]80[.]234[.]77:17105
87[.]251[.]71[.]145:58198
185[.]228[.]233[.]5:80
91[.]121[.]146[.]23:9519
194[.]33[.]45[.]147:46868
193[.]38[.]55[.]96:53888
2[.]56[.]59[.]84:43393
46[.]8[.]19[.]211:40857
193[.]38[.]235[.]12:29867
176[.]96[.]238[.]188:20427
45[.]67[.]231[.]194:29525
185[.]170[.]213[.]254:56663
185[.]215[.]113[.]32:14976
95[.]215[.]207[.]185:64399
185[.]215[.]113[.]45:41009
3[.]68[.]106[.]170:59223
45[.]147[.]231[.]225:40668
91[.]235[.]129[.]135:80
193[.]56[.]146[.]60:51431
37[.]46[.]128[.]40:2787
185[.]215[.]113[.]114:8887
212[.]224[.]105[.]98:80
194[.]233[.]74[.]11:39744
185[.]172[.]129[.]61:52372
185[.]248[.]101[.]142:54217
18[.]184[.]50[.]127:6677
http://18[.]184[.]50[.]127:6677/IRemotePanel
45[.]67[.]231[.]121:53952
212[.]224[.]105[.]106:80
51[.]178[.]146[.]144:59643
45[.]14[.]49[.]23:32246
178[.]20[.]42[.]11:80
185[.]244[.]182[.]34:22602
178[.]20[.]46[.]22:7684

188[.]40[.]193[.]166:43180
18[.]118[.]194[.]181:25857
77[.]220[.]213[.]35:52349
195[.]149[.]87[.]39:20170
37[.]46[.]128[.]72:29799
103[.]246[.]146[.]46:50702
18[.]117[.]82[.]8:58546
147[.]124[.]222[.]75:42864
212[.]224[.]105[.]105:80
212[.]224[.]105[.]80:80
45[.]14[.]49[.]71:18845
http://185[.]231[.]69[.]253:6677/IRemotePanel
185[.]231[.]69[.]253:6677
45[.]142[.]213[.]135:30059
213[.]186[.]176[.]123:80
212[.]224[.]105[.]79:80
185[.]117[.]90[.]145:80
194[.]226[.]139[.]106:25644
95.217.123.66:5143
94.140.115.194:80
45.144.29.134:26392
111.90.149.108:36626
86.106.181.209:18845
95.217.122.120:8374
176.114.11.244:80
93.189.40.76:80
185.117.90.158:80
193.161.193.99:55339
62.109.1.213:26078
194.233.74.11:58910
212.224.105.115:80
188.34.152.197:62942
149.202.7.96:60574
176.31.116.35:7078
95.215.207.58:16597
193.110.3.32:80
65.21.103.71:56458
45.14.49.91:60919
193.106.175.53:80
135.148.139.222:33569
193.110.3.6:80
185.237.165.42:61503
79.141.165.169:80

216.128.137.184:6677
http://216.128.137.184:6677/IRemotePanel
86.106.181.209:58703
185.215.113.63:23098
37.0.8.151:46665
109.248.11.240:18612
80.92.206.25:4311
185.125.18.50:80
185.117.90.241:80
193.188.22.226:30072
185.244.182.34:56068
46.8.19.196:53773
185.69.55.138:80
45.140.147.128:4311
185.186.142.83:29867
45.142.213.135:30058

SHA256:

28f4a775a412703de465d39a1415a671efdf4bf40f89b1fc2b35c817cd79402d
639a69507d10a69d3e4634cff299f048ea44daf93ee5eb186f5b87e03981e9b9
37d94c0ffea439a338a4c5a5267d07ac1aa1f6cf230bc2986f95e4e6d80cf365
3805dae603dcd659643f0888fe35b9bbbd0173c63ff5ce1ed5bf678e4fa5db90
6183d33fdfc6ea281c59c460d0177ff05e15a7a0baaa62f9064839ad88f5c261
0739ab90f698c1611cb646121808cda8c0a46e060a0bd8195d32812282c37fef
8f7cef2c0fa345df0232afa86eb779e189bca8b3ebaf7ff8b7000f1eeb49e448
8610e4f5fe6961af48752bd4ad6c815e4bd604cc7b489b7b4c9e55d463993ed1
f4786214620b515cec6586781ca473504d6a8558c192ac395a2d4ad5c235bc77
009d0e416fa47b7050f7384e864f2f6f26b901fe65c2673c2a345f36d966cf05
edc5b5dcc927af0b6e445c8fa70aefecb080d242cb160e44b2abdd32a32a36e7
f0e1e6986f17f286ed164f12f5f7fdffa3b445cf8603d013dc9eb38bcb175ed7
e49ec26779ee42f4130f34f73cc067e1d469f95fd7fbfcf7b746a4fb5cebb496
e72143a4f0dc2c89d4bba8ce346ec3290a189101767fe3090216adf9d81c0978
db7089144ad29efd77e49bfe299e63959f7c8cad57773447b02292e056a19f40

References:
https://cyberint.com/blog/research/redline-stealer/

Malware: Panda

Panda

Panda also kown as Panda Banker malware is banking Trojan is based on source code of the Zeus Trojan. For the first time trojan was detected on February 2016. Malware was spread via email spam with malicious document and exploit kits. Trojan targeted people working in mass media, manufacturing and financial organizations. The malware has all main functions of banking Trojan: formgrabber, screenshot, cookies, certificate, credit cards grabbers, web-injects supporting (Zeus format), and hide VNC remote access.

Platform: Windows

Threat level: High

Category: Trojan

Indicators of Compromise (IOCs)

CnC:

165[.]22[.]80[.]247
http://165[.]22[.]80[.]247/download/6126486da2966558135ab386/test34/test_34[.]7z

MD5

fc2e33ece56807a079ab12326af77b0d
173bdeb36ab02f4ff8f60e37881c6ae2

SHA256:

3d0e5d42ac1f0adad3fb5edf43d370b1c6dce6a859324b7b93bfbbe5f4bcb9a9
4b6af0a183c9a2e5b9af770742bbed36c6a0b7436d4faa27d64a414596885592

Network signatures

TROJAN GOBLIN PANDA Looc CnC Beacon

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN GOBLIN PANDA Looc CnC Beacon"; target:src_ip; flow:established,to_server; urilen:1; content:"POST"; http_method; content:"Content-Type|3a 20|application/x-www-form-urlencoded|0d 0a|"; http_header; content:"Accept-Language|3a 20|en-US,en|3b|q=0.8,en-US|3b|q=0.5,en|3b|q=0.3|0d 0a|"; http_header; content:"User-Agent|3a 20|Mozilla/5.0 (Windows NT 10.0|3b| WOW64|3b| rv|3a|41.0) Gecko/20100101 Firefox/41.0|0d 0a|"; http_header; fast_pattern:49,20; pcre:"/^([0-9]{1}(?:[A-Za-z0-9+\/]{4})*(?:[A-Za-z0-9+\/]{2}==|[A-Za-z0-9+\/]{3}=)?\n?\r?$|[A-Za-z0-9+/]{100,}={0,2}?\n?\r?)/P"; reference:md5,d432b2b979ee021c61ca02f3010239f9; reference:url,cdn.riskiq.com/wp-content/uploads/2017/10/RiskIQ-htpRAT-Malware-Attacks.pdf; classtype:trojan-activity; sid:2826030; rev:2; metadata:affected_product

Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_04_18, deployment Perimeter, former_category MALWARE, signature_severity Major, tag GoblinPanda, tag c2, updated_at 2020_08_13, mitre_tactic_id TA0011, mitre_tactic_name Command_And_Control, mitre_technique_id T1041, mitre_technique_name Exfiltration_Over_C2_Channel, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN ZeusPanda CnC Domain (henfobuthis .com in TLS SNI)

alert tls $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN ZeusPanda CnC Domain (henfobuthis .com in TLS SNI)"; target:src_ip; flow:established,to_server; content:"|00 00 0f|henfobuthis.com"; reference:md5,23c7055d6c0c09d6e9b2c68ebad95cdb; classtype:trojan-activity; sid:2828569; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_11_08, deployment Perimeter, former_category MALWARE, performance_impact Low, signature_severity Major, updated_at 2017_11_08, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN ZeusPanda CnC Domain (rowrorofrat .com in DNS Lookup)

alert dns $HOME_NET any -> any 53 (msg:"TROJAN ZeusPanda CnC Domain (rowrorofrat .com in DNS Lookup)"; target:src_ip; dns_query; content:"rowrorofrat.com"; isdataat:!1,relative; reference:md5,23c7055d6c0c09d6e9b2c68ebad95cdb; classtype:trojan-activity; sid:2828570; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_11_08, deployment Perimeter, former_category MALWARE, performance_impact Low, signature_severity Major, updated_at 2020_09_14, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Observed Malicious SSL Cert (Zeus Panda Banker)

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN Observed Malicious SSL Cert (Zeus Panda Banker)"; target:dest_ip; flow:established,from_server; content:"|55 04 03|"; content:"|0b|freebase.pw"; distance:1; within:12; classtype:trojan-activity; sid:2821613; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2016_08_11, deployment Perimeter, performance_impact Low, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_08_11, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Possible Panda Banker DGA Lets Encrypt SSL Cert

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN Possible Panda Banker DGA Lets Encrypt SSL Cert"; target:dest_ip; flow:established,from_server; content:"|55 04 0a|"; content:"|0d|Let|27|s Encrypt"; distance:1; within:14; fast_pattern; content:"|55 04 03|"; pcre:"/^.{2}(?=\d{0,9}?[a-f])(?=[a-f]{0,9}?\d)[0-9a-f]{10}[^.-]*?\.(?!com)[a-z]{2,3}[01]/R"; reference:md5,5fb74789a52b5c28a6c636facb7555f0; classtype:trojan-activity; sid:2825567; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_03_22, deployment Perimeter, former_category TROJAN, performance_impact Low, signature_severity Major, updated_at 2018_03_19, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Observed Malicious SSL Cert (Zeus Panda)

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN Observed Malicious SSL Cert (Zeus Panda)"; target:dest_ip; flow:established,from_server; content:"|16|"; content:"|0b|"; distance:0; within:8; content:"|09 00 e4 02 0b 4e 94 ca e7 29|"; distance:0; within:35; fast_pattern; content:"|55 04 0a|"; distance:0; content:"|14|My Company Name LTD|2e|"; distance:1; within:21; classtype:trojan-activity; sid:2822233; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2016_09_26, deployment Perimeter, signature_severity Major, updated_at 2020_08_20, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Observed Malicious Domain SSL Cert in SNI (Zeus Panda)

alert tls $HOME_NET any -> $EXTERNAL_NET 443 (msg:"TROJAN Observed Malicious Domain SSL Cert in SNI (Zeus Panda)"; target:src_ip; flow:established,to_server; content:"|16|"; depth:1; content:"|01|"; distance:4; content:"|00 00 0f|gorgot11991.com"; fast_pattern; classtype:trojan-activity; sid:2821857; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2016_08_25, deployment Perimeter, performance_impact Low, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_08_25, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Malicious Domain Panda Banker (tontrumuchtors .com in TLS SNI)

alert tls $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Malicious Domain Panda Banker (tontrumuchtors .com in TLS SNI)"; target:src_ip; flow:established,to_server; content:"|00 00 12|tontrumuchtors.com"; fast_pattern; nocase; classtype:trojan-activity; sid:2828430; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_10_26, deployment Perimeter, former_category TROJAN, performance_impact Moderate, signature_severity Major, updated_at 2019_10_07,

severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN ZeusPanda CnC Domain (linghogolac .ru in TLS SNI)

alert tls $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN ZeusPanda CnC Domain (linghogolac .ru in TLS SNI)"; target:src_ip; flow:established,to_server; content:"|00 00 0e|linghogolac.ru"; reference:md5,23c7055d6c0c09d6e9b2c68ebad95cdb; classtype:trojan-activity; sid:2828577; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_11_08, deployment Perimeter, former_category MALWARE, performance_impact Low, signature_severity Major, updated_at 2017_11_08, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Observed DNS Query (Zeus Panda)

alert dns $HOME_NET any -> any any (msg:"TROJAN Observed DNS Query (Zeus Panda)"; target:src_ip; dns_query; content:"kuwiran.top"; depth:11; nocase; isdataat:!1,relative; fast_pattern; classtype:trojan-activity; sid:2822234; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2016_09_26, deployment Perimeter, signature_severity Major, updated_at 2019_09_28, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN [CrowdStrike] ANCHOR PANDA Torn RAT Beacon Message Header Local

alert tcp $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN [CrowdStrike] ANCHOR PANDA Torn RAT Beacon Message Header Local"; target:src_ip; flow:established, to_server; dsize:16; content:"|00 00 00 11 c8 00 00 00 00 00 00 00 00 00 00 00|"; depth:16; flowbits:set,ET.Torn.toread_header; flowbits:noalert; reference:url,blog.crowdstrike.com/whois-anchor-panda/index.html; classtype:trojan-activity; sid:2016659; rev:2; metadata:attack_target Client_Endpoint, created_at 2013_03_22, deployment Perimeter, former_category MALWARE, signature_severity Major, tag c2, updated_at 2013_03_22, mitre_tactic_id TA0011, mitre_tactic_name Command_And_Control, mitre_technique_id T1041, mitre_technique_name Exfiltration_Over_C2_Channel, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Possible DEEP PANDA C2 Activity

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Possible DEEP PANDA C2 Activity"; target:src_ip; flow:established,to_server; content:"Mozilla/4.0+(compatible|3b|+MSIE+8.0|3b|+Windows+NT+5.1|3b|+SV1|29|";

fast_pattern; http_user_agent; depth:55; isdataat:!1,relative; content:!"Referer|3a|"; http_header; content:!"Content-Type|3a|"; http_header; content:!"Accept"; http_header; content:"|00 00 00 00 00|"; http_client_body; classtype:trojan-activity; sid:2020373; rev:6; metadata:created_at 2015_02_05, former_category MALWARE, updated_at 2020_05_15, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN ZeusPanda CnC Domain (mysitothar .ru in TLS SNI)

alert tls $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN ZeusPanda CnC Domain (mysitothar .ru in TLS SNI)"; target:src_ip; flow:established,to_server; content:"|00 00 0d|mysitothar.ru"; reference:md5,23c7055d6c0c09d6e9b2c68ebad95cdb; classtype:trojan-activity; sid:2828573; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_11_08, deployment Perimeter, former_category MALWARE, performance_impact Low, signature_severity Major, updated_at 2017_11_08, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Observed Malicious SSL Cert (Zeus Panda CnC)

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"TROJAN Observed Malicious SSL Cert (Zeus Panda CnC)"; target:dest_ip; flow:from_server,established; content:"|09 00 ea fe 50 cb 64 b9 a3 30|"; fast_pattern; nocase; content:"|55 04 06|"; distance:0; content:"|02|XX"; distance:1; within:3; content:"|55 04 07|"; distance:0; content:"|0c|Default City"; distance:1; within:13; reference:md5,0a070be1dcbad1b5f3e50438c535b345; classtype:trojan-activity; sid:2828585; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_11_09, deployment Perimeter, former_category MALWARE, performance_impact Moderate, signature_severity Major, updated_at 2017_11_09, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Malicious Domain Panda Banker (tontrumuchtors .com in DNS Lookup)

alert dns $HOME_NET any -> any 53 (msg:"TROJAN Malicious Domain Panda Banker (tontrumuchtors .com in DNS Lookup)"; target:src_ip; dns_query; content:"tontrumuchtors.com"; isdataat:!1,relative; classtype:trojan-activity; sid:2828429; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_10_26, deployment Perimeter, former_category TROJAN, performance_impact Moderate, signature_severity Critical, updated_at 2020_09_14,

severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

Possible Panda Banker DGA Lets Encrypt SSL Cert

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"Possible Panda Banker DGA Lets Encrypt SSL Cert"; target:dest_ip; flow:established,from_server; content:"|55 04 0a|"; content:"|0d|Let|27|s Encrypt"; distance:1; within:14; fast_pattern; content:"|55 04 03|"; pcre:"/^.{2}(?=\d{0,9}?[a-f])(?=[a-f]{0,9}?\d)[0-9a-f]{10}[^.-]*?\.(?!com)[a-z]{2,3}[01]/R"; content:!"ad12812761miqw.xyz"; nocase; reference:md5,5fb74789a52b5c28a6c636facb7555f0; classtype:trojan-activity; sid:1003234; rev:4; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_03_22, deployment Perimeter, former_category TROJAN, performance_impact Low, signature_severity Major, updated_at 2020_08_12, previous_sid 2825567, malware_family Panda, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, rule_origin gib;)

TROJAN ZeusPanda CnC Domain (mysitothar .ru in DNS Lookup)

alert dns $HOME_NET any -> any 53 (msg:"TROJAN ZeusPanda CnC Domain (mysitothar .ru in DNS Lookup)"; target:src_ip; dns_query; content:"mysitothar.ru"; isdataat:!1,relative; reference:md5,23c7055d6c0c09d6e9b2c68ebad95cdb; classtype:trojan-activity; sid:2828572; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_11_08, deployment Perimeter, former_category MALWARE, performance_impact Low, signature_severity Major, updated_at 2020_09_14, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Panda Banker Malicious SSL Certificate Detected

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN Panda Banker Malicious SSL Certificate Detected"; target:dest_ip; flow:established,from_server; content:"|55 04 03|"; content:"|0F|107.181.187.182"; distance:1; within:17; classtype:trojan-activity; sid:2820327; rev:2; metadata:attack_target Client_Endpoint, created_at 2016_05_24, deployment Perimeter, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_07_01, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Zeus Panda Banker Malicious SSL Certificate Detected

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"TROJAN Zeus Panda Banker Malicious SSL Certificate Detected"; target:dest_ip; flow:established,from_server; content:"|55 04 03|"; content:"|0d|novgeo.online"; distance:1; within:14;

classtype:banking-trojan; sid:2820593; rev:1; metadata:attack_target Client_Endpoint, created_at 2016_06_14, deployment Perimeter, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_07_01, severity 5, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Putter Panda 3PARA RAT initial beacon

alert tcp $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Putter Panda 3PARA RAT initial beacon"; target:src_ip; flow:established,to_server; content:"|c4 65 f1 b3 cf a5 7e e2 c0 1a d4 7f 78 46 26 b5 86 15 f9 34 9c 3d 67 84 6a 48 aa df dc 30 60 24|"; depth:2000; reference:url,resources.crowdstrike.com/putterpanda/; classtype:trojan-activity; sid:2018555; rev:2; metadata:attack_target Client_Endpoint, created_at 2014_06_10, deployment Perimeter, former_category MALWARE, signature_severity Major, tag c2, updated_at 2014_06_10, mitre_tactic_id TA0011, mitre_tactic_name Command_And_Control, mitre_technique_id T1041, mitre_technique_name Exfiltration_Over_C2_Channel, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Tsyrval Panda CnC Beacon

alert tcp $HOME_NET any -> $EXTERNAL_NET 1024: (msg:"TROJAN Tsyrval Panda CnC Beacon"; target:src_ip; flow:established,to_server; content:"|75 1C 11 10 75 01 14 07 12 58 5F|"; offset:3; depth:14; classtype:trojan-activity; sid:2021437; rev:1; metadata:attack_target Client_Endpoint, created_at 2015_07_20, deployment Perimeter, former_category MALWARE, signature_severity Major, tag c2, updated_at 2015_07_20, mitre_tactic_id TA0011, mitre_tactic_name Command_And_Control, mitre_technique_id T1041, mitre_technique_name Exfiltration_Over_C2_Channel, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN DEEP PANDA Checkin 3

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN DEEP PANDA Checkin 3"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:"/Catelog/login1.cgi"; http_uri; fast_pattern; reference:url,labs.alienvault.com/labs/index.php/2013/u-s-department-of-labor-website-hacked-and-redirecting-to-malicious-code/; reference:url,crowdstrike.com/sites/default/files/AdversaryIntelligenceReport_DeepPanda_0.pdf; classtype:trojan-activity; sid:2016821; rev:4; metadata:created_at 2013_05_03, former_category MALWARE, updated_at 2020_05_13, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

CURRENT_EVENTS Possible Deep Panda WateringHole Related URI Struct

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"CURRENT_EVENTS Possible Deep Panda WateringHole Related URI Struct"; target:src_ip; flow:established,to_server; content:".php?v=webhp"; fast_pattern:only; http_uri; nocase; classtype:general-suspicious; sid:2018348; rev:3; metadata:created_at 2014_04_01, updated_at 2014_04_01, severity 2, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN [CrowdStrike] ANCHOR PANDA Torn RAT Beacon Message

alert tcp $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN [CrowdStrike] ANCHOR PANDA Torn RAT Beacon Message"; target:src_ip; dsize:200; flow:to_server,established; flowbits:isset,ET.Torn.toread_header; content:"|40 7e 7e 7e|"; offset:196; depth:4; reference:url,blog.crowdstrike.com/whois-anchor-panda/index.html; classtype:trojan-activity; sid:2016660; rev:2; metadata:attack_target Client_Endpoint, created_at 2013_03_22, deployment Perimeter, former_category MALWARE, signature_severity Major, tag c2, updated_at 2013_03_22, mitre_tactic_id TA0011, mitre_tactic_name Command_And_Control, mitre_technique_id T1041, mitre_technique_name Exfiltration_Over_C2_Channel, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Possible Zeus Panda SSL Cert Observed

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"TROJAN Possible Zeus Panda SSL Cert Observed"; target:dest_ip; flow:from_server,established; tls_cert_subject; content:"C=XX, ST=1, L=1, O=1, OU=1, CN="; distance:0; pcre:"/^(?:\d{1,3}\.){3}\d{1,3}/R"; reference:md5,fc784d0df590fad68c1be4437ecf1ece; classtype:trojan-activity; sid:2822213; rev:3; metadata:attack_target Client_Endpoint, created_at 2016_09_23, deployment Perimeter, performance_impact Low, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2019_06_03, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN ZeusPanda CnC Domain (rowrorofrat .com in TLS SNI)

alert tls $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN ZeusPanda CnC Domain (rowrorofrat .com in TLS SNI)"; target:src_ip; flow:established,to_server; content:"|00 00 0f|rowrorofrat.com"; reference:md5,23c7055d6c0c09d6e9b2c68ebad95cdb; classtype:trojan-activity; sid:2828571; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_11_08, deployment Perimeter, former_category MALWARE, performance_impact Low, signature_severity Major, updated_at 2017_11_08, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Zeus Panda Domain in SNI

alert tls $HOME_NET any -> $EXTERNAL_NET 443 (msg:"TROJAN Zeus Panda Domain in SNI"; target:src_ip; flow:established,to_server; content:"|00 00 0f|gloverkentok.us"; fast_pattern; nocase; reference:md5,d438cfe54ee7c4a3b31570f5431a2f33; classtype:trojan-activity; sid:2824983; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_02_15, deployment Perimeter, performance_impact Moderate, signature_severity Major, updated_at 2019_10_07, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Possible Deep Panda - Sakula/Mivast RAT CnC Beacon 5

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Possible Deep Panda - Sakula/Mivast RAT CnC Beacon 5"; target:src_ip; flow:to_server,established; content:"GET"; http_method; content:".jpg?id="; http_uri; fast_pattern; content:!"Accept"; http_header; content:!"Referer|3a|"; http_header; content:!"tagesschau.de"; http_header; content:!"ClipOrganizer"; http_user_agent; pcre:"/\.jpg\?id=\d+$/U"; classtype:backdoor; sid:2021203; rev:5; metadata:attack_target Client_Endpoint, created_at 2015_06_08, deployment Perimeter, former_category MALWARE, signature_severity Major, tag c2, updated_at 2020_10_07, mitre_tactic_id TA0011, mitre_tactic_name Command_And_Control, mitre_technique_id T1041, mitre_technique_name Exfiltration_Over_C2_Channel, severity 5, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

TROJAN Zeus Panda Injects Domain in SNI

alert tls $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Zeus Panda Injects Domain in SNI"; target:src_ip; flow:established,to_server; content:"|00 00 0b|mousisox.pw"; fast_pattern; nocase; classtype:trojan-activity; sid:2824274; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_01_09, deployment Perimeter, former_category TROJAN, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2019_10_07, severity 3, ti_malware_id 65c91fe4e3e72018680a835ed6fb2d1e57373db3, ti_malware_name Panda, malware_family Panda, rule_origin etpro;)

Malware: Keybase

Keybase

KeyBase is a spyware family that can capture keystrokes, steal data from the user's clipboard and take screenshots of the victim's desktop at regular intervals. KeyBase itself is written in C# using the .NET Framework. It was seen for the first time in February 2015. A user with nickname 'Support™' announced KeyBase on the hackforums[.]net forum on February 7, 2015. Shortly before that, the domain 'keybase[.]in' was registered as a homepage and online store for the KeyBase keylogger. Researchers also discovered that while KeyBase's control panel was secured with authentication, the folder in which images were sent for storage was not, meaning that after all this time, they could easily put together a simple script and find all the KeyBase panels available online.

Platform: Windows

Threat level: Low

Category: Keylogger

Indicators of Compromise (IOCs)

CnC:

http://95[.]168[.]175[.]16/admin/std/admin/
http://95[.]168[.]175[.]16/admin/std/admin/login[.]php
http://95[.]168[.]175[.]16/admin/std/admin/index[.]php
http://95[.]168[.]175[.]16/admin/std/admin

Network signatures

TROJAN KeyBase Keylogger Uploading Screenshots

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN KeyBase Keylogger Uploading Screenshots"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:"/image/upload.php"; http_uri; fast_pattern; content:"filename=|22|"; http_client_body; pcre:"/^[^*\+\=\|\:\;\x22\?\>\>\,\#][a-zA-Z0-9-!@#\$%^&\(\)\x20_{}\.~]{1,14}[\d_]+\.(?:jpg|png)\x22\x0d\x0a/PR"; http_header_names; content:!"User-Agent"; content:!"Referer"; content:"|0d 0a|Expect|0d 0a|"; reference:md5,5626771cf6751286de4b90ea4b8df94d; reference:url,researchcenter.paloaltonetworks.com/2015/06/keybase-keylogger-malware-family-exposed/; classtype:trojan-activity; sid:2021441; rev:3; metadata:created_at 2015_07_20, updated_at 2020_11_19, severity 3, ti_malware_id 1adcf0f9b9b6c6fb363d2112e970dc20b03f6e6e, ti_malware_name Keybase, malware_family Keybase, rule_origin etpro;)

TROJAN KeyBase Keylogger Reporting Passwords

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN KeyBase Keylogger Reporting Passwords"; target:src_ip; flow:to_server,established; content:"GET"; http_method; nocase; content:".php?type=passwords&machinename="; fast_pattern; http_uri; content:"&password="; http_uri; content:!"User-Agent|3a 20|"; http_header; content:!"Accept"; http_header; content:!"Referer|3a 20|"; http_header; reference:md5,00f4601973c653ef7eeab355723b784a; classtype:trojan-activity; sid:2811365; rev:3; metadata:created_at 2015_06_09, updated_at 2020_10_01, severity 3, ti_malware_id 1adcf0f9b9b6c6fb363d2112e970dc20b03f6e6e, ti_malware_name Keybase, malware_family Keybase, rule_origin etpro;)

TROJAN KeyBase Keylogger Reporting Passwords

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN KeyBase Keylogger Reporting Passwords"; target:src_ip; flow:to_server,established; content:"GET"; http_method; nocase; content:".php?type=passwords&machinename="; fast_pattern; http_uri; content:"&password="; http_uri; content:!"User-Agent|3a 20|"; http_header; content:!"Accept"; http_header; content:!"Referer|3a 20|"; http_header; reference:md5,00f4601973c653ef7eeab355723b784a; classtype:trojan-activity; sid:2811365; rev:3; metadata:created_at 2015_06_09, updated_at 2020_10_01, severity 3, ti_malware_id 1adcf0f9b9b6c6fb363d2112e970dc20b03f6e6e, ti_malware_name Keybase, malware_family Keybase, rule_origin etpro;)

TROJAN Observed Malicious SSL Cert (Keybase Keylogger CnC)

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"TROJAN Observed Malicious SSL Cert (Keybase Keylogger CnC)"; target:dest_ip; flow:established,from_server; content:"|55 04 03|"; content:"|0f|mattech-llc.com"; distance:1; within:16; fast_pattern; reference:md5,c10dbcdf4a651b61397aa5a66758bff5; classtype:trojan-activity; sid:2828508; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_11_02, deployment Perimeter, former_category MALWARE, performance_impact Moderate, signature_severity Major, updated_at 2017_11_02, severity 3, ti_malware_id 1adcf0f9b9b6c6fb363d2112e970dc20b03f6e6e, ti_malware_name Keybase, malware_family Keybase, rule_origin etpro;)

TROJAN KeyBase Keylogger Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN KeyBase Keylogger Checkin"; target:src_ip; flow:to_server,established; content:"GET"; http_method; nocase; content:".php?type=notification&machinename="; fast_pattern; http_uri; content:"&machinetime="; http_uri; content:!"User-Agent|3a 20|"; http_header; reference:md5,fa6f24a18ef772d9cdaa1d6cd1e24d1b; reference:url,researchcenter.paloaltonetworks.com/2015/06/keybase-keylogger-malware-family-exposed/; classtype:trojan-activity; sid:2021188; rev:3;

metadata:created_at 2015_06_05, former_category MALWARE, updated_at 2020_10_01, severity 3, ti_malware_id 1adcf0f9b9b6c6fb363d2112e970dc20b03f6e6e, ti_malware_name Keybase, malware_family Keybase, rule_origin etpro;)

TROJAN KeyBase Keylogger HTTP Pattern

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN KeyBase Keylogger HTTP Pattern"; target:src_ip; flow:to_server,established; content:"GET"; http_method; nocase; content:"/post.php?type="; http_uri; fast_pattern; content:"&machinename="; http_uri; distance:0; content:!"User-Agent|3a 20|"; http_header; pcre:"/^Host\x3a[^\r\n]+\r\n(?:Connection\x3a\x20Keep-Alive\r\n)?(?:\r\n)?/H"; reference:md5,5626771cf6751286de4b90ea4b8df94d; reference:url,researchcenter.paloaltonetworks.com/2015/06/keybase-keylogger-malware-family-exposed/; classtype:trojan-activity; sid:2021440; rev:2; metadata:created_at 2015_07_20, updated_at 2020_05_29, severity 3, ti_malware_id 1adcf0f9b9b6c6fb363d2112e970dc20b03f6e6e, ti_malware_name Keybase, malware_family Keybase, rule_origin etpro;)

TROJAN KeyBase Keylogger Transmitting Clipboard to CnC

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN KeyBase Keylogger Transmitting Clipboard to CnC"; target:src_ip; flow:established,to_server; content:"GET"; http_method; content:".php?type=clipboard&machinename="; http_uri; fast_pattern; content:"&clipboardtext="; http_uri; content:"&machinetime="; distance:0; http_uri; content:!"User-Agent|3a|"; http_header; content:!"Accept"; http_header; content:!"Referer|3a|"; http_header; reference:md5,fa6f24a18ef772d9cdaa1d6cd1e24d1b; classtype:trojan-activity; sid:2810488; rev:3; metadata:created_at 2015_04_08, former_category MALWARE, updated_at 2020_09_30, severity 3, ti_malware_id 1adcf0f9b9b6c6fb363d2112e970dc20b03f6e6e, ti_malware_name Keybase, malware_family Keybase, rule_origin etpro;)

Malware: Necurs Botnet

Necurs Botnet

It has been reported that the variants of the malware named as Necurs are spreading. The malware mainly targets the windows operating systems and is well known for its spamming and malware distribution functionalities. The malware mainly spread by means of spear phishing emails containing phishing URLs or malicious attachments and also through dating sites.

It has the following functionalities:

- Anti-detection capabilities to hide itself by disabling Antivirus driver components or other security features.
- Spread banking Trojans, ransomwares, RATs, infostealers or cryptocurrency miners
- Stop its activities for a period of time and then reinitiate with new commands for the infected hosts.
- Machines infected with necurs botnet make network connections to remote command and control server to receive commands and operate accordingly.
- Make use of victim's email IDs to send spam mails.
- Spreads malware that are capable of launching DDoS attacks.

Necurs has kernel mode rootkit capabilities, comprising of kernel mode driver and user mode component, thereby giving the highest level of privileges to the attacker. Along with this, it also has modular architecture making it suitable to spread different malwares and perform different functions when required.

Indicators of Compromise (IOCs)

SHA256:

03c770882e87585fea0272a8e6a7b7e37085e193475884b1316e14fb193e992d
b0c173e0fc28e0f1bc8debfe49de01f306d372a0516d88201b87e441f3de303e
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6599a9e29bb7c607d1a13dc43d8df76c17c93449b654d4e00fb96e02eea2df32
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bff61ca109f8a20eb19e1eb9a922c8285d079111b5b3f3f993ef1f7624963d8d
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44112222cab7a861b428a76af7067ee562a9fc8ad213d43ab83aa8f7aac4343a
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06d42acee69178a161b7317c87515e4bdab647976985a1d172411b799ffbac32
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7e73b086c5d0d693483a57847aa738e8c3b65b45f8603b5980721795af4534dd
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f08ab6e0fc6dbff270b2d42f4412375cef3d543b311923960ab432d35754a56e
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2592d4bf18d83d1b9f98176ce389d6ad5dcaa399f3a549fab15cad520cd24470
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2881600b108ece9a1df3e7659370e3ee79cf233e9723a9acd7985452c5915eb3
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cd0a031a65a10e8c549c29c1b5db87ad730c84ef9ba48041b3c4a723e56ee71f
8e2cb05dbf3375e66488f387aaebe31c51c95fea135eadace186362629988a4c
0559d32f6a20cdfa380eb1eb17fbc4aea9e39f3203f4b7818281e0fb117a6977
32325761402e0b55dd9fe8b2718bc213491eea6f57bc354e358a6edcbe584dd1
026fa1191fcf895ce375ad8f8f2bda47aa8b1cb27e6be490399a1ad47d452b68
a20ebaf8b9c14a2738795f0c38b48a712f3e9fd293a51c5475b15c959856139d

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0af35bd7ffe0af328cff2cf39585b4b1b69d550c94f0b407e348085dda0b4284
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b78dcbf395b7c934344e4f1bb3cb08628455e8d2a997dbad0bce7afdd573ff8e
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276fd3e1e484996c7f2cd8d9b9d0125dc0d9d6488a65417fb80662616b76adc2
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350e989a917614bc2f830dbe61cbad08b444d9cfe96706ed0bd2d86e3a586ec4
d38ba2dfc9e02a2c6997901aae2197402ce7cf3e79973b81dd06271dbac17328
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52db4cca867773fdce9cd8d6d4e9b8ea66c2c0c4067f33fd4aaf6bfa0c5e4d62
e4ec3cdf1bb578d2740c06a0e615f4b2f08ce1ff6f925670a92630fc3daedda1
65184fbf32ef6a9e109115aaac401de7c0af797d485396091f284a262abf222c
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f3877a6e45463ebfa03b49087852572793e4233d084a64584e29f6b7c83af1e8
8e508ea5009677860b67e34af22f6706e6aa1e94c84759a43b1c9f3e40dbe01

Malware: Sality

Sality

Sality is a family of polymorphic file infectors, which target Windows executable files with the extensions .EXE or .SCR. Sality was first discovered in 2003. It infects executable files on local, removable and remote shared drives. The virus also creates a peer-to-peer (P2P) botnet and receives URLs of additional files to download. It then attempts to disable security software.

Sality is a family of polymorphic file infectors, which target Windows executable files with the extensions .EXE or .SCR. Sality was first discovered in 2003. It infects executable files on local, removable and remote shared drives. The virus also creates a peer-to-peer (P2P) botnet and receives URLs of additional files to download. It then attempts to disable security software.

Functionality:

Injects code into running processes and loads DLL files within them;

Lowers PC security settings;

Infects files on local disks and removable drives;

Downloads files;

Creates P2P botnets

Indicators of Compromise (IOCs)

CnC:

206[.]189[.]61[.]126
195[.]38[.]137[.]100
213[.]202[.]229[.]103
217[.]74[.]65[.]23
217[.]74[.]76[.]129
91[.]142[.]252[.]26
69[.]172[.]201[.]153
94[.]73[.]145[.]239
173[.]193[.]19[.]14
185[.]64[.]219[.]5
5[.]101[.]0[.]44
49[.]50[.]8[.]31
103[.]11[.]74[.]25
173[.]0[.]143[.]204
107[.]180[.]27[.]158
103[.]224[.]182[.]246
46[.]30[.]215[.]173
199[.]59[.]242[.]151
195[.]22[.]26[.]248

64[.]29[.]151[.]221
63[.]249[.]150[.]76
23[.]253[.]126[.]58
93[.]186[.]196[.]19
31[.]193[.]142[.]216
www[.]litespeedtech[.]com
pelcpawel[.]fm[.]interia[.]pl
www[.]interia[.]pl
chicostara[.]com
dewpoint-eg[.]com
suewyllie[.]com
www[.]bluecubecreatives[.]com
724hizmetgrup[.]com
yavuztuncil[.]ya[.]funpic[.]de
www[.]ceylanogullari[.]com
cevatpasa[.]com
pracenadoma[.]wz[.]cz
tehnik-unggul[.]com
philanthrope[.]in
www[.]katenilsson[.]dk
www[.]best-lab[.]org
ksaxl[.]com
www[.]akpartisariveliler[.]com
tn69abi[.]com
abb[.]ind[.]in
www[.]3pindia[.]in
1s2qvh91x[.]site[.]aplus[.]net
gim8[.]pl
acemoglusucuklari[.]com[.]tr
a-bring[.]com
aci[.]gratix[.]com[.]br
aclassalerts[.]com
elcisigur[.]ro

SHA-1:

adf205560e8bfde14378471ebee9342853781c50
d18dc8b64eaabb3047d503403f47f406ffe478b7
59bb3e745a5de05e821544522f5785d15cb65c00
a95455da6013caa421f9105b6b0aa9cc60b74cbb
29482261e903199483eba567bc082c5746526d46
97ce2e0e27397880966087225156f1bbf397c37b
7b6ef356c7fbead074c8b4643a42b3b7a5d46c8a
169492897a667322c3ffcabf96834244a4477ec8

de7347e63ebd9d060f98c96b3a2f80c52030022b
539af8bc5fb36e34ff4fe6869cdac998f1c9575d

SHA256:

02e195243af5923dae171d824b63a3d25a2538bc596a971273eb30b0a920b9e5
03232668bd0c47073066f155ac5577b0240fcff40eafac864adef86694006e43
03bc456b9c91607a9ace1f4d8121d28f51ea3177bc2198fc3a1d76aab20b3620
049d7d3d22c12f592379446b2ebb2cd2c894422379421afd4c77986a293760ed
06e4245cf5a76061587820f25a5d019663b63cca431e9bb43095d6c09b25a3ea
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10c2740264a991ddd1bc1058975565eaa871803647805048c8132d169d34f5ca
11b75d4bb7cdc3938d884da59da1885e70b8bc995bbf528ffd1c02d5876214f8
13971272ef6b82c6b5ef9de3eb33f2dc439048c4eacd388faf2de37d89d25bb1
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168fce02cad1cfd3ac578f3ccfb023c6ea76f8c402ab160f0271863c66279af0
1692102392f7d3552307ae0b1e081b862650272d22a3823134cc9a2bfc6866c3
16e8fc998564cd4272795782a371fad13fca160f9427f85e0a8591d56c9a5248
1a93a65e01aecd981c300f7877d51c1b4907fccb4acced53c3e70bb7c1884e61
1c2479ad95ad5ec5944d10fc4222b0f7b9c40e4f3e940515c18773205a6129c8
1c7a9720df7186f3354799f5f7b17139e20d8c9233ef796c1f8a9a4a61a3eb73
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b535ea6cc31dd9f8a66fbbedb61ed021520ff74f5b42f815eb84022cfb3e4435
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c40d8c58cc63dc606a9fa854f1774d7f17546170fdfc2679c3b8f6387fa4be6d
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f0d47851346c738dd836fb6f43005a57305f04e078d07af3a6d84ee586dfdfc0
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7c544889d588ae668f13ff9e05eabc9ea048fa026b3a5af4882de10da8f8640c
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bd12db3c5dcc16b35cbb3cd42bbf9719ac8e69da6449c32659fc2a066d42265e
c85d9321a025a39c5b6facb12dd663b9623a4f43a73e2be409e9e3d04f132d4c
ea5e7e60a45331e504dcb30b29f6d9c7d438fb343aa2ae897047369b6863d712
f6efc4a323520ba88ccb8f678f3c9167010c6c575afcd8225393bc0f664fc96b
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cea7a79f688fe24df1c614bc6fdcb281c056f882307e2b9f7841dca56ae923f0
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1e21f175cd66fe91b5ff770b1e74c61b2df04c13044388e36dfd3d0768c9e6e5
bdb1b6c2151038f1023b551d26ef4eab2d5321066d3352d5357b8bee301b67b0

Malware: QBot

QBot

Qbot, also known as Qakbot, Pinkslipbot is a network-aware worm with backdoor capabilities, primarily designed as a credential harvester. It can download and execute files, delete itself, replicate itself across network, terminate processes in OS. All stolen data will be collected and sent to FTP servers. QBot, (aka Qakbot, Quakbot) is a banking trojan first identified in 2009 as a network-aware worm with backdoor capabilities, primarily designed as a credential harvester. It is an old threat and was well-described by Symantec back in 2009. In December 2015, several researchers reported that websites hosting the Rig Exploit Kit were serving an updated version of QBot. Then in January 2016, over 500 devices at a large public organization were infected with QBot. It was the second encounter of QBot trojan. After infecting system, QBot injected into explorer.exe and browser processes. It steals cookie files, active Internet sessions, redirects users to fake pages, injects code in visited web pages, installs keylogger, steals certificates, collects passwords and logins used by user in various programs. It can download and execute files, delete itself, replicate itself across network, terminate processes in OS. All stolen data will be collected and sent to FTP servers.

Platform: Windows

Threat level: High

Category: Banking Trojan

Indicators of Compromise (IOCs)

CnC:

35[.]220[.]219[.]62
86[.]99[.]134[.]235
47[.]22[.]148[.]6
157[.]131[.]108[.]180
24[.]117[.]107[.]120
75[.]136[.]40[.]155
24[.]179[.]13[.]119
75[.]118[.]1[.]141
5[.]2[.]212[.]254
184[.]185[.]103[.]157
2[.]50[.]161[.]6
197[.]82[.]221[.]232
74[.]195[.]119[.]4
195[.]12[.]154[.]8
149[.]28[.]98[.]196
83[.]110[.]12[.]140
193[.]248[.]221[.]184
74[.]68[.]144[.]202

213[.]60[.]147[.]140
108[.]160[.]123[.]244
118[.]168[.]236[.]169
105[.]198[.]236[.]101
31[.]5[.]174[.]173
190[.]85[.]91[.]152
72[.]252[.]201[.]69
37[.]104[.]38[.]219
70[.]49[.]88[.]199
47[.]146[.]34[.]236
86[.]121[.]43[.]200
71[.]88[.]193[.]17
144[.]202[.]38[.]185
185[.]18[.]54[.]134
31[.]184[.]193[.]142
80[.]66[.]83[.]166
5[.]101[.]0[.]245
185[.]103[.]110[.]172
185[.]66[.]9[.]143
185[.]186[.]141[.]140
194[.]146[.]43[.]165
185[.]129[.]49[.]19
23[.]81[.]246[.]35
46[.]30[.]42[.]185
31[.]184[.]192[.]39
31[.]184[.]193[.]17
78[.]63[.]226[.]32
189[.]210[.]115[.]207
81[.]88[.]254[.]62
83[.]110[.]103[.]152
71[.]163[.]222[.]223
160[.]120[.]7[.]166
203[.]198[.]96[.]249
209[.]210[.]187[.]52
2[.]50[.]56[.]81
200[.]44[.]237[.]189
68[.]186[.]192[.]69
98[.]192[.]185[.]86
71[.]117[.]132[.]169
187[.]190[.]250[.]175
149[.]28[.]99[.]97
95[.]77[.]223[.]148
123[.]201[.]198[.]69

106[.]51[.]85[.]162
109[.]236[.]80[.]55
146[.]185[.]215[.]18
195[.]19[.]192[.]49
46[.]4[.]98[.]91
45[.]143[.]138[.]72
91[.]230[.]60[.]116
185[.]48[.]57[.]117
79[.]142[.]22[.]133
190[.]85[.]91[.]153
172[.]78[.]30[.]215
142[.]129[.]227[.]86
24[.]216[.]56[.]6
190[.]85[.]91[.]159
50[.]244[.]112[.]106
83[.]110[.]108[.]226
190[.]85[.]91[.]158
83[.]110[.]96[.]71
73[.]25[.]124[.]140
155[.]186[.]9[.]160
172[.]78[.]47[.]100
58[.]152[.]9[.]133
186[.]144[.]33[.]73
73[.]153[.]211[.]227
71[.]163[.]223[.]159
190[.]85[.]91[.]156
103[.]80[.]198[.]235
174[.]104[.]31[.]209
90[.]61[.]41[.]220
161[.]199[.]180[.]159
74[.]128[.]121[.]17
24[.]139[.]72[.]117
96[.]57[.]188[.]174
105[.]225[.]169[.]45
98[.]116[.]21[.]115
86[.]175[.]79[.]249
207[.]246[.]116[.]237
190[.]85[.]91[.]157
67[.]6[.]12[.]4
95[.]76[.]27[.]6
84[.]38[.]130[.]75
45[.]128[.]151[.]15
95[.]213[.]144[.]203

77[.]222[.]52[.]183
31[.]184[.]192[.]66
31[.]184[.]199[.]11
46[.]4[.]98[.]69
120[.]150[.]218[.]241
190[.]85[.]91[.]154
160[.]3[.]184[.]253
186[.]144[.]33[.]74
149[.]28[.]101[.]90
68[.]9[.]238[.]144
83[.]194[.]193[.]247
96[.]253[.]46[.]210
37[.]104[.]40[.]29
45[.]63[.]107[.]192
197[.]51[.]82[.]72
90[.]201[.]21[.]58
86[.]160[.]137[.]132
108[.]46[.]145[.]30
90[.]65[.]234[.]26
186[.]144[.]33[.]75
45[.]32[.]211[.]207
199[.]19[.]117[.]131
175[.]141[.]219[.]71
105[.]198[.]236[.]99
151[.]61[.]125[.]180
96[.]227[.]127[.]13
216[.]201[.]162[.]158
90[.]61[.]30[.]155
176[.]181[.]247[.]197
67[.]141[.]11[.]98
90[.]65[.]236[.]181
71[.]187[.]170[.]235
213[.]122[.]113[.]120
173[.]21[.]10[.]71
75[.]67[.]192[.]125
106[.]51[.]52[.]111
31[.]184[.]193[.]71
95[.]217[.]51[.]27
176[.]9[.]19[.]209
77[.]222[.]63[.]66
98[.]252[.]118[.]134
45[.]46[.]53[.]140
45[.]77[.]117[.]108

136[.]232[.]34[.]70
84[.]72[.]35[.]226
45[.]77[.]115[.]208
72[.]196[.]112[.]234
186[.]144[.]33[.]72
70[.]126[.]76[.]75
101[.]178[.]240[.]121
190[.]85[.]91[.]155
184[.]179[.]14[.]130
108[.]190[.]194[.]146
86[.]220[.]60[.]133
74[.]195[.]52[.]3
207[.]246[.]77[.]75
24[.]206[.]4[.]203
74[.]124[.]191[.]6
81[.]214[.]126[.]173
24[.]138[.]75[.]11
196[.]204[.]207[.]111
24[.]179[.]77[.]236
24[.]50[.]118[.]93
191[.]115[.]58[.]225
187[.]145[.]108[.]84
97[.]69[.]160[.]4
115[.]133[.]243[.]6
73[.]90[.]4[.]146
77[.]246[.]144[.]199
95[.]215[.]0[.]211
185[.]238[.]136[.]67
188[.]227[.]18[.]135
5[.]101[.]0[.]243

SHA256:

43abd76bebb7b2f1f1f3a11f07bb4777112aa457e27352f41a5b38a3d92ee13d
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c4182ff4e0a245d2d665746606ac503217fdf6bb8db3628ee54f25331d605a3a
786694b1c6db525fb700a637f60ef854cfd76b98bed007834bf32beda623f102
29eacda0c6ea2660180e38df7d5f6594af73cbcf4d421d4bdd9cde1ab9275091
2965817e747cf5c74ec45d56735e64b841ba3393eef655f05fa11eb4a6636a7d
c69c328a1bafb8742b52327581af2635425e3c3ae639bbd02235c6b57159b45e
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a7c77b78afaabc7c06cb94684d72b49d3788b31a6e52c9f9a426f20e944c402c
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a1667e9fea440141e72230f59b2d777be55dc445dfd9efce8347d647c4826329
a27c962eb6d9d7266cafd034e3846bbf2b7b90e04741154d2fe6d0ffec1f1540
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2a57c1c324a169ac5e46196fbe19f2acff36c7e7490ec50621bdf4546e69bd3e
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090e5de1e9e4dfde1524e351671acf0736d53b1737fafa324d4ac06cf2271f78
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10c27496c0a93b36c11aeea73b96dfb0220ee146afc45ed5041c6421b202f30f
6eedf6fa0d8b059e6ac541879d22e228f9218531a5dd2c73f79e226a9eaae643
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21d54c69ac6bc5d653de85be3708be83242b3a74d6911e41b2fe041153ae193d
8c24dccd50347dedd38a30a87546476011e9e9c356b532cc776eded2a3c0a692
9115c5e1a4bc56983087d03c99784efbe472e81c977aaf63bebf6bbbc92c81e5
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f7b1822cf7688515499b9ad4af685fc9569263236889460c9389e333b5fca5be
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fe2cf705ddad7ab655bbdb850b6c5e87beb7f0be195fcc260bc4b78aa6de7ab9
65d9ab81778b2a753b0849f5cf1e64afc9ae98960c3db3ce874d693fd48fc5a4
a192aadf11ae8faa8fdbf7dd51291ef1f649b92b3c34a513bc6dfc22c0be9609
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13ccba322ba077707a60ff96f9430d7b3ac18de9afd62963f59679ebea6cb3c1
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49a7a0d67f700f5e59894f0cdf767a30a6ad768c360b729f92b12395c5a9a272
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b2cc5d29e19bad075a623cfed3aaa5d1215f9e4a0fe298921fe2e33d6c62df54
cc174bff3df014a379af4388dd57e7db845aa3f0fd09ca2b609ac345a9c25807
2e9cfd3e57f330cd6dd5d9705c8858ad5594a950b21201376c9385ad8295c69c
8b848e8e4e1e2440e91c87db130b1eb9611fa8ae0c4835f536c864472de2ca3f
4da8564def807d49cf9d45fcad3e9201344732a49aea4261ab05b8b43cb3adae
8fe5b6ec872d0c6db4e2ea14d8936c1b375ed08ffb0f2354d7a3f62214ef9650
a80e53b188293efae169cb567ef5ab81d135f35102c657fdade76d60b75b37bd

Network signatures

TROJAN Win32/Qbot CnC Activity

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Win32/Qbot CnC Activity"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:"/t4"; http_uri; isdataat:!1,relative; content:"Mozilla/5.0 (Windows NT 6.1|3b 20|WOW64|3b 20|Trident/7.0|3b 20|rv|3a|11.0) like Gecko"; http_user_agent; depth:68; isdataat:!1,relative; pcre:"/^[A-Za-z0-9]{3,20}=(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4})$/Psi"; http_start; content:"POST|20|/t4|20|HTTP/1.1"; depth:17; fast_pattern; http_header_names; content:!"Referer"; reference:md5,a74309ba974690c806ec5bc24869a549; classtype:trojan-activity; sid:2838496; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2019_09_18, deployment Perimeter, deployment SSLDecrypt, former_category MALWARE, performance_impact Moderate, signature_severity Major, updated_at 2020_12_01, severity 3, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

TROJAN VBS/Qbot.Downloader Requesting Payload

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN VBS/Qbot.Downloader Requesting Payload"; target:src_ip; flow:established,to_server; content:"GET"; http_method; content:".png?bg="; http_uri; fast_pattern; content:"?os="; http_uri; distance:0; content:"&av="; http_uri; distance:0; content:"Microsoft BITS/"; http_user_agent; depth:15; content:"Range|3a 20|bytes="; http_header; http_accept_enc; content:"identity"; http_header_names; content:"If-Unmodified-Since"; content:!"Referer"; content:!"Cache"; threshold:type limit, count 1, seconds 30, track by_src; classtype:trojan-activity; sid:2833619; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2018_11_23, deployment Perimeter, former_category TROJAN, performance_impact Low, signature_severity Major, tag Downloader, tag VBS, updated_at 2020_08_27, severity 3, ti_malware_id

e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

TROJAN Win32/Qbot/Quakbot Checkin via HTTP GET

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Win32/Qbot/Quakbot Checkin via HTTP GET"; target:src_ip; flow:established,to_server; content:"GET"; http_method; pcre:"/^\/[a-zA-Z0-9]*(?=[A-Z])[a-zA-Z0-9]*\.php$/U"; pcre:"/(?:\x20MSIE\x20|rv\x3a11)/V"; pcre:"/(?:Cache-Control|Pragma)\x3a[^\r\n]+\r\n(?:\r\n)?$/H"; http_start; content:".php|20|HTTP/1.1|0d 0a|User-"; fast_pattern; http_header_names; content:"|0d 0a|User-Agent|0d 0a|Host|0d 0a|"; depth:20; content:!"Referer|0d 0a|"; content:!"Accept"; classtype:trojan-activity; sid:2815364; rev:4; metadata:created_at 2015_12_15, former_category MALWARE, updated_at 2020_04_06, severity 3, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

TROJAN PSW.Win32.Qbot.aem Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN PSW.Win32.Qbot.aem Checkin"; target:src_ip; flow:to_server,established; content:"GET"; http_method; nocase; content:"jloader.pl?is="; http_uri; nocase; content:"&ec1="; http_uri; nocase; content:"&ec2="; http_uri; nocase; content:"&it="; http_uri; nocase; content:"&b="; http_uri; nocase; content:"&vt="; http_uri; nocase; content:"&n="; http_uri; nocase; reference:url,www.threatexpert.com/reports.aspx?find=Trojan-PSW.Win32.Qbot.&x=0&y=0; classtype:banking-trojan; sid:2802932; rev:2; metadata:created_at 2011_06_06, former_category MALWARE, updated_at 2011_06_06, severity 5, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

IP address related to malware_qbot_c2_server_1

alert tcp any any <> 184.185.103.157 any (msg:"IP address related to malware_qbot_c2_server_1"; target:src_ip; flags:A; classtype:test; sid:1671681; rev:1; threshold:type limit, track by_src, seconds 30, count 1; metadata:credibility 100, malware_family malware_qbot_c2_server_1, reliability 95, rule_origin ti_panda, ti_threatactor_id 4562361a22a49bec6e4eb5c16de6aefb0809d7f0, ti_threatactor_name QBot-Group, severity 1, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot;)

IP address related to malware_qbot_c2_server_1

alert tcp any any <> 72.252.201.69 any (msg:"IP address related to malware_qbot_c2_server_1"; target:src_ip; flags:A; classtype:test; sid:1673181; rev:1; threshold:type limit, track by_src, seconds 30, count 1; metadata:credibility 100, malware_family malware_qbot_c2_server_1, reliability 95, rule_origin ti_panda,

ti_threatactor_id 4562361a22a49bec6e4eb5c16de6aefb0809d7f0, ti_threatactor_name QBot-Group, severity 1, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot;)

TROJAN Possible Win32/Qbot/Quakbot Checkin via HTTP GET

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Possible Win32/Qbot/Quakbot Checkin via HTTP GET"; target:src_ip; flow:established,to_server; content:"GET"; http_method; content:".png?uid="; http_uri; fast_pattern; pcre:"/\/\d+\.png\?uid=(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4})+$/U"; content:!"Mozilla"; http_user_agent; http_header_names; content:"|0d 0a|Connection|0d 0a|Accept|0d 0a|Accept-Language|0d 0a|User-Agent|0d 0a|Host|0d 0a 0d 0a|"; depth:59; isdataat:!1,relative; classtype:trojan-activity; sid:2030157; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2020_05_12, deployment Perimeter, signature_severity Major, updated_at 2020_05_12, severity 3, rule_origin etpro;)

IP address related to malware_qbot_c2_server_1

alert tcp any any <> 71.163.222.223 any (msg:"IP address related to malware_qbot_c2_server_1"; target:src_ip; flags:A; classtype:test; sid:1681705; rev:1; threshold:type limit, track by_src, seconds 30, count 1; metadata:credibility 100, malware_family malware_qbot_c2_server_1, reliability 95, rule_origin ti_panda, ti_threatactor_id 4562361a22a49bec6e4eb5c16de6aefb0809d7f0, ti_threatactor_name QBot-Group, severity 1, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot;)

IP address related to malware_qbot_c2_server_1

alert tcp any any <> 213.122.113.120 any (msg:"IP address related to malware_qbot_c2_server_1"; target:src_ip; flags:A; classtype:test; sid:1682633; rev:1; threshold:type limit, track by_src, seconds 30, count 1; metadata:credibility 100, malware_family malware_qbot_c2_server_1, reliability 95, rule_origin ti_panda, ti_threatactor_id 4562361a22a49bec6e4eb5c16de6aefb0809d7f0, ti_threatactor_name QBot-Group, severity 1, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot;)

TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)"; target:dest_ip; flow:established,from_server; content:"|55 04 03|"; content:"|0e|giviklorted.at"; distance:1; within:15; reference:url,sslbl.abuse.ch; classtype:trojan-activity; sid:2022537; rev:2; metadata:attack_target Client_Endpoint, created_at 2016_02_17, deployment Perimeter, former_category MALWARE, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_07_01, severity 3, rule_origin etpro;)

TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)"; target:dest_ip; flow:established,from_server; content:"|55 04 03|"; content:"|0b|marinova.am"; distance:1; within:12; reference:url,sslbl.abuse.ch; classtype:trojan-activity; sid:2022623; rev:2; metadata:attack_target Client_Endpoint, created_at 2016_03_16, deployment Perimeter, former_category MALWARE, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_07_01, severity 3, rule_origin etpro;)

TROJAN Qbot Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Qbot Checkin"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:".php"; http_uri; content:"n="; depth:2; http_client_body; content:"&m="; distance:0; http_client_body; content:"&v="; distance:0; http_client_body; content:"&g="; http_client_body; fast_pattern; content:!"Referer|3a|"; http_header; pcre:"/\.php$/U"; reference:md5,39c4c3a64f266dc0b2e49c4deb41a541; classtype:banking-trojan; sid:2809522; rev:3; metadata:created_at 2015_01_15, former_category MALWARE, updated_at 2020_09_29, severity 5, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

IP address related to malware_qbot_c2_server_1

alert tcp any any <> 45.63.107.192 any (msg:"IP address related to malware_qbot_c2_server_1"; target:src_ip; flags:A; classtype:test; sid:1663538; rev:1; threshold:type limit, track by_src, seconds 30, count 1; metadata:credibility 100, malware_family malware_qbot_c2_server_1, reliability 95, rule_origin ti_panda, ti_threatactor_id 4562361a22a49bec6e4eb5c16de6aefb0809d7f0, ti_threatactor_name QBot-Group, severity 1, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot;)

IP address related to malware_qbot_c2_server_1

alert tcp any any <> 189.210.115.207 any (msg:"IP address related to malware_qbot_c2_server_1"; target:src_ip; flags:A; classtype:test; sid:1663715; rev:1; threshold:type limit, track by_src, seconds 30, count 1; metadata:credibility 100, malware_family malware_qbot_c2_server_1, reliability 95, rule_origin ti_panda, ti_threatactor_id 4562361a22a49bec6e4eb5c16de6aefb0809d7f0, ti_threatactor_name QBot-Group, severity 1, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot;)

TROJAN Win32/Qbot/Quakbot Downloader - Requesting Secondary Download

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Win32/Qbot/Quakbot Downloader - Requesting Secondary Download"; target:src_ip; flow:established,to_server; content:"GET"; http_method; content:"|3f|uid|3d|"; http_uri;

content:"WebGL3D"; http_user_agent; depth:7; isdataat:!1,relative; fast_pattern; classtype:trojan-activity; sid:2029551; rev:2; metadata:affected_product Windows_Client_Apps, attack_target Client_Endpoint, created_at 2020_02_28, deployment Perimeter, former_category MALWARE, malware_family Qbot, signature_severity Major, updated_at 2020_02_28, severity 3, rule_origin etpro;)

TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)"; target:dest_ip; flow:established,from_server; content:"|09 00|"; content:"|55 04 06|"; distance:0; content:"|02|US"; distance:1; within:3; content:"|55 04 08|"; distance:0; content:"|02|NY"; distance:1; within:3; content:"|55 04 07|"; distance:0; content:"|02|NY"; distance:1; within:3; fast_pattern; content:"|55 04 03|"; distance:0; content:"|2a 86 48 86 f7 0d 01 09 01|"; distance:0; content:"admin@"; distance:2; within:6; reference:url,sslbl.abuse.ch; classtype:trojan-activity; sid:2022534; rev:2; metadata:attack_target Client_Endpoint, created_at 2016_02_17, deployment Perimeter, former_category MALWARE, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_07_01, severity 3, rule_origin etpro;)

TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)"; target:dest_ip; flow:established,from_server; content:"|55 04 0b|"; content:"|16|SomeOrganizationalUnit"; distance:1; within:23; content:"|2a 86 48 86 f7 0d 01 09 01|"; distance:0; content:"|0c|root@ua7.com"; distance:1; within:13; fast_pattern; reference:url,sslbl.abuse.ch; classtype:trojan-activity; sid:2022795; rev:2; metadata:attack_target Client_Endpoint, created_at 2016_05_05, deployment Perimeter, former_category MALWARE, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_07_01, severity 3, rule_origin etpro;)

TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)"; target:dest_ip; flow:established,from_server; content:"|55 04 06|"; pcre:"/^.\x02[A-Z]{2}/Rs"; content:"|55 04 08|"; distance:0; pcre:"/^.\x02[A-Z]{2}/Rs"; content:"|55 04 07|"; distance:0; pcre:"/^.{2}[A-Z][a-z]+(?:\x20[A-Z][a-z]+)?[01]/Rs"; content:"|55 04 09|"; fast_pattern; distance:0; pcre:"/^.{2}\d{2,3}(?:\x20[A-Z][a-z]+\.?){1,3}[01]/Rs"; content:!"|2a 86 48 86 f7 0d 01 09 01|"; distance:0; content:"|55 04 0a|"; distance:0; content:"|55 04 0b|"; distance:0; content:"|55 04 03|"; distance:0; pcre:"/^.(.[a-z]{4,12}\.(?:us|org|net|biz|info|mobi|com)[01]).*?\x55\x04\x03.\1/Rs"; reference:url,sslbl.abuse.ch; classtype:trojan-activity; sid:2022868; rev:4; metadata:attack_target Client_Endpoint, created_at 2016_06_06, deployment

Perimeter, former_category MALWARE, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_07_01, severity 3, rule_origin etpro;)

TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)"; target:dest_ip; flow:established,from_server; content:"|04 26 98 61 57|"; fast_pattern; content:"|55 04 03|"; distance:0; content:"|25|ASA Temporary Self Signed Certificate"; distance:1; within:38; reference:url,sslbl.abuse.ch; classtype:trojan-activity; sid:2023013; rev:2; metadata:attack_target Client_Endpoint, created_at 2016_08_02, deployment Perimeter, former_category MALWARE, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_08_02, severity 3, rule_origin etpro;)

TROJAN Win32/Qbot CnC Activity M2

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Win32/Qbot CnC Activity M2"; target:src_ip; flow:established,to_server; pcre:"/^[A-Za-z0-9]{3,20}=(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4})$/Psi"; http_header_names; content:!"Referer"; http_request_line; content:"POST|20|/t4|20|HTTP/1.1"; depth:17; fast_pattern; isdataat:!1,relative; http_accept; content:"application/x-shockwave-flash, image/gif, image/jpeg, image/pjpeg, */*"; depth:70; isdataat:!1,relative; reference:md5,3ceb36fc3607df3d67d9eb0f1d00fea0; classtype:trojan-activity; sid:2845945; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2020_12_09, deployment Perimeter, deployment SSLDecrypt, former_category MALWARE, malware_family Qbot, performance_impact Low, signature_severity Major, updated_at 2020_12_09, severity 3, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, rule_origin etpro;)

TROJAN Observed Qbot Style SSL Certificate

alert tls $EXTERNAL_NET ![443,587] -> $HOME_NET any (msg:"TROJAN Observed Qbot Style SSL Certificate"; target:dest_ip; flow:established,from_server; tls_cert_issuer; content:"C="; depth:2; content:",|20|ST="; distance:2; within:5; content:",|20|L="; distance:2; within:4; content:",|20|O="; distance:0; within:20; content:",|20|CN="; distance:0; within:50; pcre:"/^C=(?:M[ACDEGHKLMNOPQRSTUVWXYZ]|G[ABDEFGHILMNPQRSTUWY]|B[ABDEFGHIJMNORSTVWZ]|A[DEFGILMNOQRSTUWXZ]|S[ABCEGHIJKLMNRTUVZ]|C[ACFHIKLMNORSVXYZ]|T[CDFGHJKMNOPRTVWZ]|P[AEFGHKLMNRSTWY]|N[ACEFGILOPRTUZ]|K[EGHIMNRWYZ]|L[ACIKSTUVY]|I[DELMNOST]|E[CEGHRST]|F[IJKMORX]|U[AGKMSYZ]|V[ACEGINU]|D[EJKMOZ]|H[KMNRTU]|R[EOSUW]|J[EMOP]|W[FS]|Y[ET]|Z[AM]|OM|QA),\sST=(?!(?:M[ADEINOST]|N[CDEHJMVY]|A[KLRZ]|I[ADLN]|W[AIVY]|C[AOT]|O[HKR]|[GLP]A|K[SY]|S[CD]|T[NX]|V[AT]|[HR]I|DE|FL|UT))[A-Z]{2},\sL=[A-Z][a-z]{2,15}(?:\s[A-Z][a-

z]{2,10})?,\sO=[A-Z][a-z]{2,25}\s[A-Z][a-z]{2,25}(?:\s[A-Z][a-z]{2,25})?(?:\s[A-Z][a-z]{2,25})?(?:\s(?:Inc|LLC)\.)?,\sCN=[a-z]{4,11}\.[a-z]{2,4}$/"; classtype:trojan-activity; sid:2834895; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2019_02_15, deployment Perimeter, former_category TROJAN, performance_impact Significant, signature_severity Major, updated_at 2021_04_20, severity 3, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)"; target:dest_ip; flow:established,from_server; content:"|09 00|"; content:"|55 04 06|"; distance:0; content:"|02|US"; distance:1; within:3; content:"|55 04 08|"; distance:0; content:"|02|NY"; distance:1; within:3; content:"|55 04 07|"; distance:0; content:"|08|New York"; distance:1; within:9; fast_pattern; content:"|55 04 03|"; byte_test:1,>,27,1,relative; byte_test:1,<,30,1,relative; pcre:"/^.{2}[a-z]{25}\.[a-z]{2,3}[01]/Rs"; reference:url,sslbl.abuse.ch; classtype:trojan-activity; sid:2022488; rev:3; metadata:attack_target Client_Endpoint, created_at 2016_02_04, deployment Perimeter, former_category MALWARE, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_07_01, severity 3, rule_origin etpro;)

TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)"; target:dest_ip; flow:established,from_server; content:"|55 04 08|"; content:"|02|FL"; distance:1; within:3; content:"|55 04 07|"; distance:0; content:"|05|Tampa"; distance:1; within:6; content:"|55 04 0a|"; distance:0; content:"|1b|Realtek Semiconductor Corp."; distance:1; within:28; fast_pattern; reference:url,sslbl.abuse.ch; classtype:trojan-activity; sid:2022714; rev:3; metadata:attack_target Client_Endpoint, created_at 2016_04_07, deployment Perimeter, former_category MALWARE, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_07_01, severity 3, rule_origin etpro;)

TROJAN Win32/Qbot CnC

alert tcp $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Win32/Qbot CnC"; target:src_ip; flow:established,to_server; dsize:<600; content:"|01 06 00 00 00 00 04 02 00 00|"; depth:10; fast_pattern; pcre:"/^[a-z]{6}\d{6}/R"; content:"|2e|"; distance:20; within:4; pcre:"/^(?:\d{1,3}\.){2}\d{1,3}\x00/R"; reference:md5,b06de4f40b501bba57903f2b4dcc585a; classtype:trojan-activity; sid:2815159; rev:1; metadata:created_at 2015_12_01, former_category MALWARE, updated_at 2015_12_01, severity 3, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

TROJAN Win32/Qbot Variant Exfil via FTP

alert tcp $HOME_NET any -> $EXTERNAL_NET [21,2100,3535] (msg:"TROJAN Win32/Qbot Variant Exfil via FTP"; target:src_ip; flow:established,to_server; content:"STOR artic"; fast_pattern; content:"e_"; distance:1; within:2; pcre:"/^[a-z]{6}\d{6}_1[45]\d{8}\.zip\r?\n/R"; reference:md5,fe318c2828c47e37b095731685e3b999; classtype:trojan-activity; sid:2814194; rev:7; metadata:created_at 2015_10_01, former_category TROJAN, updated_at 2018_05_11, severity 3, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

TROJAN Possible Qbot SSL Cert

alert tls $EXTERNAL_NET [995,2222] -> $HOME_NET any (msg:"TROJAN Possible Qbot SSL Cert"; target:dest_ip; flow:established,to_client; tls_cert_subject; content:"C="; depth:2; content:", OU="; distance:2; within:5; fast_pattern; content:", CN="; distance:0; pcre:"/^C=[A-Z]{2},\sOU=[A-Z][a-z]+(?:\s[A-Z][a-z]+)*,\sCN=[a-z]+\.[a-z]+$/"; tls_cert_issuer; content:"C="; depth:2; content:", ST="; distance:2; within:5; content:", L="; distance:2; within:4; content:", O="; distance:0; content:", CN="; distance:0; pcre:"/^C=[A-Z]{2},\sST=(?!(A[KLRZ]|C[AOT]|D[CE]|FL|GA|HI|I[ADLN]|K[SY]|LA|M[ADEINOST]|N[CDEHJMVY]|O[HKR]|P[AR]|RI|S[CD]|T[NX]|UT|V[AIT]|W[AIVY]))[A-Z]{2},\sL=[A-Z][a-z]+(?:\s[A-Z][a-z]+)*,\sO=[A-Z][a-z]+(?:\s[A-Z][a-zA-Z]+.?)*,\sCN=[a-z]+\.[a-z]+$/"; classtype:trojan-activity; sid:2830811; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2018_05_11, deployment Perimeter, former_category MALWARE, signature_severity Major, tag Qbot, updated_at 2020_08_25, severity 3, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

TROJAN Observed Malicious SSL Cert (Qbot CnC)

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"TROJAN Observed Malicious SSL Cert (Qbot CnC)"; target:dest_ip; flow:established,to_client; tls_cert_serial; content:"22:0A"; tls_cert_subject; content:"CN=ahbezwkftrm.net"; nocase; isdataat:!1,relative; reference:md5,79c1e7151c5f2e30a7908261aca331cf; classtype:trojan-activity; sid:2833402; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2018_11_01, deployment Perimeter, former_category MALWARE, performance_impact Moderate, signature_severity Major, updated_at 2020_09_16, severity 3, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)"; target:dest_ip; flow:established,from_server; content:"|09 00 e4 52 b4 b2 9e 40 bd 86|"; fast_pattern; content:"|55 04 0a|"; distance:0; content:"|0d|Synology Inc."; distance:1; within:14; reference:url,sslbl.abuse.ch; classtype:trojan-activity; sid:2023268; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2016_09_22, deployment Perimeter, former_category MALWARE, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_09_22, severity 3, rule_origin etpro;)

TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)

alert tls $EXTERNAL_NET 443 -> $HOME_NET any (msg:"TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (Quakbot CnC)"; target:dest_ip; flow:established,from_server; content:"|55 04 03|"; content:"|15|whaovxeynxctdrvzn.com"; distance:1; within:22; reference:url,sslbl.abuse.ch; classtype:trojan-activity; sid:2022685; rev:2; metadata:attack_target Client_Endpoint, created_at 2016_03_30, deployment Perimeter, former_category MALWARE, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_07_01, severity 3, rule_origin etpro;)

TROJAN Win32/Qbot CnC Activity M3

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Win32/Qbot CnC Activity M3"; target:src_ip; flow:established,to_server; pcre:"/^[A-Za-z0-9]{3,20}=(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4})$/Psi"; http_header_names; content:!"Referer"; http_request_line; content:"POST|20|/t3|20|HTTP/1.1"; depth:17; fast_pattern; isdataat:!1,relative; http_accept; content:"application/x-shockwave-flash, image/gif, image/jpeg, image/pjpeg, */*"; depth:70; isdataat:!1,relative; reference:md5,3ceb36fc3607df3d67d9eb0f1d00fea0; classtype:trojan-activity; sid:2845946; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2020_12_09, deployment Perimeter, deployment SSLDecrypt, former_category MALWARE, malware_family Qbot, performance_impact Low, signature_severity Major, updated_at 2020_12_09, severity 3, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, rule_origin etpro;)

TROJAN VBS/Qbot.Downloader CnC Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN VBS/Qbot.Downloader CnC Checkin"; target:src_ip; flow:established,to_server; content:"HEAD"; http_method; content:".png?bg="; http_uri; fast_pattern; content:"os="; http_uri; distance:0; content:"&av="; http_uri; distance:0; content:"Microsoft BITS/"; http_user_agent; depth:15; http_accept_enc;

content:"identity"; http_header_names; content:!"Referer"; content:!"Cache"; classtype:trojan-activity; sid:2833618; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2018_11_23, deployment Perimeter, former_category MALWARE, performance_impact Low, signature_severity Major, tag Downloader, tag VBS, updated_at 2020_08_28, severity 3, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

TROJAN Win32/Qbot/Quakbot Checkin via HTTP POST

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Win32/Qbot/Quakbot Checkin via HTTP POST"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:"Accept|3a 20|*/*|0d 0a|Content"; http_header; fast_pattern; content:!"Referer|3a|"; http_header; pcre:"/^[a-z]{5,15}=[a-zA-Z0-9/+=]{100,}$/P"; pcre:"/^\/[a-zA-Z0-9]{20,}\.php$/U"; classtype:trojan-activity; sid:2815363; rev:4; metadata:created_at 2015_12_15, former_category MALWARE, updated_at 2020_10_05, severity 3, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

TROJAN Win32/Qbot/Quakbot Checkin via HTTP POST

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Win32/Qbot/Quakbot Checkin via HTTP POST"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:"Accept|3a 20|*/*|0d 0a|Content"; http_header; fast_pattern; content:!"Referer|3a|"; http_header; pcre:"/^[a-z]{5,15}=[a-zA-Z0-9/+=]{100,}$/P"; pcre:"/^\/[a-zA-Z0-9]{20,}\.php$/U"; classtype:trojan-activity; sid:2815363; rev:4; metadata:created_at 2015_12_15, former_category MALWARE, updated_at 2020_10_05, severity 3, ti_malware_id e323de16fc8162e02aad6683b0f48a0e4008cbae, ti_malware_name QBot, malware_family QBot, rule_origin etpro;)

Malware: Sombra or SombRAT

Sombra or SombRAT

SombRAT is a backdoor discovered in 2020. It communicates with a C&C server via multiple protocols, including DNS, TLS-encrypted TCP, and potentially WebSockets. Although the backdoor supports dozens of commands, most of them enable the operator to manipulate an encrypted storage file and reconfigure the implant. The backdoor's primary purpose is to download and execute plugins provided via payload.

Platform: Windows

Threat level: High

Category: Backdoor

Indicators of Compromise (IOCs)

CnC:

Celomito[.]com
Feticost[.]com
Cosarm[.]com
Portalcos[.]com
sbibd[.]net
infosportals[.]com
akams[.]in
newspointview[.]com
159[.]65[.]31[.]84
212[.]83[.]61[.]227
144[.]217[.]53[.]146
45[.]89[.]175[.]206
bd1540dda[.]celomito[.]com
5dc5a95caaaad5ce6ef4[.]celomito[.]com
b27543ffd5a3949c5d483e2b4705[.]celomito[.]com
^b[a-zA-Z0-9]{3,64}\[.](celomito|feticost)\[.]com
51[.]89[.]50[.]152
57[.]219[.]0[.]1
19[.]134[.]94[.]227
88[.]105[.]224[.]32
180[.]222[.]29[.]199
119[.]39[.]152[.]157
109[.]124[.]209[.]212
119[.]170[.]44[.]215
226[.]31[.]10[.]29
156[.]77[.]252[.]190
135[.]78[.]65[.]199

30[.]24[.]7[.]206
229[.]222[.]231[.]39
22[.]58[.]50[.]80
218[.]10[.]128[.]138
245[.]179[.]63[.]52
98[.]160[.]54[.]99
200[.]72[.]40[.]81
229[.]228[.]106[.]12
71[.]61[.]21[.]41
79[.]93[.]190[.]81
64[.]227[.]24[.]12
157[.]230[.]184[.]142

MD5:

87c78d62fd35bb25e34abb8f4caace4a
6382d48fae675084d30ccb69b4664cbb
cf1b9284d239928cce1839ea8919a7af
4aa3eab3f657498f52757dc46b8d1f11
1f6495ea7606a15daa79be93070159a8
31dcd09eb9fa2050aadc0e6ca05957bf
edf567bd19d09b0bab4a8d068af15572
a5b26931a1519e9ceda04b4c997bb01f
f0751bef4804fadfe2b993bf25791c49

SHA256:

130fa726df5a58e9334cc28dc62e3ebaa0b7c0d637fce1a66daff66ee05a9437
8062e1582525534b9c52c5d9a38d6b012746484a2714a14febe2d07af02c32d5
d69764b22d1b68aa9462f1f5f0bf18caebbcff4d592083f80dbce39c64890295
f6ecdae3ae4769aaafc8a0faab30cb66dab8c9d3fff27764ff208be7a455125c
561bf3f3db67996ce81d98f1df91bfa28fb5fc8472ed64606ef8427a97fd8cdd
8323094c43fcd2da44f60b46f043f7ca4ad6a2106b6561598e94008ece46168b
ee0f4afee2940bbe895c1f1f60b8967291a2662ac9dca9f07d9edf400d34b58a
70d63029c65c21c4681779e1968b88dc6923f92408fe5c7e9ca6cb86d7ba713a
79009ee869cec789a3d2735e0a81a546b33e320ee6ae950ba236a9f417ebf763
d81c13b094c59196ac45c5f0ec95446dea219fa2f2a1c35a25f883d2a18ab19d
99baffcd7a6b939b72c99af7c1e88523a50053ab966a079d9bf268aff884426e
61e286c62e556ac79b01c17357176e58efb67d86c5d17407e128094c3151f7f9

Malware: Emotet

Emotet

Emotet first surfaced in 2014, when we uncovered a pretty simple banking Trojan propagated through phishing emails. It evolved into a Malware-as-a-Service botnet several times over the years, allowing individuals willing to pay to gain access to compromised systems. There were a lot of them, including ransomware gangs like Ryuk and the data-stealing malware Trickbot.

Platform: Windows

Threat level: High

Category: Backdoor

Indicators of Compromise (IOCs)

CnC:

219[.]92[.]8[.]17
180[.]92[.]239[.]110
81[.]169[.]145[.]94
www[.]feetinform[.]de
http://94[.]23[.]45[.]86
http://pacificgroup[.]ws/paradisesuiting[.]com/closed_module/additional_742881396_wsvMByYwoxJJai/TmGMTw5Mc_5ydy9fKNrv00
http://nightlifemumbai[.]club/x/0wBD3/!/
https://njyp[.]com/wp-content/Nz/1/
http://www[.]escalierconsulting[.]com/wp-includes/I/
http://de[.]letscompareonline[.]com/cgi-bin/ztEE/
http://paulomarciotrp[.]com/z/y/
http://haumaguerraevoceoalvo[.]com[.]br/wp-includes/0Hm/
http://aecotimes[.]com/wp-admin/44Z/
http://rakikuma[.]com/cgi-bin/K/
84[.]200[.]106[.]120
78[.]47[.]182[.]42
71[.]58[.]165[.]119
69[.]198[.]17[.]7
39[.]112[.]243[.]65
160[.]2[.]24[.]88
139[.]162[.]151[.]141
115[.]71[.]233[.]127
http://c-t[.]com[.]au/PspAMbuSd2
http://bysound[.]com[.]tr/En_us/Documents/11_18
http://bahiacreativa[.]com/9syoe9k
http://84[.]200[.]106[.]120
http://78[.]47[.]182[.]42

http://71[.]58[.]165[.]119:443/whoami[.]php
http://69[.]198[.]17[.]7
http://39[.]112[.]243[.]65
http://160[.]2[.]24[.]88
http://139[.]162[.]151[.]141
http://115[.]71[.]233[.]127

SHA256:

d6dd56e7fb1cc71fc37199b60461e657726c3bf8319ce59177ab4be6ed3b9fb4
cb04718694115b94b4d8bde2be0a4daf802c7a4c94f9b81811872e4e7126e813
667cda76b582c0771f85ad12167238e0f4bb12f479030d99c8a15d7f08eb9975
63e348c05cd94f4488f7f1707ba901ddfa8ec04b4626a46ae2d9d0a83ae291ae
045e15c1df7c712dcac94c720b81df08fd0ff4e4c177d231d5cdcd7b4d096f9599
def2b3241d79b377518a5b1a39506ebd3018c8c8e8d611e43916cfdacc377a8a
ba154a65b97dd287b4b85191759be5cae2bfb1b663bd5f6269dea7cb5e80f3a2
afc45e7266a43b6608f6052166a07c75fdff5990d201af85ab06fc63a5e5d3d9
9f8f9470663bb4c1dca15733e1cff0e882c931ed0ca6e9eeefa0f535df501229
90c07f7976127dc85f002710eb67930cd277cefb91d4da09ab42c7de58242f09
7ece6b353421561ebb06b374497b668d84a13506ad8c6fa552b04dc3dfd4878b
7671e803b42ec6425d5f12f3a88d5fa442474e6d7ecae05e75619c9bd57359d1
707539d4c37078c936250a42e901fb5db3a9575db176edc5a3d4889b6f1ab649
6b80eeb2b9d7e86b14e12ee8858daaf12f92c0ac0340cd6b95e5691ff373591c
6a34569bf87487070e6ddd5896b403b7dffb7d9a29341fda5813151a3511aaf6
43099c7f72b6aff08e3ddb1566e32735c66b1751500fff124af6e1a761c1ccbc
34cebe5a052d2d3a5c23059350443b4e6a133983029f9f8c3d275bb8a342402d
2d5caba6f7f04cd29245bd72faa63f47964c98ce9c4b995bb7d4a8a134555d0a
207fbe9c72f12bd67b3febaf2653ae9230000a7f8e1850a0933060df72983084
0bd927dbaad1932ff73d5abacb13abed7947ad6834fd2481a5cc5ada7bab76d9
007afb6797203e525c3facbe4de7dba73b31007e58059cfc09bad8e317581249
e4ecb82fb8a2bf785c2f976c1feea57bca2ff115f5a26c00a9282f9d7f43eb43
e410c621736aa8e6b5174ad62cc2c49fc6a804dd6dac8f87fcfd35910b5734ca
d1e2d97314ab7f756f8ce799a9b578d80388f8e1365f648743183ec08a9f315d
b61113e598e002f1d9273b07d7607d858efba0cb4dcda4a8c72864885ed63376
7516af39a37c18fa7c21a8dc9b0659463886b7453d92d0082e04907e8c7cfb32
6ca9d13ba701a131d357c033e15204e7daacd1805142856c568c1289ca010656
5ab7313c5141a184d22a5c6ac325dbd3bdaf81aa448600d204914a3740e5612d
3ce80ee8433dc8ddd1459244196e687508bd564493621a45fa2df58b3e521314
3546c31ab9a6dbcf55084397ce3b5b24afe23861e2a9cc2b84f7d79b07e33ee5
1908cf7f7f3be0ea4d3221f70402947b76211dad38058a5a0bfb762f8ecdd392
0b3e6fb8bf5701aa1e13c089b2cf51bcb8c169e3d6a2e3e86a8ed9398f8f493b
000cac78f50ff38ccb4465cac82be45df87e8d0b9e28338fdd62d367240f26a0

Malware: AZORult

AZORult

AZORult stealer is known since 2016 when it appeared on underground market. This malware is able to steal passwords from popular browsers and dat files of popular crypto wallets.

Platform: Windows

Threat level: High

Category: Trojan

General information

- Stealing of passwords from browsers, email clients, FTP-clients, IM-clients: Chrome, Mozilla Firefox, Opera, Yandex Browser, Comodo Dragon, Internet Explorer, Microsoft Edge, Outlook, Thunderbird, Amigo, Pidgin, PSI, PSI + and others.
- Stealing of cookies files, data from autocomplete forms in browsers Chrome, Mozilla Firefox, Opera, Yandex Browser, Comodo Dragon, Amigo, etc.
- Stealing of banking cards data from Chrome-like browsers.
- Collecting of dat files from popular crypto wallets (bitcoin, litecoin, etc.)
- Collecting files of Skype and files from victim's desktop
- Collecting of information about victim's system (ip/comp/user, list of processes, list of applications, etc.)

Indicators of Compromise (IOCs)

CnC:

43[.]255[.]154[.]108
185[.]9[.]147[.]100
205[.]185[.]121[.]209
103[.]28[.]15[.]220
141[.]8[.]195[.]34
103[.]211[.]216[.]223
209[.]99[.]16[.]206
142[.]44[.]131[.]27
91[.]243[.]80[.]164:80
93[.]170[.]105[.]132
89[.]108[.]99[.]79
91[.]243[.]81[.]212
5[.]8[.]88[.]106
162[.]244[.]35[.]55
91[.]243[.]80[.]23
homeearlybird[.]com
sijuki[.]com
lulaaura[.]top

driverscontroller[.]com
lacdowronfor[.]com
http://baliseconsulting[.]com
hadsparmirat[.]com
rombutcading[.]ru

MD5:

59953C7BF6FD0D9AF52A483C5F993B66
3163ABA93A0292A4BB27AA52DB27C300
c8996ffafc353f1b14f2cada218f8fa5
2fe90a1d114ed4c91fdcfb5e4bbcf60d
d722759dab276601ce5a6071e282b6c4
5E876524A4BCF406D9B53FA90FE97327
E56D3607E99F3F51A8BD18267D8FC15C
19A1DDDA720F8F444BA81B1E070903F9
6081ED3388C8261E85ED1735EEFC16BE
58FBBD895301937014BA1880284DF58D
B1F988B550C4DB1411BA36773227E248
3FCB889CE9066DD811A79C811B36BF56
FDA0D12ADFB59256B3B655CFB011624F
E829B268494D6A5D53EA91803A018853
9b30f8ac97733dac0fa5a02530f2b94c
07ce7152dcb4ba99c9b05c4a959be577
f76849218adceb805e702a45b85c907c
ad3c82241cdac455de215fd0b37ac4cb
0AC55B5056364CDAC63AAF05F9D7F654
2bfe8198144d16a2bf62740a69f3816f
ed3368dbd10ed6ef74d6b65b1f35ef67
0ac55b5056364cdac63aaf05f9d7f654
60fd7028eba3bb029c0631680ff135a1
ed95fb42855312fd61fb65fb29fb77f1
b8e6efb23e79aa5889360d70f494695c;
29ed79ca7b1778274d76c7ef0304efb5
5ddac41b063bc265854f053fb026475f
f32bd9317b8dc700e899aacc554a3b50
d444350e4ea6e10285865d02982d28ee
7ff25aad4b48a2eca4237755735c158a

Network signatures

AZORult CnC Beacon

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult CnC Beacon"; flow:established,to_server; content:"POST"; http_method; content:".php|20|HTTP/1.1|0d 0a|User-"; fast_pattern; content:"MSIE"; http_user_agent;

pcre:"/^J[\x20-\x7e\r\n]{0,20}[^\x20-\x7e\r\n]/P"; http_content_len; byte_test:0,<,150,0,string,dec; http_header_names; content:!"Referer"; content:"|0d 0a|User-Agent|0d 0a|Host|0d 0a|Content-Length|0d 0a|"; pcre:"/^(?:Cache-Control|Pragma)\r\n\r\n$/R"; classtype:backdoor; target:src_ip; sid:1002985; rev:1; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin gib, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6;)

AZORult Variant.4 Checkin M2

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult Variant.4 Checkin M2"; flow:established,to_server; content:"POST"; http_method; content:".php"; http_uri; content:"|4a 2f fb|"; fast_pattern; http_client_body; content:"|2f fb|"; http_client_body; depth:11; content:!"Referer"; http_header; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,0ac55b5056364cdac63aaf05f9d7f654; reference:url,twitter.com/James_inthe_box/status/1020522733984100352?s=03; classtype:trojan-activity; target:src_ip; sid:2025885; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2018_07_23, malware_family AZORult, updated_at 2018_07_23;)

Observed Malicious SSL Cert (AZORult CnC)

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC)"; flow:from_server,established; tls_cert_subject; content:"CN=linddiederich462.pw"; nocase; fast_pattern; isdataat:!1,relative; tls_cert_issuer; content:"C=US, O=Let's Encrypt, CN=Let's Encrypt Authority X3"; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; classtype:trojan-activity; target:dest_ip; sid:2027799; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag SSL_Malicious_Cert, signature_severity Major, created_at 2019_08_05, malware_family AZORult, performance_impact Low, updated_at 2019_09_28;)

Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-07

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-07"; flow:established,to_client; tls_cert_subject; content:"CN=mailfueler.com"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category TROJAN; reference:md5,c189cdadd96c148e64912c55c5129d3e; classtype:trojan-activity; target:dest_ip; sid:2028652; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint,

deployment Perimeter, signature_severity Major, created_at 2019_10_07, malware_family AZORult, performance_impact Low, updated_at 2019_10_07;)

Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-03

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-03"; flow:established,to_client; tls_cert_subject; content:"CN=worldmasterclass.com"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,fe9caf2568d7bbf2bb0e20b8e7dc8971; reference:md5,c5a460fd87ffd50c114fffa684688d01; classtype:trojan-activity; target:dest_ip; sid:2028653; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_10_07, malware_family AZORult, performance_impact Low, updated_at 2019_10_07;)

Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-03

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-03"; flow:established,to_client; tls_cert_subject; content:"CN=worldmasterclass.com"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,fe9caf2568d7bbf2bb0e20b8e7dc8971; reference:md5,c5a460fd87ffd50c114fffa684688d01; classtype:trojan-activity; target:dest_ip; sid:2028653; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_10_07, malware_family AZORult, performance_impact Low, updated_at 2019_10_07;)

Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-03

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-03"; flow:established,to_client; tls_cert_subject; content:"CN=corpcougar.com"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,73fad17f8054d01488c3ddd67e355bf1; reference:md5,a25591dbf57ac687e2a03f94dcccc35a; classtype:trojan-activity; target:dest_ip; sid:2028654; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_10_07, performance_impact Low, updated_at 2019_10_07;)

Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-02

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-02"; flow:established,to_client; tls_cert_subject; content:"CN=adityebirla.com"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,61b34d02bb09e5a547251a625ce81f9c; reference:md5,cab127c5b8582c1e3ea8860a239a060b; classtype:trojan-activity; target:dest_ip; sid:2028655; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_10_07, malware_family AZORult, performance_impact Low, updated_at 2019_10_07;

Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-01

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-01"; flow:established,to_client; tls_cert_subject; content:"OU=Domain Control Validated, OU=PositiveSSL, CN=www.livdecor.pt"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,7baca517af0b93bd3f94910c7b8f10db; reference:md5,efb4951e11baf306f5680a041c214e5b; classtype:trojan-activity; target:dest_ip; sid:2028656; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_10_07, malware_family AZORult, performance_impact Low, updated_at 2019_10_07;)

Observed Malicious SSL Cert (AZORult CnC Server) 2019-09-30

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) 2019-09-30"; flow:established,to_client; tls_cert_subject; content:"CN=flozzy.uk"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category TROJAN; reference:md5,6a333c3f54d7fb6efb276cf6e33315c0; reference:md5,ab578cff6c06157aadd5f324a3413973; classtype:trojan-activity; target:dest_ip; sid:2028657; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_10_07, malware_family AZORult, performance_impact Low, updated_at 2019_10_07;)

Observed Malicious SSL Cert (AZORult Cnc Server) 2019-09-27

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult Cnc Server) 2019-09-27"; flow:established,to_client; tls_cert_subject; content:"CN=evershinebd.net"; isdataat:!1,relative; fast_pattern; metadata:cnc 0,

severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,c93a2d16dd0cf8dd3afa5ecba111e7c4; reference:md5,23aff33025681263adcdcb480d0e9a95; classtype:trojan-activity; target:dest_ip; sid:2028658; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_10_07, malware_family AZORult, performance_impact Low, updated_at 2019_10_07;

Observed Malicious SSL Cert (AZORult CnC) 2019-11-18

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC) 2019-11-18"; flow:established,to_client; tls_cert_subject; content:"CN=solvents.ru"; isdataat:!1,relative; fast_pattern; tls_cert_issuer; content:"C=US, ST=TX, L=Houston, O=cPanel, Inc., CN=cPanel, Inc. Certification Authority"; isdataat:!1,relative; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,e54cbf645b0840c0dd1f212f42cd47fd; classtype:backdoor; target:dest_ip; sid:2029001; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_11_18, malware_family AZORult, performance_impact Low, updated_at 2019_11_18;)

AZORult v3.3 Server Response M1

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"AZORult v3.3 Server Response M1"; flow:established,to_client; content:"200"; http_stat_code; file_data; content:"|3f 36 90|"; depth:6; content:"|3f 7a cd 3d 69 c0 3d|"; distance:0; fast_pattern; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; classtype:backdoor; target:dest_ip; sid:2029136; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_12_12, malware_family AZORult, performance_impact Low, updated_at 2019_12_12;)

AZORult v3.3 Server Response M2

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"AZORult v3.3 Server Response M2"; flow:established,to_client; content:"200"; http_stat_code; file_data; content:"|3f 36 90|"; depth:6; content:"|69 81 60 6b 92 6d 6b|"; distance:0; fast_pattern; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE;

classtype:backdoor; target:dest_ip; sid:2029137; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_12_12, malware_family AZORult, performance_impact Low, updated_at 2019_12_12;)

AZORult v3.3 Server Response M3

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"AZORult v3.3 Server Response M3"; flow:established,to_client; content:"200"; http_stat_code; file_data; content:"|3f 36 90|"; depth:6; content:"|92 2c 36 90 3f 3b 90|"; distance:0; fast_pattern; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; classtype:backdoor; target:dest_ip; sid:2029138; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_12_12, malware_family AZORult, performance_impact Low, updated_at 2019_12_12;)

AZORult v3.2 Server Response M1

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"AZORult v3.2 Server Response M1"; flow:established,to_client; content:"200"; http_stat_code; file_data; content:"|31 69 f6|"; depth:6; content:"|31 25 ab 33 36 a6 33|"; distance:0; fast_pattern; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; classtype:backdoor; target:dest_ip; sid:2029139; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_12_12, malware_family AZORult, performance_impact Low, updated_at 2019_12_12;)

AZORult v3.2 Server Response M2

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"AZORult v3.2 Server Response M2"; flow:established,to_client; content:"200"; http_stat_code; file_data; content:"|31 69 f6|"; depth:6; content:"|36 e7 6e 34 f4 63 34|"; distance:0; fast_pattern; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; classtype:backdoor; target:dest_ip; sid:2029140; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_12_12, malware_family AZORult, performance_impact Low, updated_at 2019_12_12;)

Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-08

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-08"; flow:established,to_client; tls_cert_subject; content:"CN=superlatinradio.com"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,ce879fb552e7740bb2e940c65746aad2; classtype:trojan-activity; target:dest_ip; sid:2028672; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_10_11, malware_family AZORult, performance_impact Low, updated_at 2019_10_11;)

Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-08

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-08"; flow:established,to_client; tls_cert_subject; content:"CN=corpcougar.in"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,f7a490fcf756f9ddbaedc2441fbc3c0c; classtype:trojan-activity; target:dest_ip; sid:2028673; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_10_11, performance_impact Low, updated_at 2019_10_11;)

Observed Malicious SSL Cert (AZORult CnC Server) in SNI 2019-09-27

alert tls $HOME_NET any -> $EXTERNAL_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) in SNI 2019-09-27"; flow:established,to_server; tls_sni; content:"techxim.com"; isdataat:!1,relative; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category TROJAN; reference:md5,5c4e395fc545b5e0c03f960a4145f4ea; classtype:trojan-activity; target:src_ip; sid:2028659; rev:1; metadata:attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_10_07, malware_family AZORult, performance_impact Moderate, updated_at 2019_10_07;)

Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-08

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-08"; flow:established,to_client; tls_cert_subject; content:"CN=cloudcitytechnologies.com"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,9a23881abe27dc70ca42597a1e1de354; classtype:trojan-activity; target:dest_ip; sid:2028894; rev:1; metadata:attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at

2019_10_22, malware_family AZORult, performance_impact Low, updated_at 2019_10_22;)

AZORult Variant.2 Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult Variant.2 Checkin"; flow:established,to_server; content:"POST"; http_method; content:".php"; http_uri; content:"CWC^@GUSGP"; http_client_body; depth:10; fast_pattern; http_content_type; content:"image/jpeg"; depth:10; http_header_names; content:!"Accept|0d 0a|"; content:!"User-Agent|0d 0a|"; content:!"Referer|0d 0a|"; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,b8e6efb23e79aa5889360d70f494695c; classtype:backdoor; target:src_ip; sid:2826206; rev:4; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2017_05_02, malware_family Stealer, performance_impact Moderate, updated_at 2020_03_06;)

AZORult Variant.2 Checkin m2

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult Variant.2 Checkin m2"; flow:established,to_server; content:"POST"; http_method; content:".php"; http_uri; content:"~~~~~~~~~~|3a 20|~~~~~"; fast_pattern; http_header; http_content_type; content:"image/jpeg"; depth:10; http_header_names; content:!"Accept|0d 0a|"; content:!"User-Agent|0d 0a|"; content:!"Referer|0d 0a|"; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,b8e6efb23e79aa5889360d70f494695c; classtype:backdoor; target:src_ip; sid:2826232; rev:4; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2017_05_03, performance_impact Moderate, updated_at 2020_03_06;)

AZORult Variant.2 Checkin m3

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult Variant.2 Checkin m3"; flow:established,to_server; content:"POST"; http_method; content:".php"; http_uri; http_start; content:".php HTTP/1.0|0d 0a|Host"; fast_pattern; http_content_type; content:"image/jpeg"; depth:10; http_header_names; content:!"Accept|0d 0a|"; content:!"User-Agent|0d 0a|"; content:!"Referer|0d 0a|"; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,b8e6efb23e79aa5889360d70f494695c; reference:md5,29ed79ca7b1778274d76c7ef0304efb5; classtype:backdoor; target:src_ip; sid:2826361; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint,

deployment Perimeter, signature_severity Major, created_at 2017_05_10, malware_family Stealer, malware_family AZORult, performance_impact Moderate, updated_at 2020_03_02;)

AZORult v3.2 Server Response M3

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"AZORult v3.2 Server Response M3"; flow:established,to_client; content:"200"; http_stat_code; file_data; content:"|31 69 f6|"; depth:6; content:"|f4 22 69 f6 31 64 f6|"; distance:0; fast_pattern; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; classtype:backdoor; target:dest_ip; sid:2029141; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_12_12, malware_family AZORult, performance_impact Low, updated_at 2019_12_12;)

AZORult Variant.3 Checkin M1

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult Variant.3 Checkin M1"; flow:established,to_server; content:"POST"; http_method; content:".php"; http_uri; content:"|99 4c 42 9d 4f 51 c3|"; http_client_body; depth:7; fast_pattern; http_header_names; content:!"Referer"; content:!"User-Agent"; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,ed95fb42855312fd61fb65fb29fb77f1; classtype:trojan-activity; target:src_ip; sid:2829890; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2018_03_06, malware_family AZORult, performance_impact Low, updated_at 2018_05_30;)

AZORult Variant.3 Checkin M2

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult Variant.3 Checkin M2"; flow:established,to_server; content:"POST"; http_method; content:".php"; http_uri; content:"|8c 4c 46 91 5b 42 9a 48 42 9f 14|"; http_client_body; depth:11; fast_pattern; http_header_names; content:!"Referer"; content:!"User-Agent"; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,60fd7028eba3bb029c0631680ff135a1; classtype:trojan-activity; target:src_ip; sid:2831079; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2018_05_30, malware_family Stealer, malware_family AZORult, updated_at 2018_05_30;)

AZORult Variant.4 XORed Download

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"AZORult Variant.4 XORed Download"; flow:established,to_client; file_data; content:"|31 69 f6|"; depth:3; fast_pattern; pcre:"/(?:\x31\x25\xab\x33|\x36\xe7\x6e\x34|\xf4\x22\x69\xf6)/RQs"; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category TROJAN; classtype:trojan-activity; target:dest_ip; sid:2831936; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2018_07_23, malware_family AZORult, updated_at 2018_07_23;)

AZORult Variant.5 Checkin M1

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult Variant.5 Checkin M1"; flow:established,to_server; content:"POST"; http_method; content:".php"; http_uri; content:"|26 66 96 26 66 9d 47 14 ef 26 66 98 26 66 99 46|"; http_client_body; depth:20; http_header_names; content:!"Referer"; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,aebb382b54e1521ad1309f66d29a1d1c; classtype:trojan-activity; target:src_ip; sid:2833315; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2018_10_29, malware_family AZORult, updated_at 2018_10_29;)

AZORult Variant.5 Checkin M2

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult Variant.5 Checkin M2"; flow:established,to_server; content:"POST"; http_method; content:".php"; http_uri; content:"|41 10 8b 30 64 8b 30 66 8b 30 62 8b 30 61 8b 30 62 ed|"; http_client_body; depth:20; http_header_names; content:!"Referer"; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,aebb382b54e1521ad1309f66d29a1d1c; classtype:trojan-activity; target:src_ip; sid:2833316; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2018_10_29, malware_family AZORult, updated_at 2018_10_29;)

AZORult Variant.5 Checkin Response

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"AZORult Variant.5 Checkin Response"; flow:established,to_client; file_data; content:"</n><d>"; content:"</d>|0d 0a 30 0d 0a 0d 0a|"; distance:0; isdataat:!1,relative; metadata:cnc 0, severity 3, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,aebb382b54e1521ad1309f66d29a1d1c; classtype:trojan-activity;

target:dest_ip; sid:2833317; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2018_10_29, malware_family AZORult, updated_at 2019_09_28;)

Observed DNS Query to known AZOrult Domain

alert dns $HOME_NET any -> any any (msg:"Observed DNS Query to known AZOrult Domain"; dns_query; content:"makak.bit"; nocase; isdataat:!1,relative; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category TROJAN; reference:md5,78800a47adadaa3a56e533dd7abf957e; classtype:backdoor; target:src_ip; sid:2834136; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2018_12_28, malware_family AZORult, performance_impact Low, updated_at 2019_09_28;)

AZORult CnC Beacon M2

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult CnC Beacon M2"; flow:established,to_server; content:"POST"; http_method; content:"MSIE"; http_user_agent; content:!"/connect.php"; http_uri; content:!"pq.f.360.cn"; http_host; pcre:"/^[\x20-\x7e\r\n]{0,20}[^\x20-\x7e\r\n]/P"; http_start; content:"POST|20 2f 20|HTTP/1.1|0d 0a|User-Agent|3a 20|Mozilla/"; fast_pattern; depth:37; http_content_len; byte_test:0,<,150,0,string,dec; http_header_names; content:!"Referer"; content:"|0d 0a|User-Agent|0d 0a|Host|0d 0a|Content-Length|0d 0a|Cache-Control|0d 0a 0d 0a|"; depth:53; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,111665920191e273002cf649070a7766; classtype:backdoor; target:src_ip; sid:2834334; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag Stealer, signature_severity Major, created_at 2019_01_10, malware_family AZORult, performance_impact Low, updated_at 2019_01_11;)

Azorult++ Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Azorult++ Checkin"; flow:established,to_server; content:"POST"; http_method; urilen:1; content:"|00 00 00|"; http_client_body; depth:3; content:"Content-Length|3a 20|25|0d 0a|"; http_header; fast_pattern; http_header_names; content:"|0d 0a|Content-Type|0d 0a|Host|0d 0a|Content-Length|0d 0a|Connection|0d 0a|"; content:!"Referer"; content:!"User-Agent"; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE;

reference:md5,fe8938f0baaf90516a90610f6e210484; reference:url,securelist.com/azorult-analysis-history/89922/; classtype:backdoor; target:src_ip; sid:2835638; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_03_29, malware_family AZORult, updated_at 2019_03_29;)

AZORult Geolocation Lookup (set)

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult Geolocation Lookup (set)"; flow:established,to_server; xbits:set,ETPro.AzoRult.GeoCheck,track ip_src,expire 5; noalert; content: "GET"; http_method; content:"/geoip"; http_uri; depth:6; isdataat:!1,relative; content:"api.ip.sb"; http_host; depth:9; isdataat:!1,relative; content:"Mozilla/5.0|20 28|Windows NT 10.0|3b 20|Win64|3b 20|x64|29 20|AppleWebKit/537.36|20 28|KHTML, like Gecko|29 20|Chrome/72.0.3626.121 Safari/537.36"; http_user_agent; depth:115; isdataat:!1,relative; content:"|0d 0a 0d 0a|"; isdataat:!1,relative; http_header_names; content:"|0d 0a|Content-Type|0d 0a|User-Agent|0d 0a|Host|0d 0a|"; http_content_type; content:"application/x-www-form-urlencoded"; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category TROJAN; reference:md5,3a13ecf4f8ee02027cf77396bc130c53; reference:md5,fa633db0e584a35350b84560d6ea29df; reference:md5,a703ba86d3692fb59c41efc88ba98c8e; classtype:backdoor; target:src_ip; sid:2836768; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Minor, created_at 2019_06_10, malware_family AZORult, performance_impact Low, updated_at 2019_09_28;)

AZORult Geolocation Lookup

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult Geolocation Lookup"; flow:established,to_server; xbits:isset,ETPro.AzoRult.GeoCheck,track ip_src; content: "GET"; http_method; content:"/json"; http_uri; depth:6; isdataat:!1,relative; content:"freegeoip.app"; http_host; depth:13; isdataat:!1,relative; content:"Mozilla/5.0|20 28|Windows NT 10.0|3b 20|Win64|3b 20|x64|29 20|AppleWebKit/537.36|20 28|KHTML, like Gecko|29 20|Chrome/72.0.3626.121 Safari/537.36"; http_user_agent; depth:115; isdataat:!1,relative; content:"|0d 0a 0d 0a|"; isdataat:!1,relative; http_header_names; content:"|0d 0a|Content-Type|0d 0a|User-Agent|0d 0a|Host|0d 0a|"; http_content_type; content:"application/x-www-form-urlencoded"; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category TROJAN; reference:md5,3a13ecf4f8ee02027cf77396bc130c53; reference:md5,fa633db0e584a35350b84560d6ea29df;

reference:md5,a703ba86d3692fb59c41efc88ba98c8e; classtype:backdoor; target:src_ip; sid:2836769; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_06_10, malware_family AZORult, performance_impact Low, updated_at 2019_09_28;)

Observed Malicious SSL Cert (AZORult CnC)

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC)"; flow:established,to_client; tls_cert_subject; content:"CN=techxim.com"; nocase; isdataat:!1,relative; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,dc6c83c65e091e3f572d6870a4d3b382; classtype:backdoor; target:dest_ip; sid:2838487; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_09_17, malware_family AZORult, performance_impact Low, updated_at 2019_09_28;)

AZORult CnC Beacon M3

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"AZORult CnC Beacon M3"; flow:established,to_server; content:"POST"; http_method; content:" MSIE "; http_user_agent; pcre:"/^[\x20-\x7e\r\n]{0,20}[^\x20-\x7e\r\n]/P"; http_content_len; byte_test:0,<,150,0,string,dec; http_header_names; content:!"Referer"; content:"|0d 0a|Host|0d 0a|User-Agent|0d 0a|Content-Length|0d 0a|"; depth:36; http_start; content:".php|20|HTTP/1.1|0d 0a|Host|3a|"; fast_pattern; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,73964217600c6a83da1110ed4df85217; classtype:backdoor; target:src_ip; sid:2834335; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag Stealer, signature_severity Major, created_at 2019_01_10, malware_family AZORult, performance_impact Low, updated_at 2020_02_12;)

Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-28

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-28"; flow:established,to_client; tls_cert_subject; content:"OU=Domain Control Validated, CN=dicey.biz"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category TROJAN; reference:md5,76fe84b3901f697927de568f5a0dbb0f; classtype:backdoor; target:dest_ip; sid:2839137; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint,

deployment Perimeter, signature_severity Major, created_at 2019_10_28, malware_family AZORult, performance_impact Low, updated_at 2019_10_28;)

Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-22

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC Server) 2019-10-22"; flow:established,to_client; tls_cert_subject; content:"OU=Domain Control Validated, CN=derek-heath.com"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,6867022e6454cc381c6e156466e53a9e; classtype:backdoor; target:dest_ip; sid:2839138; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_10_28, malware_family AZORult, performance_impact Low, updated_at 2019_10_28;)

Observed Malicious SSL Cert (AZORult CnC)

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC)"; flow:established,to_client; tls_cert_subject; content:"CN=azo.icf-fx.kz"; nocase; isdataat:!1,relative; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,678988bffec50b92a0150e0ed0ea9c24; classtype:backdoor; target:dest_ip; sid:2833327; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2018_10_29, malware_family AZORult, performance_impact Moderate, updated_at 2019_09_28;)

Observed Malicious SSL Cert (AZORult CnC) 2019-11-18

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC) 2019-11-18"; flow:established,to_client; tls_cert_subject; content:"CN=gemateknindoperkasa.co.id"; isdataat:!1,relative; fast_pattern; tls_cert_issuer; content:"C=US, ST=TX, L=Houston, O=cPanel, Inc., CN=cPanel, Inc. Certification Authority"; isdataat:!1,relative; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,3289edad56299b031de6e6a35e93969b; classtype:backdoor; target:dest_ip; sid:2839482; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_11_18, performance_impact Moderate, updated_at 2019_11_18;)

Observed AZORult Domain in TLS SNI

alert tls $HOME_NET any -> $EXTERNAL_NET any (msg:"Observed AZORult Domain in TLS SNI"; flow:established,to_server; tls_sni; content:"1d9f0a85.ngrok.io"; isdataat:!1,relative; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,5ebe08ea8d7c4f043cd0e94711b0ff7f; classtype:backdoor; target:src_ip; sid:2839694; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_12_02, malware_family AZORult, performance_impact Low, updated_at 2019_12_02;)

Observed Malicious SSL Cert (AZORult CnC) 2019-12-19

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC) 2019-12-19"; flow:established,to_client; tls_cert_subject; content:"CN=belco-in.com"; depth:15; isdataat:!1,relative; fast_pattern; reference:md5,5306317feffae1f5d2290229e931b624; classtype:backdoor; target:dest_ip; sid:2840027; rev:2; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag SSL_Malicious_Cert, signature_severity Major, created_at 2019_12_19, malware_family AZORult, performance_impact Low, updated_at 2019_12_19;)

Observed Malicious SSL Cert (AZORult CnC) 2019-12-27

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC) 2019-12-27"; flow:established,to_client; tls_cert_subject; content:"CN=nsabeau.com.my"; depth:17; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; reference:md5,8390e6ceb68f2bd717d83849c4c0e535; classtype:backdoor; target:dest_ip; sid:2840141; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag SSL_Malicious_Cert, signature_severity Major, created_at 2019_12_27, malware_family AZORult, performance_impact Low, updated_at 2019_12_27;)

Observed Malicious SSL Cert (AZORult CnC) 2020-01-02

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC) 2020-01-02"; flow:established,to_client; tls_cert_subject; content:"CN=a-vnet.com"; depth:13; isdataat:!1,relative; fast_pattern; reference:md5,8323181d5829755580d379cde3c7aaea; classtype:backdoor; target:dest_ip; sid:2840227; rev:2; metadata:cnc 0, severity 5, malware_family AZORult,

ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag SSL_Malicious_Cert, signature_severity Major, created_at 2020_01_02, malware_family AZORult, performance_impact Low, updated_at 2020_01_02;)

Observed Malicious SSL Cert (AZORult CnC) 2020-01-02

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC) 2020-01-02"; flow:established,to_client; tls_cert_subject; content:"CN=aearthlink.net"; depth:17; isdataat:!1,relative; fast_pattern; reference:md5,2ddd176ca5b852ba366642447cddde39; classtype:backdoor; target:dest_ip; sid:2840228; rev:2; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag SSL_Malicious_Cert, signature_severity Major, created_at 2020_01_02, malware_family AZORult, performance_impact Low, updated_at 2020_01_02;)

Observed Malicious SSL Cert (AZORult CnC) 2020-01-02

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC) 2020-01-02"; flow:established,to_client; tls_cert_subject; content:"CN=ezvuer.com"; depth:13; isdataat:!1,relative; fast_pattern; reference:md5,bf716722b130148297047ab18fbb0342; classtype:backdoor; target:dest_ip; sid:2840229; rev:2; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag SSL_Malicious_Cert, signature_severity Major, created_at 2020_01_02, malware_family AZORult, performance_impact Low, updated_at 2020_01_02;)

Observed Malicious SSL Cert (AZORult CnC)

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC)"; flow:established,to_client; tls_cert_subject; content:"CN=syndicatemechines.com"; depth:24; isdataat:!1,relative; fast_pattern; reference:md5,b1382375eafb605ab7bbf304fadfed64; classtype:backdoor; target:dest_ip; sid:2840357; rev:2; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag SSL_Malicious_Cert, signature_severity Major, created_at

2020_01_09, malware_family AZORult, performance_impact Low, updated_at 2020_01_09;)

Observed Malicious SSL Cert (AZORult CnC)

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC)"; flow:established,to_client; tls_cert_subject; content:"CN=nsabeau.com.my"; depth:17; isdataat:!1,relative; fast_pattern; reference:md5,8390e6ceb68f2bd717d83849c4c0e535; classtype:backdoor; target:dest_ip; sid:2840114; rev:2; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag SSL_Malicious_Cert, signature_severity Major, created_at 2019_12_26, malware_family AZORult, performance_impact Low, updated_at 2019_12_26;)

Observed Malicious SSL Cert (AZORult CnC) 2019-12-05

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC) 2019-12-05"; flow:established,to_client; tls_cert_subject; content:"CN=cbn-cargo.co.id"; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, former_category MALWARE; classtype:backdoor; target:dest_ip; sid:2839784; rev:2; metadata:attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_12_06, malware_family AZORult, performance_impact Low, updated_at 2019_12_06;)

Observed Malicious SSL Cert (AZORult CnC) 2020-01-10

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC) 2020-01-10"; flow:established,to_client; tls_cert_subject; content:"CN=syndicatemechines.com"; depth:24; isdataat:!1,relative; fast_pattern; reference:md5,276add022cac0382c552364a9f0793e0; classtype:backdoor; target:dest_ip; sid:2840391; rev:2; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag SSL_Malicious_Cert, signature_severity Major, created_at 2020_01_10, malware_family AZORult, performance_impact Low, updated_at 2020_01_10;)

Observed Malicious SSL Cert (AZORult CnC) 2020-01-13

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (AZORult CnC) 2020-01-13"; flow:established,to_client; tls_cert_subject;

content:"CN=nenkel.com"; depth:13; isdataat:!1,relative; fast_pattern; reference:md5,c0ab2bcae5b3e3567fa5654ae4b0fdf2; classtype:backdoor; target:dest_ip; sid:2840417; rev:2; metadata:cnc 0, severity 5, malware_family AZORult, ti_malware_name AZORult, rule_origin etpro, ti_malware_id 83b2f363e76157386cd7c376ecbe9c8d6b6030a6, affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag SSL_Malicious_Cert, signature_severity Major, created_at 2020_01_13, malware_family AZORult, performance_impact Low, updated_at 2020_01_13;)

Malware: KPOT Stealer

KPOT Stealer

In July 2018 advertisement about selling if «KPOT Stealer» has been published on underground forums. This malware is able to steal passwords from different browsers, messengers, crypto wallets, FTP and other programs. It also has functions to make screenshots of victim's display and function of loader which allows to infect victim's PC with other malware.

Platform: Windows

Threat level: High

Category: Stealer

General information

- Stealing of passwords, auto filling forms, cookies, masked CC from Chromium-Based and Mozilla-Based browsers. It is realized using recursion.
- Collection of passwords from Internet Explorer (versions 6-11)
- Collections of credentials from jabber clients – psi, psi+, pidgin
- Collection of credentials from outlook, rdp
- Collections of crypto wallets data from wallet.dat, namecoin, monero, bytecoin, electrum, ethereum
- Collection of skype correspondence in format: time – sender— receiver – message
- Grabbing of Telegram session
- Grabbing of Discord session
- Grabbing of Battle.Net session
- Grabbing of passwords in VPN: EarthVPN, NordVPN
- Collection of Steam data: ssfn, config.vdf, loginusers.vdf
- Collection of FTP: FileZilla, WinSCP, TotalCommander, WsFtp
- Collection of wininet cookies in netscape format
- Makes screenshots of victim's display in png format
- Function of files' grabbing-Collects information about victim's system – screen resolution, keyboard layout, video card, the name and number of processor cores, current LOCAL time and time zone, OS version including os edition, number of RAM, IP-address.
- Function of loader – file is recorded into memory. If «resident» is chosen, file will be recorded into Temp, path to the file in PEB will be changed so that your file can be installed by copying itself wherever it is needed. If file is 32 bit, loadup will be in current process; if file is 64 bit and OS is 64-bit, cmd.exe will be launched and file will be injected using wow64ext.
- Function of self-deleting-Bypassing of firewall on the base of com-interface of Internet Explorer.

Network signatures

KPOT Stealer Check-In

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"KPOT Stealer Check-In"; flow:established,to_server; content:"POST"; http_method; content:"bot_id="; depth:7; nocase; http_client_body; fast_pattern; content:"&x64="; nocase; distance:0; http_client_body; content:"&is_admin="; nocase; distance:0; http_client_body; content:"&IL="; nocase; distance:0; http_client_body; content:"&os_version="; nocase; distance:0; http_client_body; content:!"Referer"; http_header; metadata:cnc 0, severity 3, malware_family KPOT Stealer, ti_malware_name KPOT Stealer, rule_origin etpro, ti_malware_id f1725b6226be26590ed6f7b0a22c11bc35f23c91, former_category TROJAN; reference:md5,7586034a638b95ddd51b60e5b9f4a2b2; classtype:trojan-activity; target:src_ip; sid:2832358; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2018_08_28, updated_at 2018_08_28;)

KPOT Stealer Exfiltration

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"KPOT Stealer Exfiltration"; flow:established,to_server; content:"POST"; http_method; content:"Content-Disposition|3a 20|form-data|3b 20|name=|22|zip_file|22 3b 20|filename=|22|"; http_client_body; content:".cab|22 0d 0a|Content-Type|3a 20|vnd.ms-cab-compressed|0d 0a|"; http_client_body; distance:0; content:"sysInfo.txt"; http_client_body; distance:0; nocase; http_content_type; content:"multipart/form-data|3b 20|boundary=0xd3adc0d3"; nocase; fast_pattern; depth:40; isdataat:!1,relative; metadata:cnc 0, severity 3, malware_family KPOT Stealer, ti_malware_name KPOT Stealer, rule_origin etpro, ti_malware_id f1725b6226be26590ed6f7b0a22c11bc35f23c91, former_category TROJAN; reference:md5,7586034a638b95ddd51b60e5b9f4a2b2; classtype:trojan-activity; target:src_ip; sid:2832359; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2018_08_28, updated_at 2019_09_28;)

KPOT Stealer Exfiltration M2

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"KPOT Stealer Exfiltration M2"; flow:established,to_server; content:"POST"; http_method; content:"/gate.php"; http_uri; fast_pattern; isdataat:!1,relative; content:"-stream|0d 0a|Content-Encoding|3a 20|binary|0d 0a|Host"; http_header; http_header_names; content:!"User-Agent"; content:!"Referer"; content:!"Accept"; metadata:cnc 0, severity 3, malware_family KPOT Stealer, ti_malware_name KPOT Stealer, rule_origin etpro, ti_malware_id f1725b6226be26590ed6f7b0a22c11bc35f23c91, former_category TROJAN; reference:md5,bba015562893c9367325057b5e725dae; classtype:trojan-activity; target:src_ip; sid:2832753; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint,

deployment Perimeter, signature_severity Major, created_at 2018_09_24, malware_family Stealer, malware_family KPOT, updated_at 2019_09_28;)

KPOT Stealer Variant CnC Activity

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"KPOT Stealer Variant CnC Activity"; flow:established,to_server; content:"POST"; http_method; content:"/gate.php"; http_uri; isdataat:!1,relative; fast_pattern; http_content_len; byte_test:0,>,1500,0,string,dec; http_header_names; content:"|0d 0a|Host|0d 0a|Content-Length|0d 0a|Connection|0d 0a|Cache-Control|0d 0a 0d 0a|"; depth:53; content:!"User-Agent"; content:!"Accept"; content:!"Referer"; metadata:cnc 0, severity 3, malware_family KPOT Stealer, ti_malware_name KPOT Stealer, rule_origin etpro, ti_malware_id f1725b6226be26590ed6f7b0a22c11bc35f23c91, former_category MALWARE; reference:md5,d88dd410ac0d4317a493b30442899d16; classtype:trojan-activity; target:src_ip; sid:2834774; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_02_07, malware_family KPOT, performance_impact Moderate, updated_at 2019_09_28;)

SSL/TLS Certificate Observed (KPOT)

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"SSL/TLS Certificate Observed (KPOT)"; flow:established,to_client; tls_cert_subject; content:"OU=Domain Control Validated, OU=PositiveSSL, CN=chrisovunhie.pw"; metadata:cnc 0, severity 3, malware_family KPOT Stealer, ti_malware_name KPOT Stealer, rule_origin etpro, ti_malware_id f1725b6226be26590ed6f7b0a22c11bc35f23c91, former_category TROJAN; classtype:trojan-activity; target:dest_ip; sid:2836202; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag KPOT, signature_severity Major, created_at 2019_05_02, updated_at 2019_05_02;)

Observed Malicious SSL Cert (KPOT CnC)

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"Observed Malicious SSL Cert (KPOT CnC)"; flow:from_server,established; tls_cert_subject; content:"CN=krtk.icu"; nocase; fast_pattern; isdataat:!1,relative; tls_cert_issuer; content:"C=US, O=Let's Encrypt, CN=Let's Encrypt Authority X3"; metadata:cnc 0, severity 3, malware_family KPOT Stealer, ti_malware_name KPOT Stealer, rule_origin etpro, ti_malware_id f1725b6226be26590ed6f7b0a22c11bc35f23c91, former_category MALWARE; classtype:trojan-activity; target:dest_ip; sid:2836970; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, tag SSL_Malicious_Cert, signature_severity Major, created_at 2019_06_21, malware_family KPOT, performance_impact Low, updated_at 2019_09_28;)

KPOT Stealer Exfiltration M3

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"KPOT Stealer Exfiltration M3"; flow:established,to_server; content:"POST"; http_method; content:"/conf.php";

http_uri; fast_pattern; isdataat:!1,relative; content:"-stream|0d 0a|Content-Encoding|3a 20|binary|0d 0a|Host"; http_header; http_header_names; content:!"User-Agent"; content:!"Referer"; content:!"Accept"; metadata:cnc 0, severity 3, malware_family KPOT Stealer, ti_malware_name KPOT Stealer, rule_origin etpro, ti_malware_id f1725b6226be26590ed6f7b0a22c11bc35f23c91, former_category TROJAN; reference:md5,a0cfe711cd721ca486a49e31081b4e02; classtype:trojan-activity; target:src_ip; sid:2837753; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_07_30, malware_family KPOT, performance_impact Moderate, updated_at 2019_09_28;)

Win32/KPOT Stealer Initial CnC Activity M1

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Win32/KPOT Stealer Initial CnC Activity M1"; flow:established,to_server; content:"GET"; http_method; content:"/gate.php"; http_uri; isdataat:!1,relative; fast_pattern; http_content_type; content:"application/x-www-form-urlencoded"; depth:33; isdataat:!1,relative; http_header_names; content:"|0d 0a|Connection|0d 0a|Content-Type|0d 0a|Host|0d 0a 0d 0a|"; depth:36; isdataat:!1,relative; metadata:cnc 0, severity 3, malware_family KPOT Stealer, ti_malware_name KPOT Stealer, rule_origin etpro, ti_malware_id f1725b6226be26590ed6f7b0a22c11bc35f23c91, former_category MALWARE; reference:md5,7e3ae5d4db2e8c55dc4de98843489e78; classtype:trojan-activity; target:src_ip; sid:2838467; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_09_16, malware_family KPOT_Stealer, performance_impact Moderate, updated_at 2019_09_28;)

Win32/KPOT Stealer Initial CnC Activity M2

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Win32/KPOT Stealer Initial CnC Activity M2"; flow:established,to_server; content:"GET"; http_method; content:"/conf.php"; http_uri; isdataat:!1,relative; http_content_type; content:"application/x-www-form-urlencoded"; depth:33; isdataat:!1,relative; http_header_names; content:"|0d 0a|Connection|0d 0a|Content-Type|0d 0a|Host|0d 0a 0d 0a|"; depth:36; isdataat:!1,relative; fast_pattern; metadata:cnc 0, severity 3, malware_family KPOT Stealer, ti_malware_name KPOT Stealer, rule_origin etpro, ti_malware_id f1725b6226be26590ed6f7b0a22c11bc35f23c91, former_category MALWARE; reference:md5,7e3ae5d4db2e8c55dc4de98843489e78; classtype:trojan-activity; target:src_ip; sid:2838468; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2019_09_16, malware_family KPOT_Stealer, performance_impact Moderate, updated_at 2019_09_28;)

Malware: Oski Stealer

Oski Stealer

Oski Stealer is a malware which is advertised on undergrounds forums by oski_seller seller since July 2019. Malware is written in C/C ++. Oski uses man-in-the-browser (MitB) attacks by hooking the browser processes using DLL injection for extracting credentials. Some of the features are: extracting browser credentials and cryptocurrency wallet passwords.

Platform: Windows

Threat level: High

Category: Info stealer

General information

- Non-resident Loader
- Data collection from Browsers (Passwords, Credit Cards, Cookies, Form AutoComplete, View History, Download History, Search Engine History):
- Chromium browsers
- Google Chrome
- Mozilla Firefox
- Opera
- Internet Explorer
- Microsoft Edge
- Amigo
- BlackHawk
- Comodo
- CentBrowser
- Cyberfox
- Epic Privacy Browser
- IceCat
- Kometa
- KMeleon
- Maxthon5
- Nichrome
- Orbitum
- Pale Moon
- Torch
- TorBro
- Uran
- QIPSurf
- Waterfox
- Sputnik

- Vivaldi

Steals following cryptocurrency wallets:

1. BitcoinCore
2. Ethereum
3. Electrum
4. ElectrumLTC
5. Exodus
6. Jaxx
7. ZCash
8. ElectronCash
9. Anoncoin
10. BBQCoin
11. MultiDoge
12. DashCore
13. InfiniteCoin
14. Litecoin
15. DevCoin
16. DigitalCoin
17. FrankoCoin
18. FlorinCoin
19. FreiCoin
20. GoldCoin
21. IxCoin
22. IOCoin
23. MegaCoin
24. MinCoin
25. NameCoin
26. PrimeCoin
27. TerraCoin
28. YACoin

- Collecting following information about Sytem:

1. Windows version
2. Username
3. PC name
4. Machine ID
5. GUID
6. Processor model
7. Video card model
8. Display resolution

9. RAM
10. Local time
11. Time Zone

Network signatures

Win32/Oski Stealer Data Exfil

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Win32/Oski Stealer Data Exfil"; flow:established,to_server; content:"POST"; http_method; content:".zip|22 0d 0a|"; http_client_body; content:"|0d 0a|PK"; http_client_body; distance:0; content:"screenshot.jpg"; http_client_body; distance:0; http_content_type; content:"multipart/form-data|3b 20|boundary=1BEF0A57BE110FD467A"; depth:49; isdataat:!1,relative; fast_pattern; http_header_names; content:!"Referer"; metadata:cnc 0, severity 3, malware_family Oski Stealer, rule_origin etpro, former_category MALWARE; reference:md5,6c8357280b50bb1808ec77b0292eb22b; classtype:trojan-activity; target:src_ip; sid:2029236; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2020_01_08, malware_family Oski, updated_at 2020_01_08;)

Malware: FormBookFormgrabber

FormBookFormgrabber

Formgrabber of "FormBook" has begun to be on sale at underground forum since February, 2016. It is intended for compromise data which victim input from browsers, e-mail clients, FTP and services of instant exchange of messages.

Platform: Windows

Threat level: Medium

Category: Trojan

General information

FormBook can be classified as inforstealer malware that collects passwords, logins, installs formgrabber, FTP credentials, messengers credentials and emails data. It began to be sold in the beginning of 2016. The malware injects into legitimate processes and installs keyboard hooks to log all pressed buttons, steal exchange buffer and intercept HTTP sessions.

- log pressed keyboard buttons
- intecept and extract data from HTTP/HTTPS/SPDY/HTTP2 requests
- extract data from Internet browsers and email clients
- make screenshots
- selfupdate
- selfremove
- execute shell commands
- steal cookies
- reboot system
- shutdown system
- Ring3 rootkit
- it reads Windows' ntdll.dll module from disk into memory

If the malware is running with elevated privileges, it can copy payload to one of the following directories:

%ProgramFiles%

%CommonProgramFiles%

If running with normal privileges, it can copy to one of the following directories:

%USERPROFILE%

%APPDATA%

%TEMP%

Browsers hooks look for following substrings in HTTP requests:

- pass
- token
- email
- login
- signin
- account
- persistent

Malware uses RC4 encrypted and Base64 encoded HTTP POST requests to C&C.

Following commands could be received from CnC:

- update
- downlaod and execute
- selfremove
- execute via ShellExecute API
- clear cookies
- reboot OS
- shutdown OS
- collect passwords and create screenshot
- download and extract ZIP archive

Indicators of Compromise (IOCs)

CnC:

http://algreenstdykeghestak.dns.army/receipat/winlog.exe
http://192.210.173.40/files/loader1.exe
http://37.0.10.83/os/sov.exe
http://hisensetech.xyz/obinnazx.exe
http://lg-tv.tk/obinnazx.exe
http://15.165.235.203/winr/x2-29.exe
http://algreenstdykeghestyc.dns.army/receipat/winlog.exe
http://stdytheviejupcazfekr.dns.army/receipt/invoice_115521.doc
http://stdyrmtcntlenverstgv.dns.army/documenrt/winlog.exe
http://algreenstdykeghestdb.dns.army/receipat/winlog.exe
http://3.12.154.229/new.exe
http://hdmilg.xyz/obinnazx.exe
https://moorebankpharmacy.net/index.php
http://rmtcntlstdyfarmtstpo.dns.army/documenrt/winlog.exe
http://darkyardfilms.com/SAMPLE/SAMPLE+PURCHASE ORDER.7z
http://stdytheviejupcazfekr.dns.army/thevdoc/winlog.exe
https://bazaar.abuse.ch/download/7876ab3827c6d9bd/
http://wsdyalgreenkeghewsmq.dns.army/receipat/winlog.exe
http://172.104.235.192/dirkk/dir1.exe
http://18.159.48.76/cps/vbctwo.exe

http://18.159.48.76/cps/vbcone.exe
http://myhostisstillgood11.zapto.org/dashboard/docs/images/kn.exe
http://37.0.10.83/os/m.exe
http://15.164.227.23/windows/xloa.exe
http://darkyardfilms.com/SAMPLE/SAMPLE+PURCHASE%20ORDER.7z
http://23.94.159.183/kome/win32.exe
algreenstdykeghestak.dns.army
hisensetech.xyz
lg-tv.tk
wwwjinsha486.com
wenerberger.com
algreenstdykeghestyc.dns.army
stdytheviejupcazfekr.dns.army
stdyrmtcntlenverstgv.dns.army
algreenstdykeghestdb.dns.army
hdmilg.xyz
cannabisdigital.network
breatheincourage.com
moorebankpharmacy.net
rmtcntlstdyfarmtstpo.dns.army
darkyardfilms.com
bazaar.abuse.ch
wsdyalgreenkeghewsmq.dns.army
myhostisstillgood11.zapto.org
protecteddrive.com
91.223.242.222
10.8.83.10
37.16.83.20
172.16.10.117
194.226.170.31
10.100.30.200

Network signatures

Win32.Trojan Formbook Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Win32.Trojan Formbook Checkin"; flow:established,to_server; content:"GET"; http_method; content:!"Referer|3a|"; nocase; http_header; content:!"User-Agent|3a|"; nocase; http_header; content:!"Accept"; nocase; http_header; content:"/?"; http_uri; fast_pattern; pcre:"/\/\?[a-zA-Z0-9\-_]+=[a-zA-Z0-9_+/=]*(&.+)?$/U"; content:"|00 00 00 00 00 00|"; isdataat:!1,relative; threshold:type limit, track by_src, seconds 360, count 1; reference:md5,36d5927e1992190368cb34dd1ce19658; reference:md5,0b658062652f4f4f8829cc131861a764; reference:md5,39c6f6d426252499caf2042ebaa21751; classtype:backdoor;

target:src_ip; sid:1002098; rev:4; metadata:cnc 1, severity 5, malware_family FormBookFormgrabber, malware_family Formbook, ti_malware_name FormBookFormgrabber, rule_origin gib, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4;)

Formbook 0.3 Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Formbook 0.3 Checkin"; flow:to_server,established; content:"POST"; http_method; content:"Mozilla"; http_user_agent; depth:7; content:"dat="; depth:4; http_client_body; nocase; fast_pattern; pcre:"/^[a-z0-9_\/+-]{1000}/PRi"; metadata:cnc 1, severity 5, malware_family FormBookFormgrabber, malware_family Formbook, ti_malware_name FormBookFormgrabber, rule_origin etpro, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4, former_category MALWARE; reference:md5,6886a2ebbde724f156a8f8dc17a6639c; classtype:backdoor; target:src_ip; sid:2024436; rev:5; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2017_06_29, malware_family Password_Stealer, updated_at 2017_11_07;)

Formbook Stealer Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Formbook Stealer Checkin"; flow:to_server,established; content:"GET"; http_method; content:"/?id="; http_uri; pcre:"/^(?:[A-Za-z0-9/+]{4})*(?:[A-Za-z0-9/+]{2}==|[A-Za-z0-9/+]{3}=|[A-Za-z0-9/+]{4})/URi"; content:"Connection|3a 20|close|0d 0a 0d 0a 00 00 00 00 00 00|"; fast_pattern; http_header_names; content:!"Referer"; content:!"User-Agent|0d 0a|"; content:!"Accept"; metadata:cnc 1, severity 5, malware_family FormBookFormgrabber, malware_family Formbook, ti_malware_name FormBookFormgrabber, rule_origin etpro, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4, former_category MALWARE; reference:md5,72c511b5b12f8bcc1dc706a77a0e9bd0; classtype:backdoor; target:src_ip; sid:2827594; rev:6; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2017_08_18, performance_impact Moderate, updated_at 2020_03_02;)

FormBook CnC Checkin (POST)

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"FormBook CnC Checkin (POST)"; flow:established,to_server; content:"POST"; http_method; content:!"."; http_uri; content:!"?"; http_uri; content:!"&"; http_uri; content:"="; within:15; http_client_body; pcre:/^[a-z0-9\(_~-]{1000,}/PRi"; http_content_len; byte_test:0,>,400,0,string,dec; http_connection; content:"close"; depth:5; isdataat:!1,relative; http_accept_enc; content:"gzip, deflate"; depth:13; isdataat:!1,relative; http_header_names; content:"|0d 0a|Host|0d 0a|Connection|0d 0a|Content-Length|0d 0a|"; depth:36; fast_pattern; metadata:cnc 0, severity 3,

malware_family FormBookFormgrabber, ti_malware_name FormBookFormgrabber, rule_origin etpro, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4, former_category MALWARE; reference:md5,a6a114f6bc3e86e142256c5a53675d1a; classtype:trojan-activity; target:src_ip; sid:2829004; rev:4; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2017_12_20, malware_family Formbook, performance_impact Moderate, updated_at 2019_09_28;)

FormBook CnC Checkin (GET)

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"FormBook CnC Checkin (GET)"; flow:established,to_server; content:"GET"; http_method; content:"/?"; http_uri; pcre:"/^[A-Za-z0-9_-]{1,15}=(?:[A-Za-z0-9-_]{1,25}|(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4}))&[A-Za-z0-9-]{1,15}=(?:[A-Za-z0-9-_]{1,25}|(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4}))(?:&sql=\d*)?$/RU"; content:"Connection|3a 20|close|0d 0a 0d 0a 00 00 00 00 00 00|"; fast_pattern; http_connection; content:"close"; depth:5; isdataat:!1,relative; http_header_names; content:"|0d 0a|Host|0d 0a|Connection|0d 0a 0d 0a|"; depth:22; isdataat:!1,relative; metadata:cnc 0, severity 3, malware_family FormBookFormgrabber, ti_malware_name FormBookFormgrabber, rule_origin etpro, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4, former_category MALWARE; reference:md5,a6a114f6bc3e86e142256c5a53675d1a; classtype:trojan-activity; target:src_ip; sid:2829000; rev:7; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2017_12_19, malware_family Formbook, performance_impact Moderate, updated_at 2019_09_28;)

TROJAN Formbook 0.3 Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Formbook 0.3 Checkin"; target:src_ip; flow:to_server,established; content:"POST"; http_method; content:"Mozilla"; http_user_agent; depth:7; content:"dat="; depth:4; http_client_body; nocase; fast_pattern; pcre:"/^[a-z0-9_\/+-]{1000}/PRi"; reference:md5,6886a2ebbde724f156a8f8dc17a6639c; classtype:trojan-activity; sid:2024436; rev:5; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_06_29, deployment Perimeter, former_category MALWARE, signature_severity Major, updated_at 2020_08_24, severity 3, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4, ti_malware_name FormBookFormgrabber, malware_family FormBookFormgrabber, rule_origin etpro;)

TROJAN FormBook CnC Checkin (GET)

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN FormBook CnC Checkin (GET)"; target:src_ip; flow:established,to_server; content:"GET"; http_method; content:"/?"; http_uri; pcre:"/^[A-Za-z0-9_-]{1,15}=(?:[A-Za-z0-9-_]{1,25}|(?:[A-Za-z0-

9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4}))&[A-Za-z0-9-]{1,15}=(?:[A-Za-z0-9-_]{1,25}|(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4}))(?:&sql=\d*)?$/RU"; content:"Connection|3a 20|close|0d 0a 0d 0a 00 00 00 00 00 00|"; fast_pattern; http_connection; content:"close"; depth:5; isdataat:!1,relative; http_header_names; content:"|0d 0a|Host|0d 0a|Connection|0d 0a 0d 0a|"; depth:22; isdataat:!1,relative; reference:md5,a6a114f6bc3e86e142256c5a53675d1a; classtype:trojan-activity; sid:2031449; rev:7; metadata:attack_target Client_Endpoint, created_at 2017_12_19, former_category MALWARE, performance_impact Moderate, signature_severity Major, updated_at 2020_12_16, severity 3, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4, ti_malware_name FormBookFormgrabber, ti_malware_id d77771f830d535a63e37a1ca8df3bcc25daf107d, ti_malware_name FormBook Formgrabber, rule_origin etpro;)

TROJAN FormBook CnC Checkin (GET)

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN FormBook CnC Checkin (GET)"; target:src_ip; flow:established,to_server; content:"GET"; http_method; content:"/?"; http_uri; pcre:"/^[A-Za-z0-9_-]{1,15}=(?:[A-Za-z0-9-_]{1,25}|(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4}))&[A-Za-z0-9-]{1,15}=(?:[A-Za-z0-9-_]{1,25}|(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4}))(?:&sql=\d*)?$/RU"; content:"Connection|3a 20|close|0d 0a 0d 0a 00 00 00 00 00 00|"; fast_pattern; http_connection; content:"close"; depth:5; isdataat:!1,relative; http_header_names; content:"|0d 0a|Host|0d 0a|Connection|0d 0a 0d 0a|"; depth:22; isdataat:!1,relative; reference:md5,a6a114f6bc3e86e142256c5a53675d1a; classtype:trojan-activity; sid:2829000; rev:7; metadata:attack_target Client_Endpoint, created_at 2017_12_19, former_category MALWARE, performance_impact Moderate, signature_severity Major, updated_at 2020_12_23, severity 3, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4, ti_malware_name FormBookFormgrabber, malware_family FormBookFormgrabber, rule_origin etpro;)

Formbook Stealer Checkin (POST)

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Formbook Stealer Checkin (POST)"; target:src_ip; flow:to_server,established; content:"POST"; http_method; content:"dat="; depth:4; http_client_body; nocase; fast_pattern; content:"&un="; http_client_body; distance:0; content:"&br="; http_client_body; distance:0; pcre:"/^dat=[a-z0-9-_/+]{1000}/Pi"; reference:md5,6886a2ebbde724f156a8f8dc17a6639c; classtype:trojan-activity; sid:2828408; rev:1; metadata:former_category TROJAN, severity 3, malware_family FormBookFormgrabber, rule_origin etpro; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2017_06_29,

malware_family Password_Stealer, updated_at 2017_09_28; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_10_24, deployment Perimeter, former_category TROJAN, malware_family Formbook, performance_impact Low, signature_severity Major, tag dupe, updated_at 2018_10_11;)

TROJAN FormBook CnC Checkin (GET)

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN FormBook CnC Checkin (GET)"; target:src_ip; flow:established,to_server; content:"GET"; http_method; content:"/?"; http_uri; pcre:"/^[A-Za-z0-9_-]{1,15}=(?:[A-Za-z0-9-_]{1,25}|(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4}))&[A-Za-z0-9-]{1,15}=(?:[A-Za-z0-9-_]{1,25}|(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4}))(?:&sql=\d*)?$/RU"; content:"Connection|3a 20|close|0d 0a 0d 0a 00 00 00 00 00 00|"; fast_pattern; http_connection; content:"close"; depth:5; isdataat:!1,relative; http_header_names; content:"|0d 0a|Host|0d 0a|Connection|0d 0a 0d 0a|"; depth:22; isdataat:!1,relative; reference:md5,a6a114f6bc3e86e142256c5a53675d1a; classtype:trojan-activity; sid:2031412; rev:7; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_12_19, deployment Perimeter, former_category MALWARE, malware_family Formbook, performance_impact Moderate, signature_severity Major, updated_at 2020_09_16, severity 3, ti_malware_id d77771f830d535a63e37a1ca8df3bcc25daf107d, ti_malware_name FormBook Formgrabber, rule_origin etpro;)

Win32.Trojan.MSIL.Injector GET request

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Win32.Trojan.MSIL.Injector GET request"; target:src_ip; flow:established,to_server; content:"GET"; http_method; content:!"Referer|3a|"; nocase; http_header; content:!"User-Agent|3a|"; nocase; http_header; content:!"Accept"; nocase; http_header; content:"/?"; http_uri; fast_pattern; pcre:"/\/\?[a-zA-Z0-9\-_]+=[a-zA-Z0-9_+/=]*(&.+)?$/U"; content:"|00 00 00 00 00 00|"; isdataat:!1,relative; threshold:type limit, track by_src, seconds 360, count 1; reference:md5,36d5927e1992190368cb34dd1ce19658; reference:md5,0b658062652f4f4f8829cc131861a764; classtype:trojan-activity; reference:md5,39c6f6d426252499caf2042ebaa21751; sid:1002098; rev:4; metadata:severity 3, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4, ti_malware_name FormBookFormgrabber, malware_family FormBookFormgrabber, rule_origin gib;)

Formbook CnC script download instead of audio v1

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"Formbook CnC script download instead of audio v1"; flowbits:isset,gib.formbook.mp3; flow:established,to_client; content:"$"; depth:1; http_server_body; fast_pattern;

pcre:"/\$[A-z0-9]{1,3}\=\@\(\d{2},\d{2},/Q"; http_content_type; content:"audio/mpeg"; target:src_ip; reference:md5,7c711c9e227d455a131a223eea423cbe flowbit_sids,1003216; classtype:trojan-activity; sid:1003217; rev:1; metadata:sha1 62aec9adb0dbd955d006742f49a0285823e80f1e, severity 3, rule_origin gib;)

TROJAN FormBook CnC Checkin (POST)

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN FormBook CnC Checkin (POST)"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:!"."; http_uri; content:!"?"; http_uri; content:!"&"; http_uri; content:"="; within:15; http_client_body; pcre:/^[a-z0-9\(_~-]{1000,}/PRi"; http_content_len; byte_test:0,>,400,0,string,dec; http_connection; content:"close"; depth:5; isdataat:!1,relative; http_accept_enc; content:"gzip, deflate"; depth:13; isdataat:!1,relative; http_header_names; content:"|0d 0a|Host|0d 0a|Connection|0d 0a|Content-Length|0d 0a|"; depth:36; fast_pattern; reference:md5,a6a114f6bc3e86e142256c5a53675d1a; classtype:trojan-activity; sid:2829004; rev:4; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_12_20, deployment Perimeter, former_category MALWARE, performance_impact Moderate, signature_severity Major, updated_at 2020_09_16, severity 3, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4, ti_malware_name FormBookFormgrabber, malware_family FormBookFormgrabber, rule_origin etpro;)

FormBook CnC checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"FormBook CnC checkin"; target:src_ip; flow:established,to_server; content:"GET"; http_method; pcre:"/\/[a-z0-9]+\/\?[A-Za-z0-9]+=[A-Za-z0-9+\/]+=*&[A-Za-z0-9]+=[A-Za-z0-9]+/U"; content:"|00 00 00 00 00 00|"; http_header_names; content:!"Referer"; content:!"User-Agent"; content:!"Accept"; content:!"Accept-Language"; content:!"Content-Type"; classtype:trojan-activity; reference:md5,a78444423e5f422eeb62c9019048f41e; sid:1002768; rev:2; metadata:severity 3, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4, ti_malware_name FormBookFormgrabber, rule_origin gib;)

TROJAN FormBook CnC Checkin (GET)

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN FormBook CnC Checkin (GET)"; target:src_ip; flow:established,to_server; content:"GET"; http_method; content:"/?"; http_uri; pcre:"/^[A-Za-z0-9_-]{1,15}=(?:[A-Za-z0-9-_]{1,25}|(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4}))&[A-Za-z0-9-]{1,15}=(?:[A-Za-z0-9-_]{1,25}|(?:[A-Za-z0-9+/]{4})*(?:[A-Za-z0-9+/]{2}==|[A-Za-z0-9+/]{3}=|[A-Za-z0-9+/]{4}))(?:&sql=\d*)?$/RU"; content:"Connection|3a 20|close|0d 0a 0d 0a 00 00 00 00 00 00|"; fast_pattern; http_connection; content:"close"; depth:5; isdataat:!1,relative; http_header_names; content:"|0d 0a|Host|0d 0a|Connection|0d 0a

0d 0a|"; depth:22; isdataat:!1,relative; reference:md5,a6a114f6bc3e86e142256c5a53675d1a; classtype:trojan-activity; sid:2031453; rev:7; metadata:attack_target Client_Endpoint, created_at 2017_12_19, former_category MALWARE, performance_impact Moderate, signature_severity Major, updated_at 2020_12_23, severity 3, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4, ti_malware_name FormBookFormgrabber, ti_malware_id d77771f830d535a63e37a1ca8df3bcc25daf107d, ti_malware_name FormBook Formgrabber, rule_origin etpro;)

TROJAN FormBook CnC Checkin (POST) M2

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN FormBook CnC Checkin (POST) M2"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:!"."; http_uri; content:!"?"; http_uri; content:!"&"; http_uri; content:"="; within:15; http_client_body; content:"|00 00 00 00 00 00|"; http_client_body; isdataat:!1,relative; fast_pattern; pcre:"/=[a-z0-9\(_~\-\.\x00]{300,}\x00$/Pi"; http_accept_enc; content:"gzip, deflate"; depth:13; isdataat:!1,relative; http_connection; content:"close"; depth:5; isdataat:!1,relative; http_content_len; byte_test:0,>,300,0,string,dec; http_header_names; content:"|0d 0a|Host|0d 0a|Connection|0d 0a|Content-Length|0d 0a|"; depth:36; reference:md5,6f5d2b42f4a74886ac3284fa9a414a87; classtype:trojan-activity; sid:2031413; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2020_12_16, deployment Perimeter, signature_severity Major, updated_at 2021_02_03, severity 3, ti_malware_id d77771f830d535a63e37a1ca8df3bcc25daf107d, ti_malware_name FormBook Formgrabber, rule_origin etpro;)
Formbook CnC communication (script download instead of audio)
alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Formbook CnC communication (script download instead of audio)"; flowbits:set,gib.formbook.mp3; flow:established,to_server; flowbits:noalert; content:"GET"; http_method; content:".mp3"; isdataat:!1,relative; http_uri; http_header_names; content:!"Referer"; content:!"Cookie"; content:!"User-Agent"; target:src_ip; reference:md5,7c711c9e227d455a131a223eea423cbe; classtype:trojan-activity; sid:1003216; rev:1; metadata:sha1 62aec9adb0dbd955d006742f49a0285823e80f1e, flowbit_sids 1003217_1003218, severity 3, rule_origin gib;)

TROJAN Formbook Stealer Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Formbook Stealer Checkin"; target:src_ip; flow:to_server,established; content:"GET"; http_method; content:"/?id="; http_uri; pcre:"/^(?:[A-Za-z0-9/+]{4})*(?:[A-Za-z0-9/+]{2}==|[A-Za-z0-9/+]{3}=|[A-Za-z0-9/+]{4})/URi"; content:"Connection|3a 20|close|0d 0a 0d 0a 00 00 00 00 00 00|"; fast_pattern; http_header_names; content:!"Referer"; content:!"User-Agent|0d 0a|"; content:!"Accept";

reference:md5,72c511b5b12f8bcc1dc706a77a0e9bd0; classtype:trojan-activity; sid:2827594; rev:6; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_08_18, deployment Perimeter, former_category MALWARE, performance_impact Moderate, signature_severity Major, updated_at 2020_11_03, severity 3, ti_malware_id 8eee3e23fc03c10c1d3527bea862fc18541db8b4, ti_malware_name FormBookFormgrabber, malware_family FormBookFormgrabber, rule_origin etpro;)

Formbook CnC script download instead of audio v2

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"Formbook CnC script download instead of audio v2"; flowbits:isset,gib.formbook.mp3; flow:established,to_client; content:"@@4D,@@5A"; depth:9; nocase; http_server_body; fast_pattern; http_content_type; content:"audio/mpeg"; target:src_ip; reference:md5,7c711c9e227d455a131a223eea423cbe; classtype:trojan-activity; sid:1003218; rev:1; metadata:sha1 62aec9adb0dbd955d006742f49a0285823e80f1e, flowbit_sids 1003216, severity 3, rule_origin gib;)

Malware: Loki PWS

Loki PWS

Loki PWS (Password Stealer, aka Loki Bot, Loki-Bot, LokiBot) is a Trojan designed to steal authentication data and cookies saved in browsers. In addition, the malware can steal logins/passwords from Cryptocoin wallet, email clients, FTP clients, VNC clients, Poker clients. It has file grabber, keylogger, VNC, Proxy, form grabber (FF, Chrome, IE, Edge, and Opera) and resident loader modules. Loki PWS sends stolen information to the C&C server via HTTP POST. The Trojan was written in C++ and works with following versions of Windows: XP, Vista, 7, 8, 8.1, 10 and Linux. Loki PWS first appeared on underground forums in 2015. A seller is known as «carter» and «lokistov». The seller disappeared after Loki v2 release in 2017. Presumably, Loki PWS Control panel was leaked in 2016. A cracked version of the Loki PWS has become widespread by the end of the 2017. 10.10.2018 on the underground forum exploit.in carter published an announcement about the sale of new versions Loki Bot v2.1. An actor wasn't active on forums until appearance of Loki Bot v2.1.

Platform: Windows

Threat level: High

Category: Trojan

General information

The malware can steal logins/passwords which were saved in following browsers:

- Internet Explorer
- Mozilla Firefox (x32+x64)
- Google Chrome
- K-Meleon
- Comodo Dragon
- Comodo IceDragon
- SeaMonkey
- Opera
- Safari
- CoolNovo
- Rambler Nichrome
- RockMelt
- Baidu Spark
- Chromium
- Titan Browser
- Torch Browser
- Browser

- Epic Privacy Browser
- Sleipnir Browser
- Vivaldi
- Coowon Browser
- Superbird Browser
- Chromodo Browser
- Mustan Browser
- 360 Browser
- Cyberfox (x32+x64)
- Pale Moon
- Maxthon browser
- Citrio Browser
- Chrome Canary
- Waterfox
- Orbitum
- Iridium
- SlimBrowser
- Brave
- Kometa
- Avant Browser
- Uran
- Dooble
- Sputnik

the Trojan can steal logins/passwords from email clients:

- Outlook (2003-2013)
- Mozilla Thunderbird
- Foxmail
- Pocomail
- Incredimail
- Gmail Notifier Pro
- SNetz Mailer
- Checkmail
- Opera Mail
- FossaMail
- MailSpeaker
- yMail
- Trojita
- TrulyMail
- Claws Mail
- The Bat!
- Mailbird

- TouchMail

The author noted that Trojan also can work with following FTP/VNC clients

- Total Commander
- FlashFXP
- FileZilla
- FAR Manager
- CyberDuck
- Bitvise
- NovaFTP
- NetDrive
- NppFTP
- FTPShell
- SherrodFTP
- MyFTP
- FTPBox
- FtpInfo
- Lines FTP
- FullSync
- Nexus File
- JaSFtp
- FTP Now
- Xftp
- Easy FTP
- GoFTP
- NETFile
- Blaze Ftp
- Staff-FTP
- DeluxeFTP
- ALFTP
- FTPGetter
- WS_FTP
- AbleFTp
- Automize
- RealVNC
- TightVNC
- Syncovery
- mSecure Wallet
- SmartFTP
- FreshFTP
- BitKinex
- UltraFXP

- FTP Rush
- Vandyk SecureFX
- OdinSecure FTP Expert
- Fling
- ClassicFTP
- Maxthon browser
- Kitty(login+private key)
- WinSCP
- Remmina RDP
- WinFTP
- 32Bit FTP
- FTP Navigator
- Core FTP
- CrossFTP
- FTP Voyager
- FireFTP
- CuteFTP
- JSCAPE

Supported password managers:

- EnPass
- KeePass
- 1Password
- AI RoboForm

The malware has module for stealing logins and passwords from cryptocoin wallets

- Bitcoin
- Litecoin
- MultiBit
- Electrum-BTC
- Electrum-LTC
- Armoryc
- Namecoin
- Ufasoft
- PPCoin
- Blockchain
- Ixcoin
- Feathercoin
- NovaCoin
- Primecoin
- Terracoin
- Devcoin

- Digitalcoin
- Anoncoin
- Worldcoin
- Quarkcoin
- Infinitecoin
- DogeCoin
- AsicCoin
- LottoCoin
- DarkCoin
- BitShares
- MultiDoge
- Monacoin
- BitcoinDark
- Unobtanium
- Paycoin
- Copay
- Monero
- Ethereum
- Electron Cash (Bitcoin Cash)
- Bitcoin Knots
- Green Address
- mSIGNA
- Bither
- Exodus
- WinZec (Zcash)

Network signatures

Win32.Spyware_LokiBot Sending data (Fareit/Pony)

alert http $HOME_NET any -> any any (msg:"Win32.Spyware_LokiBot Sending data (Fareit/Pony)"; flow:established,to_server; content:"POST"; http_method; content:!"Referer|3A|"; nocase; http_header; content:!"Accept-"; nocase; http_header; content:".php HTTP/1.0"; content:"(Charon|3B| Inferno)"; http_user_agent; content:"Content-Key|3A 20|"; threshold:type limit, track by_src, seconds 360, count 1; reference:md5,1019d4a79c0c66070800b827026bb83c; reference:md5,565d6e2f8ed24de7c3d36b9c277c4cf9; reference:md5,99f29c4b4ef7f494c525018212662d97; classtype:backdoor; target:src_ip; sid:1001732; rev:2; metadata:cnc 0, severity 5, malware_family Loki PWS, ti_malware_name Loki PWS, rule_origin gib, ti_malware_id b50509a8a6bfdf5f510b38040b3a38fb311447f2;)

Loki Bot Cryptocurrency Wallet Exfiltration Detected

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Loki Bot Cryptocurrency Wallet Exfiltration Detected"; flow:established,to_server; content:"POST"; http_method; content:"(Charon|3b 20|Inferno)"; http_user_agent; content:"|00 26 00|"; offset:1; depth:3; http_client_body; pcre:"/^[\x00-\x01]\x00.\x00{3}/PR"; metadata:cnc 0, severity 5, malware_family Loki PWS, ti_malware_name Loki PWS, rule_origin etpro, ti_malware_id b50509a8a6bfdf5f510b38040b3a38fb311447f2, former_category TROJAN; classtype:backdoor; target:src_ip; sid:2024311; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2017_05_17, malware_family lokibot, updated_at 2018_04_13;)

Loki Bot Keylogger Data Exfiltration Detected M1

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Loki Bot Keylogger Data Exfiltration Detected M1"; flow:established,to_server; content:"POST"; http_method; content:"(Charon|3b 20|Inferno)"; http_user_agent; content:"|00 2b 00|"; offset:1; depth:3; http_client_body; pcre:"/^[\x00-\x01]\x00.\x00[\x00-\x01]\x00.\x00.{4}\x01\x00.\x00{3}.{48}\x05\x00{3}/PR"; metadata:cnc 0, severity 5, malware_family Loki PWS, ti_malware_name Loki PWS, rule_origin etpro, ti_malware_id b50509a8a6bfdf5f510b38040b3a38fb311447f2, former_category TROJAN; classtype:backdoor; target:src_ip; sid:2024315; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2017_05_17, malware_family lokibot, updated_at 2018_04_13;)

Malware: Nexus Stealer

Nexus Stealer

Nexus Stealer is a malware which is advertised on undergrounds forums by nexusMP seller since January 2020. Malware is written in C/C ++.

Platform: Windows

Threat level: High

Category: Info stealer

General information

- Data collection of all Chromium browsers (Passwords, Credit Cards, Cookies, Form AutoComplete, View History, Download History, Search Engine History) Includes data from Chrome Browser and browsers with non-standard data location.
- Collecting all .dat of files (recursion) of cryptocurrency wallets, and also collecting cold purses: Anoncoin, Bitcoin, Bitpay, Coinomi, DashCore, devcoin, Eidoo, Electrum, Electrum-NMC, Exodus, Feathercoin, Fetch, FLO, Franko, Freicoin, GoldCoin (GLD), Guarda, I0coin, iXcoin, Jaxx, Litecoin, Luckycoin, MegaCoin, Mincoin, Monero, MyCrypto, NovaCoin, Peercoin, Primecoin, Quarkcoin, TerracoinCore, Worldcoin, Yacoin, Zetacoin.
- Collecting 2FA Sessions - Authenticator (Authy)
- Collecting all Telegram sessions
- Collect all Discord sessions
- Collect all Steam sessions
- Jabber Client Census
- Collect all profiles FileZilla
- Collect all profiles WinSCP
- Collect all profiles TotalCommander
- Collecting credentials WindowsSecureVault
- IE, Edge credential collection
- Collect all Pidgin accounts
- Collecting all PSI, PSI accounts
- Collecting sessions of VPN clients
- Collection of sessions and authorization data OpenVPN
- Collecting Steam Details
- Collecting profile data WiFi
- Collecting profiles from Credmanager
- Collect system information, screenshots, and location data (useful for spot client processing)
- Grabber of files
- Ability to filter CIS-Logi (LPG), protection against repetition

- Loader module with flexible parameters, ability to specify multiple files and multiple filters
- A separate and convenient search page, with the ability to sort by a large number of criteria, including cookies and passwords, to automate the search for the required data.
- Ability to change skin in one click,
- View log data without downloading (passwords, PC information)
- The automated installation of the panel
- Intuitive and at the same time beautiful admin panel. Ability to sort logs by custom templates (Presets), ability to create/edit/delete templates.
- The ability to download or remove all logs directly in the panel (in one click)!
- Smart filtering of fresh logs
- Geostatistical information on home page

Network signatures

Nexus Stealer CnC Data Exfil

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Nexus Stealer CnC Data Exfil"; flow:established,to_server; content:"POST"; http_method; content:".php"; http_uri; isdataat:!1,relative; content:!"Mozilla"; http_user_agent; content:"{"; depth:1; http_client_body; content:"|7e 3b 5e 3b|Windows|20|"; distance:0; http_client_body; within:50; fast_pattern; content:"|7e 3b 5e 3b|"; distance:0; http_client_body; content:"|7e 3b 5e 3b|"; distance:0; http_client_body; content:"|7e 3b 5e 3b|"; distance:0; http_client_body; http_header_names; content:!"Referer"; metadata:cnc 0, severity 3, malware_family Nexus Stealer, rule_origin etpro, former_category MALWARE; reference:md5,8bd8582155ef003b8a24d341d75f1d7f; classtype:trojan-activity; target:src_ip; sid:2029298; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, deployment Perimeter, signature_severity Major, created_at 2020_01_21, malware_family Nexus, updated_at 2020_02_19;)

Malware: TrickBot

TrickBot is banking trojan first appeared in middle 2016. TrickBot is Dyre successor and has strong code similarities to the Dyre trojan.

Platform: Windows

Threat level: High

Category: Trojan

General information

In the first half of 2016, Trickbot was first noticed in attacks on clients of banks. Trickbot is a banking trojan using similar techniques as Dyre. After launch of the loader – "TrickLoader", the body of the trojan is installed in the victim's system. This is loaded from the host controlled by the attackers along with additional modules that are then subsequently launched. Amongst these, are modules for collection and distribution of PC system information, data intercepted from browsers, information from email clients, functionality for network spreading, form-grabbers as well as browser inject functionality.

Network signatures

Trickbot SSL certificate detected

```
alert tls any any -> $HOME_NET any (msg:"Trickbot SSL certificate detected";
flow:established,from_server; content:"|55 04 0a|"; content:"|16|Ubiquiti Networks
Inc."; distance:1; within:23; content:"|55 04 0b|"; distance:0; content:"|11|Technical
Support"; distance:1; within:18; content:"|55 04 03|"; distance:0; content:"UBNT-";
distance:1; within:6; target:src_ip; classtype:banking-trojan;
reference:md5,87dfea7f85a960bbc92b0adbf124a072; sid:1002270; rev:2;
metadata:severity 5, ti_malware_id cf1534c820c4cde26a2bbb078274f10db79e14ae,
ti_malware_name TrickBot, malware_family TrickBot, rule_origin gib;)
```

Win32.Trojan_Trickbot Sending IE history

```
alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Win32.Trojan_Trickbot
Sending IE history"; target:src_ip; flow:established,to_server; content:"POST";
http_method; content:!"Referer|3a|"; nocase; http_header; content:"Connection|3a|
close"; nocase; http_header; content:"boundary=---------"; http_header; fast_pattern;
pcre:"/boundary=-{9}[A-Z]{16}\x0d\x0a/"; pcre:"/\/[\x20-\x7e]+?\.[0-9A-F]{32}\//U";
reference:md5,6ace098066b82cd4e6ad5bbdc9954b0d;
reference:md5,1a3d01fce1c387a2075f1de6a462a871; classtype:banking-trojan;
reference:md5,155106c45d76d566051cc65f77df2e55; sid:1002028; rev:1;
```

metadata:severity 5, ti_malware_id cf1534c820c4cde26a2bbb078274f10db79e14ae, ti_malware_name TrickBot, malware_family TrickBot, rule_origin gib;)

TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (TrickBot CnC)

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"TROJAN ABUSE.CH SSL Blacklist Malicious SSL certificate detected (TrickBot CnC)"; target:dest_ip; flow:established,from_server; content:"|09 00 e7 1f b0 eb b2 ae 21 70|"; fast_pattern; content:"|55 04 0a|"; distance:0; content:"|13|Default Company Ltd"; distance:1; within:20; reference:url,sslbl.abuse.ch; classtype:banking-trojan; sid:2023541; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2016_11_22, deployment Perimeter, former_category MALWARE, signature_severity Major, tag SSL_Malicious_Cert, updated_at 2016_11_22, severity 5, ti_malware_id cf1534c820c4cde26a2bbb078274f10db79e14ae, ti_malware_name TrickBot, malware_family TrickBot, rule_origin etpro;)

TROJAN TrickBot IP Check

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN TrickBot IP Check"; target:src_ip; flow:to_server,established; content:"GET"; http_method; content:"User-Agent|3a 20|Mozilla/5.0 (Windows NT 10.0|3b 20|WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/57.0.2987.133 Safari/537.36|0d 0a|Host|3a 20|ipinfo.io|0d 0a|"; http_header; depth:141; fast_pattern:121,20; content:!"Referer|3a|"; http_header; content:!"Accept"; http_header; threshold:type both, track by_src, count 1, seconds 5; reference:md5,770db932ec1807de570be1727e5ced09; classtype:banking-trojan; sid:2827992; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_09_18, deployment Perimeter, former_category TROJAN, performance_impact Moderate, signature_severity Major, updated_at 2020_08_12, severity 5, ti_malware_id cf1534c820c4cde26a2bbb078274f10db79e14ae, ti_malware_name TrickBot, malware_family TrickBot, rule_origin etpro;)

TROJAN Malicious SSL certificate detected (TrickBot C2)

alert tls $EXTERNAL_NET any -> $HOME_NET any (msg:"TROJAN Malicious SSL certificate detected (TrickBot C2)"; target:dest_ip; flow:established,from_server; content:"|55 04 03|"; content:"|0c|421ho4241.ru"; distance:1; within:13; classtype:banking-trojan; sid:2828428; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_10_26, deployment Perimeter, former_category MALWARE, performance_impact Moderate, signature_severity Major, updated_at 2017_10_26, severity 5, ti_malware_id cf1534c820c4cde26a2bbb078274f10db79e14ae, ti_malware_name TrickBot, malware_family TrickBot, rule_origin etpro;)

TROJAN Trickbot SSL Certificate Detected

alert tls $EXTERNAL_NET 447 -> $HOME_NET any (msg:"TROJAN Trickbot SSL Certificate Detected"; target:dest_ip; flow:established,from_server; content:"|55 04 03|"; content:"|13|sd-97597.dedibox.fr"; fast_pattern; distance:1; within:20; reference:md5,3d55d71c3f0655837694ea125687e479; reference:url,sslbl.abuse.ch/intel/cf31d2f8e419d76517b0bc6c3ead1f246b950a42; classtype:banking-trojan; sid:2830188; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2018_03_29, deployment Perimeter, former_category TROJAN, performance_impact Low, signature_severity Major, updated_at 2018_03_29, severity 5, ti_malware_id cf1534c820c4cde26a2bbb078274f10db79e14ae, ti_malware_name TrickBot, malware_family TrickBot, rule_origin etpro;)

TROJAN Trickbot Payload Request

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Trickbot Payload Request"; target:src_ip; flow:to_server,established; content:"GET"; http_method; pcre:"/^\/(?:kas|ser|mac)[0-9]+\.png$/Ui"; http_start; content:".png HTTP/1.1|0d 0a|Host|3a 20|"; fast_pattern; http_header_names; content:!"Accept"; content:!"Referer|0d 0a|"; content:!"User-Agent|0d 0a|"; reference:md5,2c6cd25a31fe097ee7532422fc8eedc8; classtype:banking-trojan; sid:2024901; rev:5; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_10_23, deployment Perimeter, former_category TROJAN, signature_severity Major, tag Trickbot, updated_at 2020_03_04, severity 5, ti_malware_id cf1534c820c4cde26a2bbb078274f10db79e14ae, ti_malware_name TrickBot, malware_family TrickBot, rule_origin etpro;)

Trickbot Known C&C IP

alert tcp $HOME_NET any -> [200.119.45.140, 107.181.175.122, 79.143.31.94, 186.47.40.234, 181.129.93.226, 190.152.4.210, 107.173.42.177, 82.118.22.87, 195.123.213.186, 195.123.246.69, 51.254.69.233, 195.123.240.36, 195.161.114.131, 192.210.132.15, 168.235.102.16, 164.132.138.134, 23.94.93.106, 190.154.203.218, 189.80.134.122, 125.99.253.34, 191.37.181.152, 187.58.56.26, 146.196.122.167, 177.103.240.149, 131.196.184.141, 103.84.238.3, 190.152.4.210, 202.4.169.178, 36.89.85.103, 103.117.172.206, 45.237.240.178] 443 (msg:"Trickbot Known C&C IP"; reference:md5, 0cc0cbe936aadd2ba70dc0c8a901493b; reference:url, https://brica.de/alerts/alert/public/1274175/trickbot-is-using-google-docs-to-trick-proofpoints-gateway/; reference:url, https://feodotracker.abuse.ch/browse/host/107.173.42.177/; reference:url, https://feodotracker.abuse.ch/browse/host/82.118.22.87/; reference:url, https://feodotracker.abuse.ch/browse/host/195.123.213.186/; reference:url, https://feodotracker.abuse.ch/browse/host/195.123.246.69/; reference:url, https://feodotracker.abuse.ch/browse/host/51.254.69.233/; reference:url,

https://otx.alienvault.com/indicator/ip/195.123.240.36; reference:url,
https://feodotracker.abuse.ch/browse/host/195.161.114.131/; reference:url,
https://feodotracker.abuse.ch/browse/host/192.210.132.15/; reference:url,
https://feodotracker.abuse.ch/browse/host/168.235.102.16/; reference:url,
https://feodotracker.abuse.ch/browse/host/164.132.138.134/; reference:url,
https://feodotracker.abuse.ch/browse/host/23.94.93.106/; reference:url,
https://feodotracker.abuse.ch/browse/host/190.154.203.218/; reference:url,
https://feodotracker.abuse.ch/browse/host/189.80.134.122/; reference:url,
https://feodotracker.abuse.ch/browse/host/125.99.253.34/; reference:url,
https://feodotracker.abuse.ch/browse/host/191.37.181.152/; reference:url,
https://feodotracker.abuse.ch/browse/host/187.58.56.26/; reference:url,
https://feodotracker.abuse.ch/browse/host/146.196.122.167/; reference:url,
https://feodotracker.abuse.ch/browse/host/177.103.240.149/; reference:url,
https://feodotracker.abuse.ch/browse/host/131.196.184.141/; reference:url,
https://feodotracker.abuse.ch/browse/host/103.117.232.198/; reference:url,
https://feodotracker.abuse.ch/browse/host/103.84.238.3/; reference:url,
https://feodotracker.abuse.ch/browse/host/190.152.4.210/; reference:url,
https://feodotracker.abuse.ch/browse/host/202.4.169.178/; reference:url,
https://feodotracker.abuse.ch/browse/host/36.89.85.103/; reference:url,
https://feodotracker.abuse.ch/browse/host/103.117.172.206/; reference:url,
https://feodotracker.abuse.ch/browse/host/45.237.240.178/; target:src_ip;
classtype:banking-trojan; sid:1003029; rev:1; metadata:cnc 1, severity 5, ti_malware_id
cf1534c820c4cde26a2bbb078274f10db79e14ae, ti_malware_name TrickBot,
malware_family TrickBot, rule_origin gib;)

Malware: Kinsing

Kinsing Malware

In this attack, the attackers exploit a misconfigured Docker API port to run an Ubuntu container with the kinsing malicious malware, which in turn runs a cryptominer and then attempts to spread the malware to other containers and hosts.

Platform: Linux

Threat level: Medium

Category: Cryptominer

General information

- Disabled security measures and cleared log
- Downloaded and ran the shell script every minute using crontab
- Halted and deleted files related to numerous applications like other malware and cryptominers
- Installed and ran the Kinsing malware
- Killed other malicious Docker containers and deleted their image
- Looked for other commands running and cron; if found, it deletes all cron jobs including its own.

Indicators of Compromise (IOCs)

CnC:

http://142[.]44[.]191[.]122/d[.]sh
http://142[.]44[.]191[.]122/kinsing/
http://142[.]44[.]191[.]122/al[.]sh
http://142[.]44[.]191[.]122/cron[.]sh
http://142[.]44[.]191[.]122/
http://142[.]44[.]191[.]122/kinsing
http://142[.]44[.]191[.]122/ex[.]sh
http://185[.]92[.]74[.]42/w[.]sh
http://185[.]92[.]74[.]42/d[.]sh
http://217[.]12[.]221[.]244/
http://217[.]12[.]221[.]24/d[.]sh
http://217[.]12[.]221[.]244/kinsing
http://217[.]12[.]221[.]244/j[.]sh
http://217[.]12[.]221[.]244/t[.]sh
http://217[.]12[.]221[.]244/spr[.]sh

http://217[.]12[.]221[.]244/spre[.]sh
http://217[.]12[.]221[.]244/p[.]sh
http://217[.]12[.]221[.]244/Application[.]jar
http://217[.]12[.]221[.]244/f[.]sh
http://www[.]traffclick[.]ru/
http://www[.]mechta-dachnika-tut[.]ru/
http://www[.]rus-wintrillions-com[.]ru/
http://rus-wintrillions-com[.]ru/
http://stroitelnye-jekologicheskie-materialy2016[.]ru
45[.]10[.]88[.]102
91[.]215[.]169[.]111
193[.]33[.]87[.]219

MD5:

kinsing -	0d3b26a8c65cf25356399cc5936a7210
kinsing -	6bffa50350be7234071814181277ae79
kinsing -	c4be7a3abc9f180d997dbb93937926ad
kdevtmpfsi -	d9011709dd3da2649ed30bf2be52b99e

Malware: Outlaw hacking group cryptocurrency miners

Outlaw hacking group cryptocurrency miners

Outlaw Hacking Group's Botnet download Monero miner script named dota3.tar.gz.

The shell script downloads, extracts, and executes the miner payload. The extracted TAR file contains folders with scripts and the miner and backdoor components.

Platform: Linux

Threat level: Medium

Category: Cryptominer

General information

The Shellbot disguises itself as a process named rsync, commonly the binary seen on many Unix- and Linux-based systems to automatically run for backup and synchronization. This allows the malicious activity to evade detection.

File named "tsm32" and "tsm64" is responsible for propagating the miner and backdoor via SSH brute force, and capable of sending remote commands to download and execute the malware. Another file named as ".satan" is a shell script that installs the backdoor malware as a service.

In Linux, files that start with a period are hidden.

Download masscan tar file and unzip the masscan and scan the connected network subnet excluding private IP. The scan result was kept in a text file named input.txt for delete it.

Indicators of Compromise (IOCs)

CnC:

146[.]185[.]171[.]227:443

5[.]255[.]86[.]129:3333

54[.]37[.]70[.]249/[.]satan

54[.]37[.]70[.]249/rp

http://54[.]37[.]70[.]249/[.]x15cache

http://54[.]37[.]70[.]249/dota2[.]tar[.]gz

http://54[.]37[.]70[.]249/fiatlux-1[.]0[.]0[.]apk

http://mage[.]ignorelist[.]com/dota[.]tar[.]gz

mage[.]ignorelist[.]com

zergbase[.]mooo[.]com

SHA256:

rsync	0d71a39bbd666b5898c7121be63310e9fbc15ba16ad388011f38676a14e27809
ps	bb1c41a8b9df7535e66cf5be695e2d14e97096c4ddb2281ede49b5264de2df59
cron	4efec3c7b33fd857bf8ef38e767ac203167d842fdecbeee29e30e044f7c6e33d
anacron	66b79ebfe61b5baa5ed4effb2f459a865076acf889747dc82058ee24233411e2
tsm32	0191cf8ce2fbee0a69211826852338ff0ede2b5c65ae10a2b05dd34f675e3bae
tsm64	085d864f7f06f8f2eb840b32bdac7a9544153281ea563ef92623f3d0d6810e87

Advanced Persistent Threat (APT): APT-C-61

APT-C-61 attacks against South Asia: A series of attacks organized by an unknown APT were observed starting on early 2020. The target were important organizations such as national institutions, military industry, and scientific research. The APT used spear phishing emails and social engineering methods to infiltrate, spread malicious programs to the target device, secretly control the target device, and continue to steal sensitive files.

Attack Vectors

Harpoon emails and social engineering

Indicators of Compromise (IOCs)

CnC:

35[.]173[.]69[.]207
35[.]169[.]173[.]194
54[.]156[.]27[.]150
3[.]213[.]124[.]232
34[.]230[.]212[.]197
54[.]221[.]249[.]82
75[.]101[.]250[.]206
54[.]225[.]189[.]121
os[.]herokuapp[.]com
w0m[.]herokuapp[.]com
a0x[.]erokuapp[.]com
sysupdate[.]pythonanywhere[.]com
p92[.]herokuapp[.]com
fcdn[.]pythonanywhere[.]com

MD5:

512dc6478daa978b8cc1fd8886e48fcd
78f2f7f31c7a12841695d09217138d0d
9353dd2652a12f4c8b5333d11552d13d
b30cb1cfda5d401cb5352ced708c2ffd
e0231be9e17dec8d66ad50b96172153f

Advanced Persistent Threat (APT): Sidewinder

Sidewinder is a suspected threat actor group that has been active since at least 2012. They have been observed targeting government, military, and business entities throughout Asia,

Attack Vectors

Phishing emails
Credential phising
Phising Websites

Related Tools

PowerShell
Koadic

Indicators of Compromise (IOCs)

CnC:

185[.]99[.]133[.]106

SHA256:

98af6635138045cae3f29995a587d0c8a7f14446a9d10564677dd4a41372c3f1

Advanced Persistent Threat (APT): APT C-35 (DoNot Team)

In March 2017, the 360 Chasing Team found a sample of targeted attacks that confirmed the previously unknown sample of APT's attack actions, which the organization can now trace back at least in April 2016. The chasing team named the attack organization APT-C-35. The unique EHDevel malicious code framework used by the organization.

The actors use false personas to register their domains instead of opting for privacy protection services. Depending on the registrar service chosen, this could be seen as another cost control measure. The actors often used typo-squatting to slightly alter a legitimate domain name. In contrast, the registration information used accurate spelling, possibly indicating the domain naming was intentional, typos included. Each unique registrant usually registered only a few domains, but mistakenly reused phone numbers or the registration data portrayed a similar pattern across domains. Looking at shared IP infrastructure, it was easy to see the registration patterns and expand the network used by the attackers. The Donot Team relies heavily on subdomains. Nearly every domain discovered through the course of this investigation had multiple, unique subdomains and every malware sample analyzed communicated to subdomains. In at least two instances, the domain never resolved to an IP address. Instead, the malware used subdomains, which lead to active infrastructure. Many of the sub-domains only navigated to the third level, but other samples used overly complex subdomain structures down to the sixth or seventh level.

Related Tools

StealJob

Indicators of Compromise (IOCs)

SHA256:

8fff7f07ebf0a1e0a4eabdcf57744739f39de643d831c36416b663bd243590e1
d71a1d993e9515ec69a32f913c2a18f14cdb52ef06e4011c8622b5945440c1aa
f10f41bd38832596d4c449f81b9eb4129361aa4e4ebd4a8e8d2d8bf388934ca5
f331f67baa2650c426daae9dee6066029beb8b17253f26ad9ebbd3a64b2b6a37
d4e587b16fbc486a62cc33febd5438be3a9690afc1650af702ed42d00ebfd39e
62dfec7fe0025e8863c2252abb4ec1abdb4b916b76972910c6a47728bfb648a7
b874a158f019dc082a0069eb3f7e169fbec2b4f05b123eed62d81776a7ddb384
13f27543d03fd4bee3267bdc37300e578994f55edabc031de936ff476482ceb4
e726c07f3422aaee45187bae9edb1772146ccac50315264b86820db77b42b31c
5acfd1b49ae86ef66b94a3e0209a2d2a3592c31b57ccbaa4bb9540fcf3403574
57a9a17baaf61de5cffa8b2e2ec340a179e7e1cd70e046cbd832655c44bc7c1d

Advanced Persistent Threat (APT): AVADDON

Author of the Avaddon Ransomware is threat actor "Avaddon". First time this ransomware had been detected in the wild in June 2020.Threat actor has accounts on two underground forums - Exploit[.]in and xss[.]is. Both were registered in December 2019. First time he wrote a message on forums. In May 2020 on both forums - that was a task to test the administrator panel. In June he opened an affiliate program for Avaddon Ransomware.Threat actor has low activity on forums - all his activity is limited to threads about affiliate program.

Attack Vectors

Phishing campaigns through e-mails containing obfuscated JPEG or ZIP attachments (which are actually JavaScript or Excel with macros).
Remote Desktop Protocol (RDP)
Virtual Private Networks (VPN)

Indicators of Compromise (IOCs)

CnC:

http://avaddongun7rngel[.]onion/
http://avaddonbotrxmuyl[.]onion/
avaddongun7rngel[.]onion
tldrnet[.]top
myphotoload[.]com
avaddonbotrxmuyl[.]onion

MD5:

8f6e003f36c14be08558b18b7e2a80bf
043b13e02769b4ebdc679468fd650876
8e31bceb020d0cf8280052790908 76f5
4c5339d759262f9c228910067a608bb7
8ba941089eddb79337e3658d9dbe03c4
76c47ae35c6cc4ee40cbab0f81fc63e4
e92aeb5a50d6b84d47aa19cb9def7858

SHA-256:

68510adc7bd2bbc4438b4495c61ffd8a31c68fc53415a1a0ad8cbf70124a58f3
710fb650f05011b3a084d1b62c532e3f1f34cdd79c297b5394597e4bae820024
2946ef53c8fec94dcdf9d3a1afc077ee9a3869eacb0879cb082ee0ce3de6a2e7
5252cc9dd3a35f392cc50b298de47838298128f4a1924f9eb0756039ce1e4fa2
b39bfb51c0c8e2e216123ca619d45b995371cacf68d0ef7a8cd6b658aa8e68de
cc4d665c468bcb850baf9baab764bb58e8b0ddcb8a8274b6335db5af86af72fb
17396e9cf64ed18556a6510b6573b61ce0ac52428490ffdbd3e3a704e53fb7cd
2c5ecb43c0468b4724f7ea6c308531de9e0373678f611505b2f7a7ccbe03f2b8
21949184522a8258d58b90ff43cf440c713f1e62ba1491a5cd60460b4ae465c4
b8d6fd333973adb640649cab8c9e7575a17b5a8bc382e3335400d43a606a6253
fce637ff0885b82dcdb90c5625d4537d4905c2b1affce0e65cb3a5a052b35b5c

10c7127adb4ade624a3a6e3855c025e9b308c3a760a94db0b5109acdd4caa188
12bc439445f10a04b574d49ed8ccc405e2dfaa493747585439643e8a2129e5e5
f4f2a920a6f6454b3843b1ce69119ff91389ef398ba33622a1a35476aa81288b
167942b8b37615f543d58ee7ceacc174a545b5f4353ded2cb60400da729f645e
dccc689c986e357d5dbdc987e72e6b8a0e9017cbf347449b27c84b8b7b9d507a
036de5693b7e3821b0177a72a57e4ef87530c14999674a8fd967ee3cfe2aafc6
1a0753164f53de108ec44958bfa8f01a37d08e75b0436ed6b9961de9fd7bc669
50d97a35df81fc2c19b1f1893ae8ac552839b65adf662aa4dedd4923f5097608
66ebe6ca19059102193a67034f6f726783050571af484fd53c07fa5e36cdec43
7fd53917c03a9e2734abc50b43e2aabae04b440d1f88c89cf727e5e6ad9f040a
6616abb725c24307f4f062996edc5150079bc477acd4236a4f450e5835a20c62
4f198228806c897797647eecce0f92d4082476b82781183062a55c417c0bb197
9c9c4f20e4be9403e80e4f4bc09dcdcabdfcfd061950d7a226fa19b220e6d3bd
bcb69244dc69a152af4dca3849bb4f3ca634ad785926304c672dbf8a3c38e7bc
f3f4d4e4c6704788bc8954ca6f6ddc61b006aba89d5d384794f19424a3d24132
11dc4d55c095a7c2c3fe5b8e3e3612440ce9c068dd7c0d33503e62a5499e0dfc
94faa76502bb4342ed7cc3207b3158027807a01575436e2b683d4816842ed65d
7355912b1d15c772efe698fe04ac77d77e44862785b03ac3079570e9ab5fb50c
ea93ce421be8a2eba34752b8e8da4d241d671ef808a0f8e55a04ceca8ad5113f
b75f1a42db354e1552360fee17727198e3a70158ca1f78c8c41f2b92bde0114a
4a072c044993616658d1fdeddcf9ead501633fdf000cde18447301afa9b96e99
09bcfc62dd97d13cd7747066369bb5b4d9710307f718690598df79e11a196838
304945a98969e17d31a232cd7e3c42911f8ac3a33df69523dd51b5dd1cb0ae4d
6642eae47df9d87fdbe9356229989f37c6c88467ff47dfb6fde144c2563eb853
20bade9ac05d61c82189db69517bc3b7468c23818eb2470db6009dde7ac09985
a660ce6953d8c90f844efed48f30eacdaa21e872c11ab9e7dddd862ca4fdc40c
7dc1363a330c4ce09b662b84db879f0fa064378aa3d212173f64f4bd65bb0008
a481d2b64c546f68d55e1fd23e57ada80b6b4e2c3dd7b0466380dba465f3d318
a3fca43a08e02ec75524fbd841ac9908a37b05530e1d019c0defb278041660b6
29b5a12cda22a30533e22620ae89c4a36c9235714f4bad2e3944c38acb3c5eee
331177ca9c2bf0c6ac4acd5d2d40c77991bb5edb6e546913528b1665d8b501f3
46a8c1e768f632d69d06bfbd93932d102965c9e3f7c37d4a92e30aaeca905675
557809ad788cd565c7515ce150109f8bddcdec02ad383039b5401305a479562c
56835a799dde8d9ec2d34493fb7207bff069c0deac9942ece427721853709d91
aea6fc31e3a6df3fae067535ab6dc83518ef39662865ec6b1a7bd65bd640b137
0a052eff71641ff91897af5bdecb4a98ed3cb32bcb6ff86c4396b1e3ceee0184
66fdfebe84bdcef5389b066474661cfbcf5e71e6036deaa4b4b6fc1f43bf8892
94fefbae1f1c369c6fcc718d0ea40828b98f55b18c8b4fa68915ceef2d725707
4bf54e4e4c36d6509470ba7a45fd03b68f8432ca3e926b269a195196d2a01d5f
9d32616dd8061f94ff7a0fc575b9b2a9e3e111fad732c81ce8523f896527aa47
21b7b150139c8c228f2b2d342e5de08526b0758a653c23fd7bf2b4d51639f0ea
8c0d535176320f2391ff86beeed00fc3a2987b055b83c7969d8730071477b19d
75066a2982794eff05bb053ba53e7a018faa0b6151f8a47b35f4153e9e5c74ad

982d910b04625e284fc6ff5217f6708433af0939d6ac2301cd88ceea3e362b87
05af0cf40590aef24b28fa04c6b4998b7ab3b7f26e60c507adb84f3d837778f2
f1be81055877d185ed1e09e8e3356d82eee388875ce9f948ebf7712c749f9819
5a47a89a870d7db244c76da43887e33c9ee4b26f9972878b1a6616be0302439f
0ff4058f709d278ed662719b9627618c48e7a656c59f6bfecda9081c7cbd742b
5266b38ad229e89f9afd2464b8f609d33c0f068dc7fe54d9cdc06624826cedc5
b08247c9c0cd3bd8f805f49e08131d78be25e9e8691aab2fab74bfee8fab6a9d
b3fa794ac8d4b8577a61109b96262fd83d9ebf6717d006cb9b5e5638cb234b70
146e554f0d56db9a88224cd6921744fdfe1f8ee4a9e3ac79711f9ab15f9d3c7f
165c5c883fd4fd36758bcba6baf2faffb77d2f4872ffd5ee918a16f91de5a8a8
28adb5fa487a7d726b8bad629736641aadbdacca5e4f417acc791d0e853924a7
d1c1dfa0117fc595419464578959feb4c459ab99a498e0cb66cee626ceff6835
fa4626e2c5984d7868a685c5102530bd8260d0b31ef06d2ce2da7636da48d2d6
4fd72c550987c7638e727c9d84b4940692bf94e101d3f5746bc4a8f377e49b37
c06e2e3fe09f92007ff589e46a57cb8efa1fe261d7b8193190eb648cf7961a4b
210c7f7330f66a248d3cb90bfeefcdb68d5771b1bfc976c7607deedf626d4391
a73900ed8479bfcfbeff20c95dfdb941aa67ea24aeebd07e5e4162d6f4ffb50d
c6add04be76ec96445a2418b6e7cc52faa4671ceea98e1f9050ced82e54df5f4
a4c73aabb9e37b06cebb95b339a24b567ee6c996d129ad9b4fcb6ac029cc2fee
cbb0d1d2a9a93464e0b77844088875ef75bb4904efa189ad7d7d15d3dde4d800

List of CVE commonly exploited by AVADDON APT:

CVE-2018-13379

An Improper Limitation of a Pathname to a Restricted Directory ("Path Traversal") in Fortinet FortiOS 6.0.0 to 6.0.4, 5.6.3 to 5.6.7 and 5.4.6 to 5.4.12 and FortiProxy 2.0.0, 1.2.0 to 1.2.8, 1.1.0 to 1.1.6, 1.0.0 to 1.0.7 under SSL VPN web portal allows an unauthenticated attacker to download system files via special crafted HTTP resource requests.

CVE-2017-0144

The SMBv1 server in Microsoft Windows Vista SP2; Windows Server 2008 SP2 and R2 SP1; Windows 7 SP1; Windows 8.1; Windows Server 2012 Gold and R2; Windows RT 8.1; and Windows 10 Gold, 1511, and 1607; and Windows Server 2016 allows remote attackers to execute arbitrary code via crafted packets, aka "Windows SMB Remote Code Execution Vulnerability." This vulnerability is different from those described in CVE-2017-0143, CVE-2017-0145, CVE-2017-0146, and CVE-2017-0148.

Advanced Persistent Threat (APT): BALBESI

This group of cybercriminals is involved in compromising corporate networks using the "Cobalt Strike" framework and the publicly available tool - Mimikatz. Based on our Intel this group consists of at least four members with nick-names: balbes; nicko; finamina; brute. This group is also known as "hancitor". Other aliases of group: TA511, MAN1, Moskalvzapoe. Cuba ransomware was found in at least one of compromised network. We suppose that they are partners of RaaS Cuba/Buran/ Zeppellin.

Related Tools:

Cobalt Strike
Mimikatz
Buran
SystemBC
FickerStealer
Cuba
LaZagne
NBTScan

Indicators of Compromise (IOCs)

CnC:

http://185[.]153[.]199[.]166/a
http://185[.]153[.]199[.]166/match
http://144[.]202[.]42[.]216/download/svchost[.]exe
torbavzubi[.]com
winsysmon[.]us
trampampooh[.]com
lajasinfoy[.]com
31[.]44[.]184[.]53
31[.]44[.]184[.]55
185[.]153[.]199[.]166
144[.]202[.]42[.]216
31[.]44[.]184[.]49
185[.]153[.]196[.]214
31[.]44[.]184[.]51
84[.]238[.]168[.]253

MD5:

a7a7f626f5808ae112fa85bc530ad724
5381a11ff3bc4ab0daaf590b61b032d6
b41df38c683ccbfe27d3e9ee4dc88e63
fc9b875bee6ea712519889a8ee68d3aa
522bc39647dd316db705de3995099f2d
53b91edd8c93cb49ff2003a87aafc1a2
5ec3aacd4c91f6d9232ce4b77b30afa9

73a8e5cf8c5e9870f459c376ff345c0c
a8d7ce3bdbebb466c06493028d9c5824
ca10d3fa3609170e675061355ee3e228
19eeed1819efbdcbc115bbec3f71e1c3
1a08104065ec8968e34dce8cfdd568ed
1dcf4b7c10c4a6263e521a19a3016ae5
42b9cdd896b72f6fdcc4fbf728064321
3ec590d5377bc6f4b0cae4a93efe5fbb
76a5b1c4ca4c02e98d6b9fbbf3ae8229
9c01d5ced2dbaf1300a30ab1cb831cde
a0d4f3fdee72c23689c9f0153401c245
02675f4692e8d057ae6457c7cc1a7716
224f383c45814dfde345ea6aebca3443
3e37d13807117228e270ddcce81f33a3
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SHA-256:

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Advanced Persistent Threat (APT): APT41

The cybercrime group APT41 (also known as BARIUM; Winnti; LEAD; WICKED SPIDER; WICKED PANDA; Blackfly; Suckfly; Winnti Umbrella; Double Dragon) is a criminal group with dual attack goal (cyber espionage and financial benefit) that has been active since at least 2007. APT41 specializes in stealing digital certificates for use in operations involving user data theft (cyber espionage), as well as placing cryptominers and ransomware on devices. Previously, the group's goals were also currency manipulation in online games and theft of intellectual property. The use of digital certificates issued for legitimate gaming software and obtained by compromising the manufacturer in attacks is one of the main features of this group. Certificates are either delivered by agreement with the group or distributed commercially in the shadow segment of the network. The malware was distributed in the DLL library for a 64-bit version of Windows form and had the functionality of a Remote Administration Tool (RAT). Third-party utilities and frameworks were also used. The use of malware attributed to other groups has been noticed. APT41 considered to be a few APT groups conglomerate which includes Group 72, PassCV, APT17

Related Tools

ASPXSpy
BITSAdmin
BLACKCOFFEE
Certutil
China Chopper
Cobalt Strike
Derusbi
Empire
ZxShell
Winnti for Linux
ShadowPad
ROCKBOOT
Pwdump
PowerSploit
PlugX
MESSAGETAP
gh0st RAT
FTP
Ipconfig
Mimikatz
Net
Netstat
LaZagne

NBTScan

Indicators of Compromise (IOCs)

CnC:

http://54[.]245[.]195[.]101/mess[.]exe
http://54[.]245[.]195[.]101/test[.]rtf
http://signup[.]facebooknavigation[.]com/
http://54[.]245[.]195[.]101/sign[.]exe
http://118[.]193[.]37[.]157/log[.]dll
http://ieee[.]boeing-job[.]com/1
http://ieee[.]boeing-job[.]com/0
http://149[.]28[.]23[.]32:65534/Complaint[.]rar
http://www[.]btdot[.]com/bbs/data/boot1[.]gif
http://www[.]funzone[.]co[.]kr/bbs/data/boot1[.]gif
http://www[.]gbutterfly[.]com/bbs/data/boot1[.]gif
http://www[.]srsr[.]co[.]kr/bbs2/data/boot1[.]gif
http://boot[.]ncook[.]net/bbs/data/boot1[.]gif
https://github[.]com/Yt1g3r/CVE-2019-3396_EXP/blob/master/cmd[.]vm
http://67[.]229[.]97[.]229/pass_sqzr[.]jsp
https://bugcheck[.]xigncodeservice[.]com/Common/Lib/Common_bsod[.]php
http://www[.]battllestategames[.]com/jquery
https://www[.]battllestategames[.]com:8443/jquery-3[.]3[.]1[.]min[.]js
http://www[.]battllestategames[.]com/jquery-3[.]3[.]1[.]min[.]js
http://coivo2xo[.]livehost[.]live/access/?version=4&lid=1582502724&token=cnnnidaighjjhobannhffjehgkgnmnochcecmdcoaahcheohgdndgipgmecnofjmmnmnkhlbacejlkjbloifejgiepngmlefmeijpjlpdgjebmphioaiedkddbiniomdkokbojbdlcjfgchhnnomgnmgpkbibchlehjmnaafndlapibljjmkmpooehfgghkgbjhhgmhbbaikebggpeojbglbdofgkbjkhlpoijpgfdlojgmkblhnopdfjhifaeme
https://coivotek[.]livehost[.]live/access/?version=4&lid=1582502724&token=hkmoblodbbckhkaaokfdlbfihpaodddoldbjimgjfnlhednammmhafdcleiohbemednhieigngleicfecddeikeaekjfdkeopglpjholodiicbpghlpkkkiddbadlmgngeomaobppefbmcepmelogdcafkpfbhndhmlghphaobeenpogakdojioaemeiggmdiofkaekogikecbooippdklkjnhfbepffmjdekkhaabgcmhajmapihmmnmkbjnmpe
https://coivo2xo[.]livehost[.]live/beat
https://coivo2xo[.]livehost[.]live/9jVd
https://coivo2xo[.]livehost[.]live/access/?version=4&lid=1582502724&token=dgmppklkgcahinpmmkplfbmednfekhghdnnkfglelnbjndnnbonfflaammdghgdaffdbiijpmefidhbnhjjblfjelkbglpdkgjejljakoipnjiacnoaifpgnhdeljlbpghhdgohcnigpinfoghcodhondnkeknegajcgledoejgidinjebjaifhipghnoodapdhoggbhfchjanffpphbejpanekpljllmdbbodabdkefnhebijeigdkiobhjpinc
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https://doc[.]goog1eweb[.]com:80/settings
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http://www[.]yandex2unitedstated[.]dynamic-dns[.]net/news[.]php?type=1&hash=6fc29fee2b56620d4ff2ed750f5ad232&time=02:12:55
http://www[.]oseupdate[.]dns-dns[.]com/news[.]php?type=1&hash=d41d8cd98f00b204e9800998ecf8427e&time=10:32:17
http://agent[.]my-homeip[.]net/ks8d192[.]168[.]122[.]143akspbu[.]txt
http://g00gle_jp[.]dynamic-dns[.]net/news[.]php?type=1&hash=d41d8cd98f00b204e9800998ecf8427e&time=11:59:58
http://www[.]oseupdate[.]dns-dns[.]com/news[.]php?type=1&hash=d41d8cd98f00b204e9800998ecf8427e&time=10:19:30
http://agent[.]my-homeip[.]net:8000/ks8d0[.]0[.]0[.]0akspbu[.]txt
googlerenewals[.]net
facebooknavigation[.]com
cdn[.]igooglefiles[.]com
xn--360tmp-k02m[.]tmp[.]googlecustomservice[.]com
tmp[.]googlecustomservice[.]com
find2find[.]com
luckhairs[.]com
bot[.]new[.]googlecustomservice[.]com
www[.]googlecustomservice[.]com
new[.]googlecustomservice[.]com
bot[.]googlecustomservice[.]com
igooglefiles[.]com
pornsee[.]tv
signup[.]facebooknavigation[.]com
game[.]googlecustomservice[.]com
www[.]uk[.]igooglefiles[.]com
xn--360tmp-k02m[.]www[.]googlecustomservice[.]com
ftp[.]googlecustomservice[.]com
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googlesoftservice[.]net
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xn--360tmp-k02m[.]new[.]googlecustomservice[.]com
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voda[.]dns04[.]com
nxead[.]itemdb[.]com
winner[.]ikwb[.]com
firejun[.]freeddns[.]com
users[.]fartit[.]com
netsysdom[.]dynamic-dns[.]net
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xx0xx[.]dnset[.]com
hike[.]dns04[.]com
remotetest[.]dynamic-dns[.]net
free[.]itsaol[.]com
happysky[.]edns[.]biz
gold[.]mrbonus[.]com
readme[.]myddns[.]com
images[.]ikwb[.]com
xnews[.]ikwb[.]com
remoteset[.]zyns[.]com
udm[.]dns05[.]com

ddns[.]4pu[.]com
faceb00k[.]ns01[.]info
patch[.]itsaol[.]com
wordpressb[.]justdied[.]com
pd1[.]dynamic-dns[.]net
forum1[.]zzux[.]com
faceb0ok[.]2waky[.]com
pachost[.]wikaba[.]com
gold[.]bigmoney[.]biz
ddxsn[.]ddns[.]info
item[.]itemdb[.]com
excharge[.]sexxxy[.]biz
pachost[.]dynamic-dns[.]net
wordpr[.]dynamic-dns[.]net
firejun[.]freetcp[.]com
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vada[.]my03[.]com
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firejun[.]myddns[.]com
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spyd123[.]dynamic-dns[.]net
foryou[.]x24hr[.]com
pic[.]4pu[.]com
www[.]pneword[.]net
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ns[.]upgradsource[.]com
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ftpd[.]9966[.]org
pptp[.]7766[.]org
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moegoo[.]com
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exchange[.]longmusic[.]com
alibaba[.]zzux[.]com
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www[.]gbutterfly[.]com
www[.]srsr[.]co[.]kr
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paniesx[.]com
nylalobghyhirgh[.]com
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notped[.]com
operatingbox[.]com

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github[.]com
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pool[.]boreye[.]com
ssl[.]dyn-dns[.]com
dns1-1[.]7release[.]com
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ap[.]googleclick[.]net
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ns1[.]naverpulic[.]com
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www[.]googletrait[.]com

pass2[.]nexongame[.]net
bot[.]jgame[.]in
ftp[.]hja63[.]com
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ns2[.]nhnclass[.]com
xxoo[.]co
mynetav[.]net
pass2[.]hangame[.]co[.]uk
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kr[.]xxoo[.]co
gasoft[.]us
ro[.]xxoo[.]co
egi[.]mynetav[.]net
holleword[.]3322[.]org
apanku[.]com
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nx[.]cjinternet[.]us
zz[.]xxoo[.]co
imc[.]zzsoft[.]info
pop[.]gasoft[.]us
osk[.]zzsoft[.]info
new[.]nexoncorp[.]us
ro[.]myxxoo[.]com
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lp[.]xxoo[.]co
zm[.]gasoft[.]us
jcrsoft[.]com
service[.]googlefiles[.]net
ftp[.]nexoncorp[.]us
www[.]jcrsoft[.]com
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ns3[.]msftncsl[.]com
support[.]nexononline[.]com
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usp[.]xxoo[.]co
pop[.]nexoncorp[.]us

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rh[.]jcrsoft[.]com
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fm[.]hja63[.]com
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ar[.]apanku[.]com
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ns2[.]msftncsl[.]com
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103[.]19[.]3[.]17
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207[.]246[.]16[.]107
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114[.]222[.]36[.]32
199[.]188[.]106[.]231
119[.]240[.]212[.]110
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113[.]196[.]70[.]169
27[.]115[.]103[.]195
162[.]255[.]119[.]254
192[.]64[.]119[.]194
163[.]49[.]70[.]18
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103[.]43[.]18[.]252
137[.]175[.]66[.]204
101[.]78[.]177[.]240
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154[.]223[.]175[.]59
95[.]179[.]228[.]103
149[.]154[.]159[.]171
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192[.]161[.]58[.]62
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137[.]220[.]245[.]75
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103[.]27[.]108[.]214

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149[.]28[.]145[.]214
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27[.]255[.]72[.]233
154[.]95[.]17[.]140
27[.]255[.]65[.]77
198[.]55[.]103[.]157
64[.]233[.]167[.]99
61[.]97[.]250[.]89
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96[.]44[.]158[.]122
61[.]43[.]242[.]78
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180[.]150[.]226[.]216
223[.]255[.]155[.]237
27[.]255[.]94[.]21

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List of CVE commonly exploited by APT41:

CVE-2017-0199

Microsoft Office 2007 SP3, Microsoft Office 2010 SP2, Microsoft Office 2013 SP1, Microsoft Office 2016, Microsoft Windows Vista SP2, Windows Server 2008 SP2, Windows 7 SP1, Windows 8.1 allow remote attackers to execute arbitrary code via a crafted document

CVE-2013-0633

Buffer overflow in Adobe Flash Player before 10.3.183.51 and 11.x before 11.5.502.149 on Windows and Mac OS X, before 10.3.183.51 and 11.x before 11.2.202.262 on Linux, before 11.1.111.32 on Android 2.x and 3.x, and before 11.1.115.37 on Android 4.x allows remote attackers to execute arbitrary code via crafted SWF content.

CVE-2013-0634

Adobe Flash Player before 10.3.183.51 and 11.x before 11.5.502.149 on Windows and Mac OS X, before 10.3.183.51 and 11.x before 11.2.202.262 on Linux, before 11.1.111.32

on Android 2.x and 3.x, and before 11.1.115.37 on Android 4.x allows remote attackers to execute arbitrary code or cause a denial of service (memory corruption) via crafted SWF content.

CVE-2019-11510

In Pulse Secure Pulse Connect Secure (PCS) 8.2 before 8.2R12.1, 8.3 before 8.3R7.1, and 9.0 before 9.0R3.4, an unauthenticated remote attacker can send a specially crafted URI to perform an arbitrary file reading vulnerability.

CVE-2019-16920

Unauthenticated remote code execution occurs in D-Link products such as DIR-655C, DIR-866L, DIR-652, and DHP-1565. The issue occurs when the attacker sends an arbitrary input to a "PingTest" device common gateway interface that could lead to common injection. An attacker who successfully triggers the command injection could achieve full system compromise. Later, it was independently found that these are also affected: DIR-855L, DAP-1533, DIR-862L, DIR-615, DIR-835, and DIR-825.

CVE-2019-16278

Directory Traversal in the function http_verify in nostromo nhttpd through 1.9.6 allows an attacker to achieve remote code execution via a crafted HTTP request.

CVE-2019-19781

An issue was discovered in Citrix Application Delivery Controller (ADC) and Gateway 10.5, 11.1, 12.0, 12.1, and 13.0. They allow Directory Traversal.

CVE-2019-3396

The Widget Connector macro in Atlassian Confluence Server before version 6.6.12 (the fixed version for 6.6.x), from version 6.7.0 before 6.12.3 (the fixed version for 6.12.x), from version 6.13.0 before 6.13.3 (the fixed version for 6.13.x), and from version 6.14.0 before 6.14.2 (the fixed version for 6.14.x), allows remote attackers to achieve path traversal and remote code execution on a Confluence Server or Data Center instance via server-side template injection.

CVE-2021-26855

Microsoft Exchange Server Remote Code Execution Vulnerability.

CVE-2021-26857

Microsoft Exchange Server Remote Code Execution Vulnerability.

CVE-2021-26858

Microsoft Exchange Server Remote Code Execution Vulnerability.

CVE-2021-27065

Microsoft Exchange Server Remote Code Execution Vulnerability.

CVE-2019-1653

A vulnerability in the web-based management interface of Cisco Small Business RV320 and RV325 Dual Gigabit WAN VPN Routers could allow an unauthenticated, remote attacker to retrieve sensitive information. The vulnerability is due to improper access controls for URLs. An attacker could exploit this vulnerability by connecting to an affected device via HTTP or HTTPS and requesting specific URLs. A successful exploit could allow the attacker to download the router configuration or detailed diagnostic information.

CVE-2019-1652

A vulnerability in the web-based management interface of Cisco Small Business RV320 and RV325 Dual Gigabit WAN VPN Routers could allow an authenticated, remote attacker with administrative privileges on an affected device to execute arbitrary commands. The vulnerability is due to improper validation of user-supplied input. An attacker could exploit this vulnerability by sending malicious HTTP POST requests to the web-based management interface of an affected device. A successful exploit could allow the attacker to execute arbitrary commands on the underlying Linux shell as root.

CVE-2020-10189

Zoho ManageEngine Desktop Central before 10.0.474 allows remote code execution because of deserialization of untrusted data in getChartImage in the FileStorage class. This is related to the CewolfServlet and MDMLogUploaderServlet servlets.

CVE-2017-11882

Microsoft Office 2007 Service Pack 3, Microsoft Office 2010 Service Pack 2, Microsoft Office 2013 Service Pack 1, and Microsoft Office 2016 allow an attacker to run arbitrary code in the context of the current user by failing to properly handle objects in memory, aka "Microsoft Office Memory Corruption Vulnerability".

Advanced Persistent Threat (APT): NXSMS

The cybercrime group NXSMS (also known as Desktop group; SilverTerrier) is a hacking group, which uses red teaming frameworks and publicly available versions of RATs for conducting attacks on various organizations. All servers are hidden behind dynamic DNS services, Frooty VPN, Your VPN, several anti-abuse hosters and mobile Internet. Since 2020-03 the TA got access to several financial organizations. At least in one African bank the TA gained control over SWIFT controllers. At least infrastructure of two banks were used to attack other organizations. During the lateral movement stage the TA deployed Metasploit teamserver there. On the final stage the TA gains control over payment system. Then with help of exfiltrated account of payment system operator the TA makes thousands money transfers to mule accounts. Then in few hours mules cash out money from ATMs.

Indicators of Compromise (IOCs)

CnC:

update[.]mcafee-endpoint[.]com
news[.]afrikmedia[.]info
news[.]coris-bank[.]fr
covid[.]ocitnetad[.]com
download[.]nortonupdate[.]com
winsec[.]senegalsante[.]org
update[.]microsofts[.]download
reply2host[.]duckdns[.]org
driver[.]eimaragon[.]org
info[.]senegalsante[.]org
queen2012[.]ddns[.]net
contact[.]senegalsante[.]org
boa[.]eimaragon[.]org
winsec[.]ddns[.]net
winsec[.]gotdns[.]ch
cobalt[.]warii[.]club
wari[.]warii[.]club
wa[.]eimaragon[.]org
gemalto788[.]ddns[.]net
info[.]warii[.]club
bac[.]senegalsante[.]org
warima[.]warii[.]club
lofl2154[.]odns[.]fr
bac[.]eimaragon[.]org
winsec[.]warii[.]club
176[.]9[.]193[.]5
45[.]15[.]16[.]228
160[.]155[.]0[.]199

108[.]62[.]49[.]249
154[.]44[.]177[.]192
154[.]44[.]177[.]192

MD5:

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62fa2fd8ddd36330840c643259ae52f1
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22fe5107805f9c5f1ce8051c9796df18
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34499495a77a34ce3a58899089f97062
df88175fb96cad1ca9605db2352ae063
e2b0d44be0970b740afc27ff82bb29bf
efa80d8591424baf4020f6af6d31264b
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f61a31de0f8478b9b4332ae321b03c1b
f80d3f12cc2625e3ea4448429ffb7520
f82e14c44a62e332b539e3347dfc5461
fafd580a4c5faae28a82a2c2487f0b66
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d6a3f830a51ec64acaab361e056f5e0d
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63649943c1ffb9d650d73bc375b6f224
6414928547ef254886331378cfb97be1

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13e7c5ad329a3e3c0568d27cc2242af6
14bb5b6f4f94285c366b456ee5a65bc0
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9e770404e3b0636846aeb0b89523f472
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a822a9c8655ff10488655bdcae619524
aae20b78c9bcba19e95fc56a630228a0
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5bda2488ed7628af8b068811258f5e10
622bfef24d3278eef4ca0f50af8d777f
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c5821ff549fa52fe8df8d43a03fbd32f
ce83775b68686c01d1c45fe47d8e5325
cebbd06d6dbf99ab1eb868310f642027
dc1e1506c0c03663233911f4d0a22c70
446a6e8c3876959ba1695899fe3584a7
472873942f0e7750ced3bc42c0b469f7
4f27b4322117484847c7021a5325814d
588afc20615b110b8bc0365397c3dbbf
bb431f144ae22c06662fcb0d64dd6b7d
c01c90d7d742108055078b657250cb80
e89790f614197291933982e26f9214ca
f2060ef4f0e02bb9f96f4f0ac295c03f
fddf19d5410019b32d26ccf6763f2a40
fdfe13661dd743d884e5b92775c89102
75549471ec54ba39f33ef636ab3dd700
3ae956f12a7a0d43aea8c6819d4a4d61
37240381d523afd3f81117fa811b12c2
3671872f33a75317254ce80656ee6da7

SHA-256:

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07191e65af30541f71e876b6037079a070a34c435641897dc788c15e5f62f53c
f689ee9af94b00e9e3f0bb072b34caaf207f32dcb4f5782fc9ca351df9a06c97

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b6a4d7d59bbd9e2f914e36d6b2146f5293d308882900656e75f2d3046a64c360
6516eeb8b47307826abe8a1edabac1f86290df84412c5f62427c49e0cdee1d6e
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e9022acaeb28b9660c46198989e9fbfad998a2ba9e32cf53a1e009505c07f983
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61c4d908df19d8e4a92083b55e11264ba6f15fbe0fc3747a49b2458ec71db436
f0c947dc52ef25ec5ae2dc9ea95e1b068ecb5869cfe6a894babb0dee690a1ac1
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eab5a2a023f676cf2182b41c6f66d18931ece859fd7ceac241e321c72070c7bf
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b8ed318330c822cbe1fbc25ceb197006d836facb1d8a079e1397e48e24b9531f
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b47213e2ff24ebb55506a92f473983e98690c0ec6e151dab912b35d6b6e70980
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611308b920be55b8ab0d58d9109ea3de428227babc81c850552627f8cd9f3b39
f092a0f4719ccbb78b250e9374fa908face33f836c713df00863042feb7a3bd8

Advanced Persistent Threat (APT): HAFNIUM

HAFNIUM, a group assessed to be state-sponsored, based on observed victimology, tactics and procedures. Its primarily targets entities a number of industry sectors, including infectious disease researchers, law firms, higher education institutions, defense contractors, policy think tanks, and NGOs. This group has overlaps in tactics and technique with other hacker groups.

Attack Vectors

Exploit public-facing applications

Related Tools

China Chopper
ASPXSpy
Covenant
Mimikatz
ProcDump
Psexec
Nishang
PowerCat
7-Zip
Nishang
Psexec
PowerCat
ProcDump

Indicators of Compromise (IOCs)

CnC:

http://p[.]estonine[.]com/p?e
http://188[.]166[.]162[.]201/update[.]png
http://cdn[.]chatcdn[.]net/p?hig210305
http://cdn[.]chatcdn[.]net/p?low210305
p[.]estonine[.]com
cdn[.]chatcdn[.]net
192[.]81[.]208[.]169
203[.]160[.]69[.]66
182[.]18[.]152[.]105
167[.]99[.]239[.]29
157[.]230[.]221[.]198
165[.]232[.]154[.]116
5[.]254[.]43[.]18
104[.]248[.]49[.]97
45[.]77[.]252[.]175
86[.]105[.]18[.]116

161[.]35[.]1[.]225
13[.]231[.]174[.]2
104[.]250[.]191[.]110
161[.]35[.]45[.]41
167[.]99[.]168[.]251
185[.]250[.]151[.]72
5[.]2[.]69[.]14
80[.]92[.]205[.]81
89[.]34[.]111[.]11
45[.]155[.]205[.]225
45[.]76[.]110[.]29
103[.]77[.]192[.]219
104[.]140[.]114[.]110
108[.]61[.]246[.]56
149[.]28[.]14[.]163
211[.]56[.]98[.]146
91[.]192[.]103[.]43
161[.]35[.]1[.]207
5[.]2[.]69[.]13
110[.]36[.]238[.]2
114[.]205[.]37[.]150
209[.]58[.]163[.]131
58[.]190[.]46[.]175
90[.]230[.]190[.]92
121[.]154[.]50[.]51
121[.]176[.]145[.]25
161[.]35[.]76[.]1
188[.]166[.]162[.]201
103[.]212[.]223[.]210
110[.]36[.]235[.]230
130[.]255[.]189[.]21
34[.]87[.]189[.]145
46[.]101[.]232[.]43
46[.]23[.]196[.]21
49[.]36[.]47[.]211
78[.]189[.]225[.]136
1[.]9[.]2[.]18
103[.]135[.]248[.]70
113[.]173[.]3[.]225
185[.]65[.]134[.]165
46[.]244[.]29[.]17
200[.]52[.]177[.]138
213[.]219[.]235[.]158

218[.]39[.]251[.]104
112[.]168[.]90[.]84
119[.]231[.]129[.]222
122[.]213[.]178[.]102
123[.]16[.]231[.]247
1[.]36[.]203[.]86
1[.]65[.]152[.]106
108[.]172[.]93[.]199
211[.]177[.]182[.]80
23[.]95[.]80[.]191
128[.]90[.]21[.]223
159[.]89[.]95[.]163
124[.]5[.]24[.]161
167[.]179[.]67[.]3
104[.]244[.]92[.]215
31[.]28[.]31[.]132
39[.]123[.]17[.]120
58[.]126[.]135[.]235
89[.]147[.]119[.]227
104[.]225[.]219[.]16
116[.]49[.]101[.]143
117[.]146[.]53[.]162
119[.]197[.]26[.]38
185[.]224[.]83[.]137
219[.]100[.]37[.]239
219[.]100[.]37[.]243
31[.]182[.]197[.]163
170[.]10[.]228[.]74
185[.]171[.]166[.]188
108[.]61[.]171[.]184
185[.]65[.]134[.]170
34[.]87[.]113[.]30
139[.]59[.]56[.]239
172[.]105[.]87[.]139
179[.]1[.]65[.]54
182[.]165[.]53[.]4
201[.]17[.]196[.]211
201[.]208[.]18[.]226
202[.]182[.]118[.]99
110[.]39[.]189[.]202
121[.]174[.]31[.]220
61[.]82[.]150[.]49
78[.]188[.]104[.]84

104[.]223[.]89[.]147
139[.]162[.]98[.]150
219[.]78[.]205[.]63
5[.]189[.]162[.]164

SHA-256:

31a750f8dbdd5bd608cfec4218ccb5a3842821f7d03d0cff9128ad00a691f4bd
508ac97ea751daebe8a99fa915144036369fc9e831697731bf57c07f32db01e8
c0caa9be0c1d825a8af029cc07207f2e2887fce4637a3d8498692d37a52b4014
5e09ea8b70a386f0812a8cafb94e2d2365849ce67fda42377389f18e56d860d0
5ac7dec465b3a532d401afe83f40d336ffc599643501a40d95aa886c436bfc0f
0c5fd2b5d1bfe5ffca2784541c9ce2ad3d22a9cb64d941a8439ec1b2a411f7f8
36149efb63a0100f4fb042ad179945aab1939bcbf8b337ab08b62083c38642ac
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d9c75da893975415663c4f334d2ad292e6001116d829863ab572c311e7edea77
c7e1b386b472a26a36632f4ccc25e37458546b9c864b7ef0ec5ebece5e8cc704
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d637b9a4477778a2e32a22027a86d783e1511e999993aad7dca9b7b1b62250b8
bda1b5b349bfc15b20c3c9cbfabd7ae8473cee8d000045f78ca379a629d97a61
71ff78f43c60a61566dac1a923557670e5e832c4adfe5efb91cac7d8386b70e0
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94512C434290405BEFD159FC3C4ED01F18722F966D53DAC45760DD36C4D9B918
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EE91A2ADF1581CEEAEB690125A60A3CCD94B98ECE545679D1E95E609AB9666F9

List of CVE commonly exploited by HAFNIUM:

CVE-2021-26855

Microsoft Exchange Server Remote Code Execution Vulnerability.

CVE-2021-26857

Microsoft Exchange Server Remote Code Execution Vulnerability.

CVE-2021-26858

Microsoft Exchange Server Remote Code Execution Vulnerability.

Advanced Persistent Threat (APT): DARK HALO

The cybercrime group "DARK HALO" (also known as UNC2452, SolarStorm, StellarParticle, NOBELIUM, NobleBaron, IRON RITUAL) is active since late 2019 with espionage aims. It has compromised organizations across the globe via a supply chain attack that consists of a trojanized update file for the SolarWinds Orion Platform. They used following malware: sunburst, teardrop and cobalt strike beacon.

Attack Vectors

Supply chain compromise

Related Tools

GoldFinder,
GoldMax,
Sibot,
China Chopper,
VictimTotal Sandbox,
Koadic,
Sarasota script,
Cobalt Strike,
Sunburst,
EnvyScout,
BoomBox,
Sunspot,
Teardrop,
Raindrop,
NativeZone

Indicators of Compromise (IOCs)

CnC:

http://jenkins[.]findfwd[.]com/sk-jspark_init[.]php
http://alertmeter[.]info/sk-jspark_init[.]php
http://176[.]10[.]118[.]136/pwrvw[.]ps1
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highdatabase[.]com
virtualdataserver[.]com
srfnetwork[.]org
onetechcompany[.]com
bigtopweb[.]com
autonetonline[.]com
actualityworld[.]com
mappsglobal[.]com
assetdata[.]net
diamondglobalnetwork[.]com
datatidy[.]com
limoservicecompany[.]com
ioxmesh[.]com
gdbcloud[.]com
productpitfalls[.]com
webpp[.]com
websitesline[.]com
gnadptech[.]com
topwebservers[.]com
softwarelaunches[.]com
ipadsreview[.]org
ebbcloud[.]com
armrvrholo[.]com
computerrepublic[.]com
xrlinks[.]com
techforefront[.]com
storagewithoutborders[.]com
securitysystemnews[.]com
graphicscodex[.]net
globesoftwares[.]com
vmdisk[.]com
microtransito[.]com
ryaxtech[.]com
softweblinks[.]com
rollver[.]com
1cloudserver[.]com
apexwebtech[.]com

digitalphotohub[.]com
bigdataanalysts[.]com
globalsection[.]org
ebookstorelive[.]com
fqtel[.]com
appsprovider[.]com
domainingdirectory[.]com
38[.]135[.]104[.]189
37[.]48[.]84[.]156
185[.]122[.]57[.]238
81[.]4[.]122[.]101
79[.]110[.]52[.]140
178[.]249[.]69[.]35
23[.]106[.]61[.]74
185[.]163[.]47[.]211
130[.]0[.]235[.]92
188[.]120[.]239[.]154
149[.]154[.]157[.]248
185[.]189[.]151[.]178
185[.]43[.]220[.]214
84[.]38[.]183[.]45
91[.]219[.]239[.]43
179[.]43[.]169[.]32
104[.]128[.]228[.]76
176[.]10[.]118[.]136
179[.]43[.]141[.]188
185[.]99[.]133[.]129
188[.]138[.]71[.]62
91[.]219[.]239[.]54
141[.]255[.]161[.]180
179[.]43[.]169[.]30
81[.]4[.]122[.]193
79[.]110[.]52[.]139
179[.]43[.]169[.]31
5[.]61[.]57[.]152
74[.]72[.]74[.]142
185[.]163[.]45[.]150
141[.]136[.]0[.]4
173[.]232[.]146[.]12
185[.]189[.]151[.]182
79[.]110[.]52[.]138
146[.]0[.]32[.]16
185[.]185[.]117[.]15

46[.]32[.]252[.]175
45[.]89[.]106[.]3
158[.]69[.]243[.]52
18[.]220[.]219[.]143
34[.]219[.]234[.]134
13[.]59[.]205[.]66
3[.]87[.]182[.]149
3[.]16[.]81[.]254
54[.]215[.]192[.]52
54[.]193[.]127[.]66
18[.]217[.]225[.]111
13[.]57[.]184[.]217
162[.]223[.]31[.]184
83[.]171[.]237[.]173
192[.]99[.]221[.]77
198[.]12[.]75[.]112
107[.]152[.]35[.]77
93[.]119[.]106[.]69
23[.]92[.]211[.]15
135[.]181[.]10[.]254
199[.]241[.]143[.]102
172[.]97[.]71[.]162
45[.]150[.]4[.]10
192[.]3[.]31[.]210
162[.]241[.]124[.]32
34[.]203[.]203[.]23
204[.]188[.]205[.]176
5[.]252[.]177[.]25
5[.]252[.]177[.]21
51[.]89[.]125[.]18
139[.]99[.]115[.]204
66[.]172[.]27[.]175
185[.]225[.]69[.]69
144[.]217[.]174[.]58
45[.]10[.]21[.]121
149[.]255[.]35[.]187
172[.]245[.]92[.]219
212[.]103[.]61[.]118
104[.]168[.]165[.]76
162[.]248[.]245[.]79
94[.]158[.]244[.]32
45[.]66[.]156[.]171
24[.]132[.]243[.]118

51[.]81[.]0[.]3
107[.]175[.]96[.]36
193[.]70[.]109[.]24
79[.]141[.]162[.]41
103[.]124[.]105[.]87
89[.]44[.]9[.]70
54[.]177[.]231[.]23
51[.]161[.]59[.]32
185[.]62[.]58[.]210
23[.]145[.]80[.]43
104[.]217[.]8[.]116
192[.]3[.]255[.]190
202[.]5[.]24[.]181
198[.]23[.]206[.]4
34[.]217[.]37[.]240
216[.]189[.]145[.]128
158[.]51[.]87[.]108
38[.]68[.]50[.]174
158[.]51[.]85[.]116
38[.]117[.]105[.]187
91[.]189[.]187[.]189
192[.]250[.]230[.]158
185[.]186[.]247[.]34
45[.]149[.]114[.]106
192[.]243[.]97[.]109
140[.]82[.]3[.]156
45[.]76[.]2[.]102
144[.]202[.]84[.]65
104[.]248[.]255[.]207
63[.]141[.]224[.]90
172[.]106[.]86[.]13

MD5:

4f2eb62fa529c0283b28d05ddd311fae

SHA-256:

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59a779046e32940c08f4c723143134a1b14d6855de3482e8503fca47aea9413e
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0afcd12924eed83f0e3f33c51a0766849df661ea2220b4a919297b0ef742b7c3
d5c4d94bb747555921469eff6a3660456d0c048c735de4bb9099c303d713e73e

65226d59bb790120af2ad70d48736a8a223f6122d6ee5dd6b48bd5c47ff94b0b
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c418acbe45ccaa7e66eb9db8fd595a89c8215c9ac5e2d151dd3389641e81b50a
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f2a8bdf135caca0d7359a7163a4343701a5bdfbc8007e71424649e45901ab7e2
4e8f24fb50a08c12636f3d50c94772f355d5229e58110cccb3b4835cb2371aec
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88cd1bc85e6a57fa254ede18f96566b33cee999c538902aefc5b819d71163d07
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6e2069758228e8d69f8c0a82a88ca7433a0a71076c9b1cb0d4646ba8236edf23
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112f92cfecdc4e177458bc1caebcc4420b5879840f137f249fac360ddac64ddd
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b81beb17622d4675a1c6f4efb358cc66903366df75eb5911bca725465160bdb6
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70d93035b0693b0e4ef65eb7f8529e6385d698759cc5b8666a394b2136cc06eb
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611458206837560511cb007ab5eeb57047025c2edc0643184561a6bf451e8c2c
240ef5b8392b8c7a5a025c36a7e5b0e03e5bb0d0d1a28703bb22e6159a4fd10e

List of CVE commonly exploited by DARK HALO:

CVE-2021-1879

This issue was addressed by improved management of object lifetimes. Processing maliciously crafted web content may lead to universal cross site scripting. This issue is fixed in iOS 12.5.2, iOS 14.4.2 and iPadOS 14.4.2, watchOS 7.3.3.

Advanced Persistent Threat (APT): TRANSPARENT TRIBE

The cybercrime group "TRANSPARENT TRIBE" (also known as APT36, ProjectM, Mythic Leopard, TEMP.lapie) is active since 2012. Transparent Tribe performs cyber-espionage operations with the intent of collecting sensitive information from various countries based on military and diplomatic interests. It mainly relies on both spear phishing and watering hole attacks to gain its foothold on victims. The phishing email is either a malicious macro document or an rtf file exploiting vulnerabilities, such as CVE-2012-0158, CVE-2017-0199. The attacker used watering hole websites for deliver a remote access Trojan (RAT) dubbed «MSIL/Crimson RAT». The RAT allowed attackers to steal data from infected devices, log keystrokes and capture screenshots. In the past, the group has also deployed different types of RATs, such as BreachRAT, PeepyRAT, DarkComet, Luminosity RAT, and njRAT.

Indicators of Compromise (IOCs)

CnC:

198[.]46[.]177[.]73
193[.]164[.]131[.]58
5[.]189[.]145[.]118
193[.]228[.]53[.]0
193[.]111[.]155[.]137
173[.]249[.]14[.]104
173[.]249[.]42[.]113
45[.]32[.]151[.]155
209[.]127[.]16[.]126
104[.]227[.]97[.]53
198[.]12[.]90[.]116
213[.]136[.]73[.]122
192[.]3[.]157[.]104
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04f2a21072bf11e8cf9e06bc9e0d8102f07df92b8af6bf2431ea33be098cf0ea

List of CVE commonly exploited by TRANSPARENT TRIBE:

CVE-2012-0158

The (1) ListView, (2) ListView2, (3) TreeView, and (4) TreeView2 ActiveX controls in MSCOMCTL.OCX in the Common Controls in Microsoft Office 2003 SP3, 2007 SP2 and SP3, and 2010 Gold and SP1; Office 2003 Web Components SP3; SQL Server 2000 SP4, 2005 SP4, and 2008 SP2, SP3, and R2; BizTalk Server 2002 SP1; Commerce Server 2002 SP4, 2007 SP2, and 2009 Gold and R2; Visual FoxPro 8.0 SP1 and 9.0 SP2; and Visual Basic 6.0 Runtime allow remote attackers to execute arbitrary code via a crafted (a) web site, (b) Office document, or (c) .rtf file that triggers "system state" corruption, as exploited in the wild in April 2012, aka "MSCOMCTL.OCX RCE Vulnerability."

CVE-2017-0199

Microsoft Office 2007 SP3, Microsoft Office 2010 SP2, Microsoft Office 2013 SP1, Microsoft Office 2016, Microsoft Windows Vista SP2, Windows Server 2008 SP2, Windows 7 SP1, Windows 8.1 allow remote attackers to execute arbitrary code via a crafted document, aka "Microsoft Office/WordPad Remote Code Execution Vulnerability w/Windows API."

CVE-2017-11882

Microsoft Office 2007 Service Pack 3, Microsoft Office 2010 Service Pack 2, Microsoft Office 2013 Service Pack 1, and Microsoft Office 2016 allow an attacker to run arbitrary code in the context of the current user by failing to properly handle objects in memory, aka "Microsoft Office Memory Corruption Vulnerability". This CVE ID is unique from CVE-2017-11884.

Advanced Persistent Threat (APT): APT28

The cybercrime group APT28 (also known as Fancy Bear, Sednit group, Sofacy, Pawn Storm, Strontium, Tsar Team, TG-4127, Group-4127, TAG_0700, Swallowtail, IRON TWILIGHT, Group 74, SNAKEMACKEREL, SectorC01, ITG05, APT-C-20, SIG40) has been operational since 2004. Most of the attacks targeted political and military institutions, while a smaller percentage took aim at media and sports organizations. At various times, defense ministries, foreign ministries, and other military and political organizations of various country were attacked. In 2016 and 2017, in addition to standard targets, APT28 attacked the World Anti-Doping Agency (WADA) and international Olympic winter sports federations.

Related Tools

Tcpdump
Responder
WinEXE
Remcom

Indicators of Compromise (IOCs)

CnC:

http://msrole[.]com/office_con
http://supservermgr[.]com/sys/upd/pageupd[.]php
http://45[.]124[.]132[.]127/action-center/centerforserviceandaction/service-and-action[.]php
http://185[.]221[.]202[.]35/software-protection/app[.]php
http://185[.]86[.]148[.]227:443
http://45[.]32[.]129[.]185:443
http://23[.]227[.]196[.]217:443
http://86[.]105[.]18[.]106/apps[.]update/DetailsID/clientPID-118253[.]php
http://86[.]105[.]18[.]106/versionID/Plugin0899/debug-release01119/debug-19[.]app
http://86[.]105[.]18[.]111/UpdateCertificate33-33725cnm^BB/CheckerNow-saMbA-99-36^11/CheckerSerface^8830-11[.]php
http://93[.]113[.]131[.]117/KB7735-9927/security-serv/opt[.]php
http://rammatica[.]com/QqrAzMjp/CmKjzk/OspRkzmG[.]php
http://185[.]25[.]50[.]93/syshelp/kd8812u/protocol[.]php
http://185[.]25[.]51[.]114/get-help-software/get-app-c/error-code-lookup[.]php
http://213[.]103[.]67[.]193/ghflYvz/vmwWIdx/realui[.]php
http://46[.]102[.]152[.]127/messageID/get-data/SecurityID[.]php
http://80[.]255[.]6[.]5/daily-update-certifaicates52735462534234/update-15[.]dat
http://86[.]105[.]18[.]106/debug-info/pluginId/CLISD1934[.]php
http://89[.]249[.]65[.]234/guard-service/Servers-ip4/upd-release/mdb4
http://89[.]45[.]67[.]153/supportfsys/t863321i/func112SerErr[.]php
http://93[.]115[.]38[.]132/wWpYdSMRulkdp/arpz/MsKZrpUfe[.]php
http://rammatica[.]com/QqrAzMjp/CmKjzk/EspTkzmH[.]php

http://213[.]252[.]244[.]219/client-update-info/version-id/version333[.]php
http://222[.]15[.]23[.]121/gft_piyes/ndhfkuryhs09/fdfd_iunb_hhert_ps[.]php
http://86[.]105[.]18[.]106/data-extract/timermodule/update-client[.]php
http://86[.]106[.]131[.]177/srvSettings/conf4421i/support[.]php
http://86[.]106[.]131[.]177/SupportA91i/syshelpA774i/viewsupp[.]php
http://142[.]0[.]68[.]2/test-update-17-8752417/temp827612480/checkUpdate79832467[.]php
http://213[.]252[.]245[.]132/setting-the-os-release/Support-OS-release/ApiMap[.]php
http://185[.]25[.]51[.]198/get-data/searchId/get[.]php
http://185[.]25[.]51[.]198/stream-upd-service-two/definition/event[.]php
http://188[.]241[.]68[.]121/update/dB-Release/NewBaseCheck[.]php
http://194[.]187[.]249[.]126/database-update-centre/check-system-version/id=18862[.]php
http://213[.]252[.]244[.]219/cumulative-security-update/Summary/details[.]php
http://220[.]158[.]216[.]127/search-sys-update-release/base-sync/db7749sc[.]php
http://89[.]249[.]65[.]166/clientid-and-uniqued-r2/the-differenceU/Events76[.]php
http://142[.]0[.]68[.]2/test-update-16-8852418/temp727612430/checkUpdate89732468[.]php
http://185[.]25[.]50[.]93/tech99-04/litelib1/setwsdv4[.]php
http://185[.]25[.]50[.]93/techicalBS391-two/supptech18i/suppid[.]php
http://185[.]25[.]51[.]164/srv_upd_dest_two/destBB/en[.]php
http://185[.]77[.]129[.]152/wWpYdSMRulkdp/arpz/MsKZrpUfe[.]php
http://213[.]252[.]245[.]132/search-release/Search-Version/crmclients[.]php
http://46[.]183[.]223[.]227/services-check-update/security-certificate-11-554/CheckNow864[.]php
http://80[.]255[.]6[.]5/LoG-statistic8397420934809/date-update9048353094c/StaticIpUpdateLog23741033[.]php
http://86[.]105[.]18[.]106/ram-data/managerId/REM1234[.]php
http://89[.]249[.]65[.]166/int-release/check-user/userid[.]php
http://89[.]40[.]181[.]126/verification-online/service[.]911-19/check-verification-88291[.]php
http://93[.]113[.]131[.]155/Verifica-El-Lanzamiento/Ayuda-Del-Sistema/obtenerId[.]php
http://185[.]234[.]52[.]168/categories/buildings[.]php
http://185[.]205[.]209[.]172/sciencedirect/development/AAF-Progress[.]php
http://stratforglobal[.]net/weekly/51586/ruthless-and-sober-syria
http://89[.]37[.]226[.]148/technet-support/library/online-service-description[.]php?id_name=
https://support-cloud[.]life/managment/cb-secure/technology[.]php
http://194[.]32[.]78[.]245/protect/get-upd-id[.]php
https://www[.]c4csa[.]org/includes/sources/felims[.]php
https://www[.]xbhp[.]com/dominargreatasianodyssey/wp-content/plugins/akismet/style[.]php

https://109[.]248[.]148[.]22/orders/create/new[.]php
http://89[.]37[.]226[.]123/advance/portable_version/service[.]php
http://109[.]248[.]148[.]42/agr-enum/progress-inform/cube[.]php
http://145[.]249[.]105[.]165/resource-store/stockroom-center-service/check[.]php
http://185[.]203[.]118[.]198/en_action_device/center_correct_customer/drivers-i7-x86[.]php
http://185[.]217[.]92[.]119/db-module/version_1594/main[.]php
https://190[.]97[.]167[.]186/pkg/image/do[.]php
http://45[.]124[.]132[.]127/company-device-support/values/correlate-sec[.]php
https://91[.]219[.]238[.]118/zx-system/core/main-config[.]php
http://89[.]37[.]226[.]148/technet-support/library/online-service-description[.]php
posta-hurriyet[.]com
mail-hurriyet[.]com
sset-aljazeera[.]com
mail[.]arnf[.]bg
mail[.]moda[.]qov[.]sa[.]com
webmail-mfa[.]am
accounts[.]g00qle[.]com
webmail-mil[.]dk
webmail[.]exerclto[.]pt
mailmil[.]ae
mail[.]dca[.]qov[.]my
mail[.]g0v[.]me
onedrive-en-marche[.]fr
mail[.]hm[.]qov[.]hu
dansa[.]bg
mail[.]bostondynamlcs[.]com
link[.]candybober[.]info
mobile-sanoma[.]net
web[.]mailmil[.]lv
fortele[.]ro
account-aljazeera[.]net
login[.]accoounts-google[.]com
myaccount[.]google[.]comchangepasswordmyaccountidx8jxcn4ufdmncudd[.]gq
mail[.]university-tartu[.]info
inside[.]wada-arna[.]org
mail-navy[.]ro
mail[.]armf[.]bg[.]message-id8665213[.]tk
qov[.]al
mail[.]anadoluajansi[.]web[.]tr
webmail-hurriyet[.]com
ssset-aljazeera[.]net
mail[.]byegm[.]web[.]tr

myaccount[.]google[.]comsecuritysettingpage[.]gq
mail-skupstina[.]me
kasapp[.]de
mail[.]kuwaitarmy[.]gov-kw[.]com
mail[.]mod[.]qov[.]af
webmail[.]mfa[.]qov[.]ae
webmail-saic[.]com
privacy-yahoo[.]com
account[.]password-google[.]com
mail-isea[.]ru
fkit-mil[.]dk
mail[.]rsaf[.]qov[.]sa[.]com
mail[.]wada-awa[.]org
tas-cass[.]org
mail-aljazeera[.]net
url[.]googlesetting[.]com
e-post[.]byegm[.]web[.]tr
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webmail-cdu[.]de
mail-gov[.]me
vpn[.]onderzoekraad[.]nl
poczta[.]mon[.]q0v[.]pl
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webmail[.]mofa[.]qov[.]ae
mail[.]mofa[.]g0v[.]qa
mail[.]academl[.]com
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mail[.]fach[.]rnil[.]cl
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support-cdu[.]de
actblues[.]com
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mail[.]mod[.]qov[.]es
email[.]mfa[.]qov[.]gs
anadolu-ajansi[.]com
login-osce[.]org
mail-pims[.]org
mail[.]rnil[.]am
Uniquecorpind[.]com
Postlkwarn[.]com

globalresearching[.]org
Joshel[.]com
Appservicegroup[.]com
Apptaskserver[.]com
Versiontask[.]com
Securityprotectingcorp[.]com
adobeupgradeflash[.]com
Akamaisoftupdate[.]com
globaltechresearch[.]org
researchcontinental[.]org
worldpressjournal[.]com
worldpostjournal[.]com
microsoftstoreservice[.]com
appexsrv[.]net
defenceglobalnews[.]com
politlco[.]com
globaldefencetalk[.]com
abc24news[.]com
servicetlnt[.]net
windowsdefltr[.]net
pressservices[.]net
washingtnpostnews[.]com
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accounts-office[.]fr
en-marche[.]co
Cdnverify[.]net
msrole[.]com
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biathlovvorld[.]com
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mail-ibu[.]eu
fil-luge[.]com
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fisski[.]ca
supservermgr[.]com
appleupdate[.]org
software-update[.]org
baltichost[.]org
servicecdp[.]com
blackpartshare[.]com
contentdeliverysrv[.]net
space-delivery[.]com

mountainsgide[.]com
netmediaresources[.]com
sendmevideo[.]org
webviewres[.]net
satellitedeluxpanorama[.]com
rammatica[.]com
adfs[.]senate[.]group
adfs-senate[.]services
adfs[.]senate[.]qov[.]info
adfs-senate[.]email
chmail[.]ir[.]udelivered[.]tk
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cubenergy-my-sharepoint[.]com
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c1b8fc00d815e777e39f34a520342d1942ebd29695c9453951a988c61875bcd7
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List of CVE commonly exploited by APT28:

CVE-2016-7855

Use-after-free vulnerability in Adobe Flash Player before 23.0.0.205 on Windows and OS X and before 11.2.202.643 on Linux allows remote attackers to execute arbitrary code via unspecified vectors, as exploited in the wild in October 2016.

CVE-2016-7255

The kernel-mode drivers in Microsoft Windows Vista SP2, Windows Server 2008 SP2 and R2 SP1, Windows 7 SP1, Windows 8.1, Windows Server 2012 Gold and R2, Windows RT 8.1, Windows 10 Gold, 1511, and 1607, and Windows Server 2016 allow local users to gain privileges via a crafted application, aka "Win32k Elevation of Privilege Vulnerability."

CVE-2014-1761

Microsoft Word 2003 SP3, 2007 SP3, 2010 SP1 and SP2, 2013, and 2013 RT; Word Viewer; Office Compatibility Pack SP3; Office for Mac 2011; Word Automation Services on SharePoint Server 2010 SP1 and SP2 and 2013; Office Web Apps 2010 SP1 and SP2; and Office Web Apps Server 2013 allow remote attackers to execute arbitrary code or cause a denial of service (memory corruption) via crafted RTF data, as exploited in the wild in March 2014.

CVE-2012-0158

The (1) ListView, (2) ListView2, (3) TreeView, and (4) TreeView2 ActiveX controls in MSCOMCTL.OCX in the Common Controls in Microsoft Office 2003 SP3, 2007 SP2 and SP3, and 2010 Gold and SP1; Office 2003 Web Components SP3; SQL Server 2000 SP4, 2005 SP4, and 2008 SP2, SP3, and R2; BizTalk Server 2002 SP1; Commerce Server 2002 SP4, 2007 SP2, and 2009 Gold and R2; Visual FoxPro 8.0 SP1 and 9.0 SP2; and Visual Basic 6.0 Runtime allow remote attackers to execute arbitrary code via a crafted (a) web site, (b) Office document, or (c) .rtf file that triggers "system state" corruption, as exploited in the wild in April 2012, aka "MSCOMCTL.OCX RCE Vulnerability."

CVE-2016-4117

Adobe Flash Player 21.0.0.226 and earlier allows remote attackers to execute arbitrary code via unspecified vectors, as exploited in the wild in May 2016.

CVE-2016-1019

Adobe Flash Player 21.0.0.197 and earlier allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via unspecified vectors, as exploited in the wild in April 2016.

CVE-2015-7645

Adobe Flash Player 18.x through 18.0.0.252 and 19.x through 19.0.0.207 on Windows and OS X and 11.x through 11.2.202.535 on Linux allows remote attackers to execute arbitrary code via a crafted SWF file, as exploited in the wild in October 2015.

CVE-2017-11292

Adobe Flash Player version 27.0.0.159 and earlier has a flawed bytecode verification procedure, which allows for an untrusted value to be used in the calculation of an array index. This can lead to type confusion, and successful exploitation could lead to arbitrary code execution.

CVE-2015-3043

Adobe Flash Player before 13.0.0.281 and 14.x through 17.x before 17.0.0.169 on Windows and OS X and before 11.2.202.457 on Linux allows attackers to execute arbitrary code or cause a denial of service (memory corruption) via unspecified vectors, as exploited in the wild in April 2015, a different vulnerability than CVE-2015-0347, CVE-2015-0350, CVE-2015-0352, CVE-2015-0353, CVE-2015-0354, CVE-2015-0355, CVE-2015-0360, CVE-2015-3038, CVE-2015-3041, and CVE-2015-3042.

CVE-2015-1701

Win32k.sys in the kernel-mode drivers in Microsoft Windows Server 2003 SP2, Vista SP2, and Server 2008 SP2 allows local users to gain privileges via a crafted application, as exploited in the wild in April 2015, aka "Win32k Elevation of Privilege Vulnerability."

CVE-2015-1641

Microsoft Word 2007 SP3, Office 2010 SP2, Word 2010 SP2, Word 2013 SP1, Word 2013 RT SP1, Word for Mac 2011, Office Compatibility Pack SP3, Word Automation Services on SharePoint Server 2010 SP2 and 2013 SP1, and Office Web Apps Server 2010 SP2 and 2013 SP1 allow remote attackers to execute arbitrary code via a crafted RTF document, aka "Microsoft Office Memory Corruption Vulnerability."

CVE-2017-0144

The SMBv1 server in Microsoft Windows Vista SP2; Windows Server 2008 SP2 and R2 SP1; Windows 7 SP1; Windows 8.1; Windows Server 2012 Gold and R2; Windows RT 8.1; and Windows 10 Gold, 1511, and 1607; and Windows Server 2016 allows remote attackers to execute arbitrary code via crafted packets, aka "Windows SMB Remote Code Execution Vulnerability." This vulnerability is different from those described in CVE-2017-0143, CVE-2017-0145, CVE-2017-0146, and CVE-2017-0148.

CVE-2013-1347

Microsoft Internet Explorer 8 does not properly handle objects in memory, which allows remote attackers to execute arbitrary code by accessing an object that (1) was not properly allocated or (2) is deleted, as exploited in the wild in May 2013.

CVE-2013-3897

Use-after-free vulnerability in the CDisplayPointer class in mshtml.dll in Microsoft Internet Explorer 6 through 11 allows remote attackers to execute arbitrary code or cause a denial of service (memory corruption) via crafted JavaScript code that uses the onpropertychange event handler, as exploited in the wild in September and October 2013, aka "Internet Explorer Memory Corruption Vulnerability."

CVE-2014-1510

The Web IDL implementation in Mozilla Firefox before 28.0, Firefox ESR 24.x before 24.4, Thunderbird before 24.4, and SeaMonkey before 2.25 allows remote attackers to execute arbitrary JavaScript code with chrome privileges by using an IDL fragment to trigger a window.open call.

CVE-2014-1511

Mozilla Firefox before 28.0, Firefox ESR 24.x before 24.4, Thunderbird before 24.4, and SeaMonkey before 2.25 allow remote attackers to bypass the popup blocker via unspecified vectors.

CVE-2014-1776

Use-after-free vulnerability in Microsoft Internet Explorer 6 through 11 allows remote attackers to execute arbitrary code or cause a denial of service (memory corruption) via vectors related to the CMarkup::IsConnectedToPrimaryMarkup function, as exploited in the wild in April 2014. NOTE: this issue originally emphasized VGX.DLL, but Microsoft clarified that "VGX.DLL does not contain the vulnerable code leveraged in this exploit. Disabling VGX.DLL is an exploit-specific workaround that provides an immediate, effective workaround to help block known attacks."

CVE-2014-6332

OleAut32.dll in OLE in Microsoft Windows Server 2003 SP2, Windows Vista SP2, Windows Server 2008 SP2 and R2 SP1, Windows 7 SP1, Windows 8, Windows 8.1, Windows Server 2012 Gold and R2, and Windows RT Gold and 8.1 allows remote attackers to execute arbitrary code via a crafted web site, as demonstrated by an array-redimensioning attempt that triggers improper handling of a size value in the SafeArrayDimen function, aka "Windows OLE Automation Array Remote Code Execution Vulnerability."

CVE-2015-5119

Use-after-free vulnerability in the ByteArray class in the ActionScript 3 (AS3) implementation in Adobe Flash Player 13.x through 13.0.0.296 and 14.x through 18.0.0.194 on Windows and OS X and 11.x through 11.2.202.468 on Linux allows remote attackers to execute arbitrary code or cause a denial of service (memory corruption) via crafted Flash content that overrides a valueOf function, as exploited in the wild in July 2015.

CVE-2015-2590

Unspecified vulnerability in Oracle Java SE 6u95, 7u80, and 8u45, and Java SE Embedded 7u75 and 8u33 allows remote attackers to affect confidentiality, integrity, and availability via unknown vectors related to Libraries, a different vulnerability than CVE-2015-4732.

CVE-2015-4902

Unspecified vulnerability in Oracle Java SE 6u101, 7u85, and 8u60 allows remote attackers to affect integrity via unknown vectors related to Deployment.

CVE-2010-3333

Stack-based buffer overflow in Microsoft Office XP SP3, Office 2003 SP3, Office 2007 SP2, Office 2010, Office 2004 and 2008 for Mac, Office for Mac 2011, and Open XML File Format Converter for Mac allows remote attackers to execute arbitrary code via crafted RTF data, aka "RTF Stack Buffer Overflow Vulnerability."

CVE-2017-0261

Microsoft Office 2010 SP2, Office 2013 SP1, and Office 2016 allow a remote code execution vulnerability when the software fails to properly handle objects in memory, aka "Office Remote Code Execution Vulnerability". This CVE ID is unique from CVE-2017-0262 and CVE-2017-0281.

Advanced Persistent Threat (APT): PATCHWORK

The cybercrime group "PATCHWORK" (also known as Hangover, Dropping Elephant, MONSOON, Chinastrats, Quilted Tiger, Snake In The Grass, Viceroy Tiger, APT-C-09, TG-4410, Zinc Emerson, ATK 11, Neon, Confucius) has been active since at least 2013 and attacks organizations in industries connected with diplomatic missions and governmental entities. The group's aims are espionage and information theft.

Indicators of Compromise (IOCs)

CnC:

http://176[.]56[.]238[.]177/testing4/download/reg[.]exe
http://games-playbox[.]com/winone1/download/sppsvc[.]exe
http://176[.]56[.]238[.]177/testing2/download/winrm[.]exe
http://176[.]56[.]238[.]177/testing2/download/reg[.]exe
http://games-playbox[.]com/testing1/download/reg[.]exe
http://176[.]56[.]238[.]177/testing2/download/reg1[.]exe
http://176[.]56[.]238[.]177/testing2/download/sppsvc[.]exe
http://games-playbox[.]com/winone1/download/stisvc[.]exe
http://techto-earth[.]com/eastwing/download/sppsvc[.]exe
http://internet-security-suite-review[.]toptenreviews[.]com[.]infocardiology[.]biz
http://mail[.]telenor[.]no-cookieauth[.]dll-getlogon-reason-0[.]formdir-1-curl-z2fowaz2f[.]infocardiology[.]biz/01084204_Telenor_New_Satellite_Client_Agreement_30032013[.]zip
http://feed43[.]com/3210021137734622[.]xml
http://www[.]webrss[.]com/createfeed[.]php?feedid=49966
http://feeds[.]rapidfeeds[.]com/88604/
http://feed43[.]com/8166706728852850[.]xml
https://r0nald2017[.]wordpress[.]com/2017/02/16/my-first-post/
https://github[.]com/r0nald2017/project1/blob/master/xml[.]xml
http://mu5[.]ignorelist[.]com
http://d0nald2[.]strangled[.]net
http://www[.]webrss[.]com/createfeed[.]php?feedid=49297
http://185[.]82[.]217[.]200/@lb3rt/dqvabs[.]php
http://www[.]webrss[.]com/createfeed[.]php?feedid=49321
http://r0b1n[.]crabdance[.]com
http://80[.]255[.]3[.]96/r0g3r/dqvabs[.]php
http://overthemontains[.]weebly[.]com/paragliding-stuff
http://feed43[.]com/5787707581531238[.]xml
http://r0nald[.]ignorelist[.]com
https://musicall12[.]wordpress[.]com/29-2/
https://raw[.]githubusercontent[.]com/Zunaid-zunaid1/project11/master/xml[.]xml
https://robins0n12[.]wordpress[.]com/2017/01/31/my-biography/
http://feed43[.]com/0414303388550176[.]xml

http://d0nald1[.]strangled[.]net
http://d0nald[.]strangled[.]net
https://raw[.]githubusercontent[.]com/devonkearns/cricket/master/xml[.]xml
http://maxx[.]crabdance[.]com
http://80[.]255[.]3[.]96/max1mu5/dqvabs[.]php
https://yetwq[.]twilightparadox[.]com
http://149[.]56[.]80[.]64/u5b62ed973d963913bb/u5a3ewfasdk9[.]php
http://146[.]185[.]234[.]71/Ms3f3g45thgy5/f3af3fasf32[.]php
http://185[.]203[.]116[.]58/d394d142687ff5a0/dfae43rsfdgq4e[.]php
http://123[.]57[.]158[.]115/shujing/ghsnls[.]php
http://43[.]249[.]37[.]165/kungfu/ghsnls[.]php
http://94[.]156[.]35[.]204/22af645d1859cb5c/sg4gasdnjf984[.]php
http://81[.]17[.]30[.]28/th0mas/dqvabs[.]php
http://46[.]183[.]216[.]222/0racl3/dqvabs[.]php
http://176[.]107[.]182[.]24/f0357a3f154bc2ff/sadk9f043ejf[.]php
http://188[.]165[.]124[.]30/c6afebaa8acd80e7/byuehf8af[.]php
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http://45[.]153[.]184[.]67/window[.]jpeg
http://45[.]153[.]184[.]67/window[.]sct
https://185[.]193[.]38[.]24/cnc/register
http://185[.]193[.]38[.]24/windows[.]sct
http://185[.]109[.]144[.]102/DistBuild/getExecutables[.]php
http://docs[.]google[.]com/uc?id=0Bx9cf6a5Mapaa3g4MII4T244SlU&export=downlo
ad
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47edd2fc695f04623ec883416dbf166a495ded54cc4af7e41ceadd1cd4449608
5518c1bad3dc9b63c3b34a57d96a6dad11b0c30f6ad08ce7064e65d6eeec315d
2d981e468deac0ad5b47f7c55d05ea5812ddd4d539f9939cc6825ea261750533
061c155e87eaf790cc8bfa6c59ab7c1e5184df77dee4bd1c59506c9a91785b9a
60d522f415c0b2bfffb2a25650e6ac975ca8976750129ac769d257bf173dcec2
81dd46a4cc1138ff7a7f12747af501b51f0ad35c5a247cb44e2296cc8fa4c886
c057b3a6bb9082b6be0b57d1c07ae30bc97a97ea9740a1781a23ea7e20686a6b
b4e6724be4764ca14060262a9b3dee20f1a72be9f5ae7f15294ffa3cd037b78b
679eec0b8f3a9bb2d85ef1f9e0220b98bb7ffb9f9a7e1a3e7c2fb45af37b4f68
7e0e7deb55fb6024127273620466148fc70cea5bea43457cddd38fa650b0665c
ce0e152ef2cb8f1e74580d632a17451b8e007719433074a614d0468bad11a8dc
236a245ae5b6333336a38a0c347664386866e70c043d57c85b37d15b7ecd050a
c2f7e50e753322249a98e2e906b3cb6e328fcb09a4cca341304fd25a742c6e37
c481440ea7bf78e552c402afb0cdb8d1e7ecc73b4b9db14257479dec03669a12
eeaa075f3e53737471e8da2f7e932e67776f2387ddef73c4208aebded98eea2b
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cf0999f84bfcefbb789fca7bc22f2ee9cb870d9e794d177efd1acb6647e01862
885ca96b477e09edbb20e979a422597b56d72ce1435551a43d30aa9024d9e2ec
795ae4097aa3bd5932be4110f6bd992f46d605d4c9e3afced314454d35395a59
4c704849972882b81e398f14357c35546f513928aafb687f0e36f18438077055
141c92659d1b126d85383ee099cbc56e3bc9832c952446bd8969bf900d4ccf4c
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1eb22abc743122ce749f3d5263bf9285d2dccbc2b520b62a1b280783e87c671b
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5359a7bb5e7b68e61ecce8c1ca6167c88a685a1085b6005cecd5ef9c7a838af5
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bb7f7096787f9e4974baca7b8faece258464d426ce1ff749d9870f24671358b9
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9cb4b0f1330478d7748fc1f92e3150dfcb7cf958dce302e9224c235d4b6f19ed
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4ae1677f511ddc57784c330b1c9c6091e136ada2123ebb1ddaae7666cd075872
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5b76985f26c17df4897fff102a7ca66c39e8b58dc06dd367ff6aacc0616a664b
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d909945e0188839c5b52043c1ade5951a8481d53eb5bb9564366e73f6928c907
de83af838038998474a7f3cf1ba3a146af5a5b6d1b53ac59966978ae9703fa19
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d971842441c83c1bba05742d124620f5741bb5d5da9ffb31f06efa4bbdcf04ee
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5c2dd8fadf9f0bb60513f693b188a704583bb68da5572442d6c742ba0c8989c0
ffe9b86bbc2298ba003796bd18283fb4fba78962ae5aefd213a78b3494fd5708
b8bc0be5b8778f1813fc20c8984cc8d902d41df3f1a67f4e33a73ec577ad20cb
32425dc129d5b4cf6483e267907365ba5ad87c082d536e190f1d46f6a70b3ec8
cea94b50159f940df6ef1b7a1dd0fffd1ea45ce6aa86696f1441826029980984
2d1ae38f918293599bee7df30185084e767a447c0f89ac42ca79dbaa828ce1b1
ccb03e6b26ba9039f0a098231495072dd5fcca587d2f3aa7d51f84419b349c91
b2a3b46498abdec68e82b85f01fc8d96ada56bb9a9a9d294eab8441e17484a79
84312d3b0760540ead06151d0d9dec9ed674afca615ee4caa47155abf51b93a0
7747440bc9aa779ef0b7e925f029ebf1a4b0d8f40baf01b21606c891b61d10da
3fad24c3a572e93764ca528cc025b19928682e8ed05f4fec4adac5dadb9c7127
72895802000d4eb9b9c850b8360f8489e14e120cc3ecc25aae6a86c46469d79d
29844b8125bb408f2c95754303f8b201ba754950111151bb3405740ebb5dae30
e95c6ebc4737d2dc3fa3a29df456322fc19bd4e85373008b580cfc042037b9bf
780e56adc4a71c46892fe30b269a8d879a8fad0f885ac90dd1605d2510c5172a
7be2628f1cfba974979208cace745561e0403c639df8e87238938c8afae30788
b56be15f2d31a64e3fdff5461a2c72eb7f18743cd3711e2574b85e5d71fb64f3
627c2b722ea28fdd9558dd62e0938908bded7aa16a7649af87f88f1fef0fc44f
467c587ccff90bf8b4fff77aa88392640fcca75656cfb8bb9fb4c0e935edb525
03265294358b7edb7a8b689474e9791d30a4d6fc47f9caadbc0fc064abc447ae
4d369817cc80d25f0f483b9d66633cbb33de6fe8c3e248a3abc9548f30d97b0f

cb8fa89b2664155e4fb60bf33024bc6d4b1d658abbec250a2a13b3d2e337ad86
147a44b7d1011aa553cbc4fec0aa13c051c6a6f882318cebbe52acc65a1af011
6d3e9d218cec36df5822a600c059cc06c6f0fb059cd0a1d9ec9899227d9a9ace

List of CVE commonly exploited by PATCHWORK:

CVE-2012-1856

The TabStrip ActiveX control in the Common Controls in MSCOMCTL.OCX in Microsoft Office 2003 SP3, Office 2003 Web Components SP3, Office 2007 SP2 and SP3, Office 2010 SP1, SQL Server 2000 SP4, SQL Server 2005 SP4, SQL Server 2008 SP2, SP3, R2, R2 SP1, and R2 SP2, Commerce Server 2002 SP4, Commerce Server 2007 SP2, Commerce Server 2009 Gold and R2, Host Integration Server 2004 SP1, Visual FoxPro 8.0 SP1, Visual FoxPro 9.0 SP2, and Visual Basic 6.0 Runtime allows remote attackers to execute arbitrary code via a crafted (1) document or (2) web page that triggers system-state corruption, aka "MSCOMCTL.OCX RCE Vulnerability."

CVE-2014-4114

Microsoft Windows Vista SP2, Windows Server 2008 SP2 and R2 SP1, Windows 7 SP1, Windows 8, Windows 8.1, Windows Server 2012 Gold and R2, and Windows RT Gold and 8.1 allow remote attackers to execute arbitrary code via a crafted OLE object in an Office document, as exploited in the wild with a "Sandworm" attack in June through October 2014, aka "Windows OLE Remote Code Execution Vulnerability."

CVE-2017-0199

Microsoft Office 2007 SP3, Microsoft Office 2010 SP2, Microsoft Office 2013 SP1, Microsoft Office 2016, Microsoft Windows Vista SP2, Windows Server 2008 SP2, Windows 7 SP1, Windows 8.1 allow remote attackers to execute arbitrary code via a crafted document, aka "Microsoft Office/WordPad Remote Code Execution Vulnerability w/Windows API."

CVE-2015-1641

Microsoft Word 2007 SP3, Office 2010 SP2, Word 2010 SP2, Word 2013 SP1, Word 2013 RT SP1, Word for Mac 2011, Office Compatibility Pack SP3, Word Automation Services on SharePoint Server 2010 SP2 and 2013 SP1, and Office Web Apps Server 2010 SP2 and 2013 SP1 allow remote attackers to execute arbitrary code via a crafted RTF document, aka "Microsoft Office Memory Corruption Vulnerability."

CVE-2017-8570

Microsoft Office allows a remote code execution vulnerability due to the way that it handles objects in memory, aka "Microsoft Office Remote Code Execution Vulnerability". This CVE ID is unique from CVE-2017-0243.

CVE-2012-0158

The (1) ListView, (2) ListView2, (3) TreeView, and (4) TreeView2 ActiveX controls in MSCOMCTL.OCX in the Common Controls in Microsoft Office 2003 SP3, 2007 SP2 and SP3, and 2010 Gold and SP1; Office 2003 Web Components SP3; SQL Server 2000 SP4, 2005 SP4, and 2008 SP2, SP3, and R2; BizTalk Server 2002 SP1; Commerce Server 2002 SP4, 2007 SP2, and 2009 Gold and R2; Visual FoxPro 8.0 SP1 and 9.0 SP2; and Visual Basic 6.0 Runtime allow remote attackers to execute arbitrary code via a crafted (a) web site, (b) Office document, or (c) .rtf file that triggers "system state" corruption, as exploited in the wild in April 2012, aka "MSCOMCTL.OCX RCE Vulnerability."

CVE-2017-0261

Microsoft Office 2010 SP2, Office 2013 SP1, and Office 2016 allow a remote code execution vulnerability when the software fails to properly handle objects in memory, aka "Office Remote Code Execution Vulnerability". This CVE ID is unique from CVE-2017-0262 and CVE-2017-0281.

CVE-2017-11882

Microsoft Office 2007 Service Pack 3, Microsoft Office 2010 Service Pack 2, Microsoft Office 2013 Service Pack 1, and Microsoft Office 2016 allow an attacker to run arbitrary code in the context of the current user by failing to properly handle objects in memory, aka "Microsoft Office Memory Corruption Vulnerability". This CVE ID is unique from CVE-2017-11884.

CVE-2015-2545

Microsoft Office 2007 SP3, 2010 SP2, 2013 SP1, and 2013 RT SP1 allows remote attackers to execute arbitrary code via a crafted EPS image, aka "Microsoft Office Malformed EPS File Vulnerability."

CVE-2015-2546

The kernel-mode driver in Microsoft Windows Vista SP2, Windows Server 2008 SP2 and R2 SP1, Windows 7 SP1, Windows 8, Windows 8.1, Windows Server 2012 Gold and R2, Windows RT Gold and 8.1, and Windows 10 allows local users to gain privileges via a crafted application, aka "Win32k Memory Corruption Elevation of Privilege Vulnerability," a different vulnerability than CVE-2015-2511, CVE-2015-2517, and CVE-2015-2518.

CVE-2014-6352

Microsoft Windows Vista SP2, Windows Server 2008 SP2 and R2 SP1, Windows 7 SP1, Windows 8, Windows 8.1, Windows Server 2012 Gold and R2, and Windows RT Gold and 8.1 allow remote attackers to execute arbitrary code via a crafted OLE object, as exploited in the wild in October 2014 with a crafted PowerPoint document.

Advanced Persistent Threat (APT): RedDelta

RedDelta threat actor known since 2020. They attacked entities related to the Catholic Church in various country. In addition, researchers discovered attacks against law enforcement and government entities in asia.

Releted Tools:

modified PlugX
Poison Ivy
Cobalt Strike

Indicators of Compromise (IOCs)

CnC:

systeminfor[.]comsoftwarelabs[.]com
cabsecnow[.]com
lameers[.]com
http://103[.]85[.]24[.]190/qum[.]dat
http://167[.]88[.]180[.]198/dis[.]dat
http://167[.]88[.]180[.]198/hk[.]dat
167[.]88[.]180[.]5
167[.]88[.]180[.]32
103[.]85[.]24[.]136
167[.]88[.]177[.]224
103[.]85[.]24[.]190
103[.]85[.]24[.]149
167[.]88[.]180[.]198
85[.]209[.]43[.]21
lib[.]jsquerys[.]net
lib[.]hostareas[.]com
154[.]213[.]21[.]70
154[.]213[.]21[.]27
154[.]213[.]21[.]73
sbicabsec[.]com
cab-sec[.]com
forexdualsystem[.]com
lionforcesystems[.]com
apple-net[.]com
wbemsystem[.]com

MD5:

e5a23e8a2c0f98850b1a43b595c08e63

SHA-256:

4cef5835072bb0290a05f9c5281d4a614733f480ba7f1904ae91325a10a15a04
f6e5a3a32fb3aaf3f2c56ee482998b09a6ced0a60c38088e7153f3ca247ab1cc
7d85ebd460df8710d0f60278014654009be39945a820755e1fbd59030c14f4c7
bc6c2fda18f8ee36930b469f6500e28096eb6795e5fd17c44273c67bc9fa6a6d
4c8405e1c6531bcb95e863d0165a589ea31f1e623c00bcfd02fbf4f434c2da79
01c1fd0e5b8b7bbed62bc8a6f7c9ceff1725d4ff6ee86fa813bf6e70b079812f
8a07c265a20279d4b60da2cc26f2bb041730c90c6d3eca64a8dd9f4a032d85d3
86590f80b4e1608d0367a7943468304f7eb665c9195c24996281b1a958bc1512
fb7e8a99cf8cb30f829db0794042232acfe7324722cbea89ba8b77ce2dcf1caa
282eef984c20cc334f926725cc36ab610b00d05b5990c7f55c324791ab156d92
b6cb4f1c94cb2165a654e6655e099fa53c9e42d78847faf44bdbe2aadd128129
2bc7ed201c7af3e57a20eec4099e242631734fa37b50fa4bce194751f497f7c8
9bac74c592a36ee249d6e0b086bfab395a37537ec87c2095f999c00b946ae81d
7824eb5f173c43574593bd3afab41a60e0e2ffae80201a9b884721b451e6d935
76d0a85c8a8e21f59d858efafe9badf7315793ce4d4725574c06a653ba0bdb86
59aaa2b8116ba01c1b37937db37213ff1f4a8552a7211ab21f73ffac2c0c13ce
da95da58ea9669401ab40e398baaced000d1ef0f96328edbaee6aae664dca235
79ca5e8079c8fa2196c74e70d9cebc07e07cca54f8b19596b780b15aaa69b6eb
38629fb94f89d2504e1582679f82960bf343143c624a148b923d9cf4aa4db0b7
c21e3c27397549c712cdadd2ffab52f1f52ae6855931eee95c2d6533e8a4adb2
d30916f20a9352d5a4ddee5a961428baa34a0a17d4a7ad40c96f4857567f5f34

Advanced Persistent Threat (APT): SYSTEMBC TA

SYSTEMBC TA related to four campaign. It registered 2 domains for each campaign - one in .com zone and another - in .xyz. The Threat Actor used 'Hosting Concepts B.V. d/b/a' (openprovider[.]com, registrar[.]eu) for registration and all domain were delegated to Cloudflare's NS.

Indicators of Compromise (IOCs)

CnC:

dump17alertos[.]com
dump17alertos[.]xyz
dec15coma[.]com
dec15coma[.]xyz
alanpo09[.]xyz
alanpo09[.]com
209[.]151[.]144[.]238
95[.]142[.]45[.]61
109[.]234[.]39[.]211

Advanced Persistent Threat (APT): Basilisk

Indicators of Compromise (IOCs)

CnC:

www[.]3hourprofits[.]com
liftboost[.]co
snipemy[.]info
ali[.]kz[.]mail[.]ru
www[.]page
lamerhaberdotcom[.]files[.]wordpress[.]com
youhack[.]vip
198[.]200[.]94[.]190
190[.]204[.]88[.]61
60[.]51[.]212[.]61
74[.]110[.]58[.]102
129[.]128[.]146[.]149
69[.]244[.]100[.]198
75[.]190[.]200[.]181

Advanced Persistent Threat (APT): Lazarus

The cybercrime group Lazarus (also known as Dark Seoul Gang/HIDDEN COBRA/Guardians of Peace), is behind the so many major attacks.

Originally a criminal group, the group has now been designated as an advanced persistent threat due to intended nature, threat, and wide array of methods used when conducting an operation.

Related Tools

- AdFind
- SMBmap
- Plink
- Responder
- wget
- tcpdump
- XenArmor
- WinRAR
- ProcDump
- Mimikatz
- AppleJeus
- AuditCred
- BADCALL
- Bankshot
- BLINDINGCAN
- Cryptoistic
- Dacls
- Dtrack
- ECCENTRICBANDWAGON
- FALLCHILL
- HARDRAIN
- HOPLIGHT
- HotCroissant
- KEYMARBLE
- RATANKBA
- netsh
- Proxysvc
- RawDisk
- TAINTEDSCRIBE

TYPEFRAME
Volgmer
WannaCry

Malware List of Lazarus APT:

a. Manuscrypt

Manuscrypt is a RAT-type Trojan that can receive commands sent by the actors responsible from the C&C server to the victim's computer via double proxies. Usually, a Trojan hits the victim's computer using other Lazarus malware or after the user visits a compromised website.

Platform: Windows

Threat level: Middle

Category: remote-access-trojan

Other Name: FALLCHILL

General information

The Trojan collects basic system information and sends it to C&C:

- Operating system version
- Processor information
- System name
- Local IP address information
- Unique generated ID
- MAC address

Manuscrypt has the following built-in features for remote operations, providing different capabilities on the victim's system:

- retrieve information about all installed drives, including drive type and free disk space;
- create, run and terminate a new process and its main thread;
- search, read, write, move and execute files;
- get and change the timestamps of files or directories;
- change the current directory for the process or file; and
- remove the Trojan and artefacts associated with malware from the infected system

Indicators of Compromise (IOCs)

CnC:

62[.]243[.]45[.]227
59[.]90[.]93[.]138
5[.]79[.]99[.]169
82[.]223[.]73[.]81
91[.]116[.]139[.]195

71[.]125[.]1[.]132
71[.]125[.]1[.]133
96[.]65[.]90[.]58
98[.]159[.]16[.]132
41[.]92[.]208[.]194
122[.]114[.]89[.]131
221[.]235[.]53[.]229
66[.]242[.]128[.]12
66[.]242[.]128[.]173
66[.]242[.]128[.]186
181[.]119[.]19[.]118
181[.]119[.]19[.]54
98[.]101[.]211[.]162
59[.]90[.]93[.]97
175[.]100[.]189[.]174
http://www[.]028xmz[.]com/include/common[.]php
www[.]028xmz[.]com
45[.]34[.]66[.]30
http://168wangpi[.]com/include/charset[.]php
168wangpi[.]com
http://10vs[.]net/include/left[.]php
10vs[.]net
http://www[.]qdbazaar[.]com/include/footer[.]php
www[.]qdbazaar[.]com
104[.]31[.]74[.]89
https://www[.]anlway[.]com/include/arc[.]search[.]class[.]php
www[.]anlway[.]com
107[.]165[.]165[.]35
http://www[.]paulkaren[.]com/synthpop/main[.]asp
www[.]paulkaren[.]com
108[.]61[.]91[.]60
222[.]239[.]223[.]156
117[.]232[.]100[.]154
27[.]123[.]221[.]66
191[.]233[.]33[.]177
200[.]57[.]90[.]108
82[.]223[.]213[.]115
173[.]0[.]129[.]65
199[.]167[.]100[.]46
111[.]207[.]78[.]204
184[.]107[.]209[.]2
98[.]101[.]211[.]251
98[.]113[.]84[.]130
66[.]242[.]128[.]164
66[.]242[.]128[.]179
75[.]103[.]110[.]134
208[.]78[.]33[.]82

122[.]114[.]94[.]26
62[.]215[.]99[.]90
210[.]202[.]40[.]35
181[.]119[.]19[.]5
181[.]119[.]19[.]50
http://www[.]530hr[.]com/data/common[.]php
www[.]530hr[.]com
23[.]107[.]38[.]5
http://0756rz[.]com/include/left[.]php
0756rz[.]com
https://www[.]naviilibs[.]com/video/battle32[.]avi
www[.]naviilibs[.]com 198[.]54[.]116[.]51
https://www[.]naviilibs[.]com/video/battle64[.]avi
221[.]208[.]194[.]72
196[.]25[.]89[.]30
208[.]180[.]64[.]10
41[.]92[.]208[.]196
41[.]92[.]208[.]197
190[.]82[.]86[.]164
http://www[.]marmarademo[.]com/include/extend[.]php
www[.]marmarademo[.]com
http://www[.]97nb[.]net/include/arc[.]sglistview[.]php
www[.]97nb[.]net
103[.]238[.]227[.]72
66[.]242[.]128[.]185
98[.]101[.]211[.]140
64[.]29[.]144[.]201
66[.]175[.]41[.]191
66[.]242[.]128[.]13
66[.]242[.]128[.]158
181[.]119[.]19[.]56
81[.]0[.]213[.]173
222[.]122[.]31[.]115
http://www[.]pakteb[.]com/include/left[.]php
www[.]pakteb[.]com
104[.]221[.]134[.]28
https://www[.]apshenyihl[.]com/include/arc[.]speclist[.]class[.]php
www[.]apshenyihl[.]com
http://ansetech[.]co[.]kr/smarteditor/common[.]asp
ansetech[.]co[.]kr 106[.]10[.]79[.]34
http://mileage[.]krb[.]co[.]kr/common/db_conf[.]asp
mileage[.]krb[.]co[.]kr
211[.]48[.]76[.]36
http://www[.]51up[.]com/ace/main[.]asp
www[.]51up[.]com
112[.]126[.]67[.]80
190[.]82[.]74[.]66

77[.]78[.]100[.]101
125[.]160[.]213[.]239
36[.]71[.]90[.]4
181[.]119[.]19[.]141
181[.]119[.]19[.]196
182[.]56[.]5[.]227
210[.]61[.]8[.]12
195[.]74[.]38[.]115
173[.]0[.]129[.]83
208[.]78[.]33[.]70
216[.]163[.]20[.]178
50[.]62[.]168[.]157
66[.]242[.]128[.]170
66[.]242[.]128[.]223
197[.]211[.]212[.]14
104[.]192[.]193[.]149
http://51xz8[.]com/include/top[.]php
51xz8[.]com
23[.]244[.]213[.]174
http://1996hengyou[.]com/include/dialog/left[.]php
1996hengyou[.]com
160[.]124[.]191[.]80
http://www[.]nuokejs[.]com/contactus/about[.]php
www[.]nuokejs[.]com
104[.]195[.]1[.]39
smtp01[.]ansetech[.]co[.]kr
210[.]101[.]60[.]1
https://www[.]ap8898[.]com/include/arc[.]search[.]class[.]php
www[.]ap8898[.]com
104[.]222[.]238[.]212
http://www[.]shieldonline[.]co[.]za/sitemap[.]asp
www[.]shieldonline[.]co[.]za
196[.]38[.]160[.]213
http://www[.]33cow[.]com/include/control[.]php
www[.]33cow[.]com
falcancoin[.]io
203[.]160[.]191[.]116
191[.]234[.]40[.]112
66[.]232[.]121[.]65
209[.]183[.]21[.]222
119[.]10[.]74[.]66
139[.]217[.]27[.]203
181[.]119[.]19[.]58
181[.]119[.]19[.]74
190[.]105[.]225[.]232
125[.]212[.]132[.]222
http://168va[.]com/include/data/left[.]php

168va[.]com
71[.]125[.]1[.]130
71[.]125[.]1[.]138
72[.]167[.]53[.]183
98[.]101[.]211[.]170
66[.]242[.]128[.]11
80[.]91[.]118[.]45
66[.]242[.]128[.]134
66[.]242[.]128[.]140
66[.]242[.]128[.]162
66[.]242[.]128[.]163
66[.]242[.]128[.]181
66[.]99[.]86[.]8
112[.]217[.]108[.]138
211[.]192[.]239[.]232
https://www[.]elite4print[.]com/admin/order/batchPdfs[.]asp
https://tpddata[.]com/flash/gcoin2[.]swf
tpddata[.]com
104[.]243[.]41[.]186
https://tpddata[.]com/flash/gcoin4[.]swf
www[.]nuokejs[.]com
https://sfacor[.]com/upload/profile_2[.]dmg
sfacor[.]com
78[.]128[.]92[.]133
https://sfacor[.]com/upload/profile_4[.]dmg
https://wifispeedcheck[.]net/upload/conf3[.]dat
wifispeedcheck[.]net
192[.]99[.]34[.]204
https://wifispeedcheck[.]net/upload/conf6[.]dat
https://tpddata[.]com/skins/skin-8[.]thm
https://tpddata[.]com/skins/skin-6[.]thm
https://www[.]ap8898[.]com/include/arc[.]search[.]class[.]php
http://www[.]shieldonline[.]co[.]za/sitemap[.]asp
http://www[.]33cow[.]com/include/control[.]php
www[.]ap8898[.]com
www[.]shieldonline[.]co[.]za
ansetech[.]co[.]kr
106[.]10[.]79[.]34
https://itaddnet[.]com/res/prof3[.]db
https://www[.]daslibs[.]com/res/prof3[.]db
itaddnet[.]com
www[.]daslibs[.]com
https://itaddnet[.]com/res/prof6[.]db
https://www[.]daslibs[.]com/res/prof6[.]db
http://www[.]yich[.]co[.]kr/jbcgi/edit/tmp/notice_20112030837572332[.]png
www[.]yich[.]co[.]kr
222[.]231[.]2[.]43

http://www[.]jscw[.]co[.]kr/jbcgi/edit/tmp/notice_201002191504537620[.]gif
www[.]jscw[.]co[.]kr
222[.]231[.]2[.]179
http://hypnosmd[.]com/include/top[.]php
hypnosmd[.]com
64[.]90[.]49[.]224
http://168va[.]com/include/data/left[.]php
www[.]naviilibs[.]com
198[.]54[.]116[.]51

MD5:

9578c2be6437dcc8517e78a5de1fa975
bf474b8acd55380b1169bb949d60e9e4
d17b96b56d5eed6e918d89f0ba120d7e
47e7b297f020d53f7de7dc0f450e262d
1ca31319721740ecb79f4b9ee74cd9b0
633BD738AE63B6CE9C2A48CBDDD15406
34c2ac6daa44116713f882694b6b41e8
24906e88a757cb535eb17e6c190f371f
3005f1308e4519477ac25d7bbf054899
68fa29a40f64c9594cc3dbe8649f9ebc
d2de01858417fa3b580b3a95857847d5
86685ec8c3c717aa2a9702e2c9dec379
361c2c5be75439dda958daa6032cab49
3d0355ff78dcc979b3f83a679b6ba794
233ad743dd26c959fa735ffbaa456c05
cea52553aed83e408702ad7c03f287c7
e1ed584a672cab33af29114576ad6cce
d8484469587756ce0d10a09027044808
86d3c1b354ce696e454c42d8dc6df1b7
5182e7a2037717f2f9bbf6ba298c48fb
278833c6f56ce1f82c368e623bf8ae96
1f04ca0504ba5e5d721eed5575bc19ef
425dfb5944dab3b3adbffe5128f4cf29

SHA-256:

4d3c9ea93c299c397ec4af094a57acc597e6a9eaa1005eabe59c1f6617abd3b9
58a97c2c731cdf045f26ccc7cba370bd2dfee277a9c43c0421c53593e493f7bc
dced1acbbe11db2b9e7ae44a617f3c12d6613a8188f6a1ece0451e4cd4205156
546dbd370a40c8e46f9b599a414f25000eec5ae6b3e046a035fe6e6cd5d874e1
c9e3b83d77ce93cc1d70b22e967f049b13515c88572aa78e0a838103e5478777
8c3e0204f52200325ed36db9b12aba1c5e46984d415514538a5bf10783cacdf8
089e49de61701004a5eff6de65476ed9c7632b6020c2c0f38bb5761bca897359
5e54bccbd4d93447e79cda0558b0b308a186c2be571c739e5460a3cb6ef665c0
f8b329fc1f4d50f5509a72c1f630155538f4d2c6e49b80ce4841fada6547c4bd
3ff4ebae6c255d4ae6b747a77f2821f2b619825c7789c7ee5338da5ecb375395
380b76590d3e878d73bc7964fe225a2721218dcda7ed9c571b433af07a8b1107

6ebcc34020c85459dc62b745c7783d4a7e41f2c5d4f051e8817934ed7c5d0d9b
4838f85499e3c68415010d4f19e83e2c9e3f2302290138abe79c380754f97324
3c809a10106990ba93ec0ed3b63ec8558414c6680f6187066b1aacd4d8c58210
d1d490866d4a4d29306f0d9300bffc1450c41bb8fd62371d29672bf9f747bf92
f6e1a146543d2903146698da5698b2a214201720c0be756c6e8d2a2f27dcfaff
bbf09724de5e0e039846d191e44460aa4071fefad22a4e8161a2628a99bad024
d060123c21869b765b22b712a8ca47266a33464095411e2b7bdf7e327d23ed07
d8af45210bf931bc5b03215ed30fb731e067e91f25eda02a404bd55169e3e3c3
a606716355035d4a1ea0b15f3bee30aad41a2c32df28c2d468eafd18361d60d6
2a000d4d6f1dec6dfd230bb793b7fdd91db1194f0a1ea2e184ca18214e350a74
c10363059c57c52501c01f85e3bb43533ccc639f0ea57f43bae5736a8e7a9bc8
feb884409fb5dd2a45e5461481706cf04b877b648b39879ee5e55a1e61b87856
ec84802bb2bb33c52c1f02e7a7b74c6ea6247611c410bf386a95dc1eb45e2347
ec0aa9678fb5eb631b9ec94de63d8eb923728faf5b0672ba6eed43971a2ad1d0
e76b3fd3e906ac23218b1fbd66fd29c3945ee209a29e9462bbc46b07d1645de2
1faaa939087c3479441d9f9c83a80ac7ec9b929e626cb34a7417be9ff0316ff7
1884ddc53ef66488ca8fc641b438895fcaada77c15210118465377c63223b3bc
7985af0a87780d27dc52c4f73c38de44e5ad477cb78b2e8e89708168fbc4a882
9d9dda39af17a37d92b429b68f4a8fc0a76e93ff1bd03f06258c51b73eb40efa
5d134f42ce7616882df6a9156bca882097b549d1c9269a5849608114f381b9b7
bdff852398f174e9eef1db1c2d3fefdda25fe0ea90a40a2e06e51b5c0ebd69eb
0a118eb23399000d148186b9079fa59caf4c3faa7e7a8f91533e467ac9b6ff41
e98991cdd9ddd30adf490673c67a4f8241993f26810da09b52d8748c6160a292
d30cb50641ff79fa059fbf1950047d2e34eb3e9ee7b5ff5cced0912160d3edb9
201c7cd10a2bd50dde0948d14c3c7a0732955c908a3392aee3d08b94470c9d33
20abb95114de946da7595438e9edf0bf39c85ba8512709db7d5532d37d73bd64
4bd7d801d7ce3fe9c2928dbc834b296e934473f5bbcc9a1fd18af5ebd43192cd
40ef57ca2a617f5d24ac624339ba2027b6cf301c28684bf8b2075fc7a2e95116
a71017302e1745c8a3d6e425187eb23c7531551bb6f547e47198563a78e933b6
e088c3a0b0f466df5329d9a66ff618de3d468d8a5981715303babb1452631eef
675a35e04b19aab314bcbc4b1f2610e3dea4a80c277cc5188f1d1391a00dfdb1
e69d6c2d3e9c4beebee7f3a4a3892e5fdc601beda7c3ec735f0dfba2b29418a7
eee38c632c62ca95b5c66f8d39a18e23b9175845560af84b6a2f69b7f9b6ec1c
c68bfd97f5eff77d2cb44840a7ee3e19fecc304a5a3206068bd69a288bc9802e

b. CuriousLoadert

Loader used by hackers from Lazarus. Discovered as part of the attack in October 2019, however, the first sample dates back to December 2018.

Platform: N/A

Threat level: Middle

Category: Loader

General information

Indicators of Compromise (IOCs)

MD5:

84b8af33a6181ac13fa5529d08500fc7
11fdc0be9d85b4ff1faf5ca33cc272ed
5e60ff179d6e4af28f91f70f45b72038
2b02465b65024336a9e15d7f34c1f5d9
f6d6f3580160cd29b285edf7d0c647ce
14d79cd918b4f610c1a6d43cadeeff7b
c0a8483b836efdbae190cc069129d5c3

c. SvcRAT

Platform: N/A

Threat level: High

Category: remote-access-trojan

Indicators of Compromise (IOCs)

CnC:

23[.]95[.]229[.]119
107[.]175[.]59[.]21
192[.]3[.]31[.]12
66[.]154[.]103[.]104
107[.]174[.]25[.]127
172[.]245[.]156[.]203
https://151[.]106[.]27[.]234:443
151[.]106[.]27[.]234
162[.]255[.]119[.]153
162[.]255[.]119[.]34

MD5:

08b6891f3320c653d69dfd5d0694c69a
947fa11d132caea04e6c13e6150d48e0
932a845b27d5fb9ec78638a839ba5fb1
7f6263ccd71f05e5d3a7ca694ae513ad
8bd120acee67839d73ff6b1fea81b37a
7a372a2f85e9d2b6a3aebb63d8884080
c744a0435bce2fdcc6b05737321f8559
293b4729b8a619a2a2d2a2529e494925
6bd3ff14323c72bccbee75908cbaa899
04c640a5ff10f139738981372cbeb676
51b4527a31e5f4d89d0fed1c18b3199d
79e6d1e84be8742131b95cb94b94b4f5

d. RATv3.ps

RATv3.ps - is a PowerShell remote access tool (RAT) or backdoor having the functionality to run commands, manipulate files, upload/download files from a C2 server, manipulate running processes, collect system information and manipulate the Windows registry.

Platform: N/A

Threat level: N/A

Category: Backdoor, remote-access-trojan

Other Name: PowerBrace

General information

- It communicates over TLS with a custom protocol using XOR encoding. Minor obfuscation occurs throughout the script, which makes it slightly more difficult to analyse. The script uses several light forms of obfuscation. Function names and variable names are replaced with non-descriptive names, and strings are stored as base64 encoded Unicode.
- This malware collects various operating system information and sends it to the C2 server. The collected data includes:

  - Internal IP address
  - Computer name
  - Username
  - OS version
  - OS architecture
  - Proxy status
  - Proxy server
  - Script path
  - Last boot time
  - OS caption
  - OS language
  - OS country code
  - Primary C2 address and port
  - Secondary C2 address and port
  - 32/64 bit system

Indicators of Compromise (IOCs)

SHA256:

6ed6ac7b499f7fa613949c412b4245dd21c684192afd3de5614575c37cf35e1f
51f4660f6a3ecda7324fe163b23ce3c66b9bcff638fbb008d231c312bb1e5dec
fd7c2afabbfc3b20ec73d5719eba04195c59b4a70b2de266995438032e1e80ef

cb47b8e49881c8aed31e5b0c354e7eb14532c3ff6da69705142370bdaa289ebb
113b65ed938f8f3199bf28f0fe932dc80560d70f0fc1c5918c99783df00a978f
56102f70df2e481a91d3be1e33facd7e220e2b685405ddf873f3ab079e99873e
8a0e6c50a6483f2f01a458cd0cb4e485605778c42c9708b07b820968132efb76
29f1322ce49386c7cc916e0e63d706cbcaa0132ea56c55ec57c0c14c3dac8993
98d46a54383eedccd3d80cf0bf6712ab4a7acdbd69f7893fb98b4ee4a020d55d
52eb8f654d33f1d5c34b5bae0d83360158d8eccc32ddcbb555d7b1b7c943842c

e. Linux.Dacls

Linux.Dacls is a malicious remote-control software for OC Linux used by the Lazarus group.

Platform: Linux

Threat level: High

Category: remote-access-trojan

General information

- Its functions are modular, the C2 protocol uses two-layer TLS and RC4 encryption, the configuration file uses AES encryption and supports the dynamic update of C2 instructions. Linux.Dacls is compiled directly in the Bot program. It was found that Linux has 6 plugins: execution commands, file management, process management, test network access, C2 connection agent, network scan.
- The main functions of Linux.Dacls Bot include: execute commands, file management, process management, test network access, C2 connection agent, network scanning module

Indicators of Compromise (IOCs)

CnC:

162[.]241[.]217[.]135
www[.]areac-agr[.]com
http://www[.]areac-agr[.]com/cms/wp-content/uploads/2015/12/ldata[.]dat

MD5:

80c0efb9e129f7f9b05a783df6959812
859e7e9a11b37d355955f85b9a305fec

f. MAC.Dacls

MAC.Dacls is a malicious remote-control software for macOS used by the Lazarus group.

Platform: macOS

Threat level: Middle

Category: remote-access-trojan

Indicators of Compromise (IOCs)

CnC:

67[.]43[.]239[.]146
185[.]62[.]58[.]207

MD5:

81f8f0526740b55fe484c42126cd8396
f05437d510287448325bac98a1378de1
b19984c67baee3b9274fe7d9a9073fa2
024e28cb5e42eb0fe813ac9892eb7cbe

g. Win32.Dacls

Win32.Dacls is malicious remote-control software for Windows which was used by Lazarus.

Platform: Windows

Threat level: High

Category: remote-access-trojan

General information

Its functions are modular, the C2 Protocol uses two-layer TLS and RC4 encryption, the configuration file uses AES encryption and supports dynamic updating of C2 instructions. Plug-in module Win32.Dacls is dynamically loaded via a remote URL.

Indicators of Compromise (IOCs)

CnC:

162[.]241[.]217[.]135
www[.]areac-agr[.]com
http://www[.]areac-agr[.]com/cms/wp-content/uploads/2015/12/rdata[.]dat
68[.]168[.]123[.]86
172[.]93[.]184[.]62
104[.]232[.]71[.]7
23[.]227[.]199[.]69

MD5:

22a968beda8a033eb31ae175b7e0a937

SHA256:

3095f9326c66c9a035cb12bf50e2115c3aa6f7860dab9a8b8f82a223f366283a
45ab66dbcb78158b2c2448207717646655d804bdc4f975c47fafbe21a0213fbc
82d33a67c68f7c476a9ac1e960abc6a911f797446a2c24f0e13b92af1eb385b8
d2f1cccfe688c074c3d58ae8f7be7b10dbea5d7ae53320c3f7b6e48cd4f62955

cdf74f48c9ea905682155441cf03f4207dbeb2a2f09c4605a5cf4a9a367286e8
cdac934dbd8831b962718fdbaf050ebaa8b89be6c98c8cd7479a9d91939c63c6
40249bc29030349a85d18677483acb97aca028df8a55fda93728f253f72f2e0a

Network Signatures

TROJAN Possible DACLS RAT CnC (Log Server Reporting)

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Possible DACLS RAT CnC (Log Server Reporting)"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:"log=save&session_id="; http_client_body; depth:20; fast_pattern; content:"&value="; distance:0; http_client_body; pcre:"/^log=save&session_id=[^&]+&value=[^&]+$/P"; reference:url,blog.netlab.360.com/dacls-the-dual-platform-rat-en/; classtype:trojan-activity; sid:2029879; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2020_04_10, deployment Perimeter, former_category MALWARE, signature_severity Major, updated_at 2020_04_10, severity 3, ti_malware_id c75434dd3df9e41547cf58adb15fe91008f60740, ti_malware_name Win32.Dacls, malware_family Win32.Dacls, rule_origin etpro;)

h. VHD Ransomware

This crypto ransomware encrypts user data with AES-256 ECB + RSA-2048 and then demands a BTC ransom to get the files back.

Platform: N/A

Threat level: Low

Category: Ransomware

Other Names: N/A

General information

- The activity of this crypto-ransomware occurred in the second half of March 2020. Date stamp: March 19, 2020. It is aimed at English-speaking users, which does not prevent its distribution around the world.
- The ransom note is called: **HowToDecrypt.txt**
- Email addresses used:
  - johndoe2020@meet-me.live
  - johndoe2020@airmailhub.com
  - miclejaps@msgden[.]net
  - stevenjoker@msgden.net
- An extension is added to encrypted files: .vhd

- Experts note 2 features of this program:
  - The ransomware uses Mersenne Twister as a source of randomness, but unfortunately for the victims the RNG is reseeded every time new data is consumed.
  - VHD implements a mechanism to resume operations if the encryption process is interrupted. For files larger than 16MB, the ransomware stores the current cryptographic materials on the hard drive, in clear text. This information is not deleted securely afterwards, which implies there may be a chance to recover some of the files.

Indicators of Compromise (IOCs)

MD5:

EFD4A87E7C5DCBB64B7313A13B4B1012
DD00A8610BB84B54E99AE8099DB1FC20
CCC6026ACF7EADADA9ADACCAB70CA4D6
6D12547772B57A6DA2B25D2188451983
D0806C9D8BCEA0BD47D80FA004744D7D

i. PowerRatankba

PowerRatankba is a powerShell-based malware variant of «Ratankba», which used as a first stage reconnaissance tool and for the deployment of further stage implants on targets that are deemed interesting by the actor.

Platform: Windows

Threat level: High

Category: atm-malware

Other Names: Recon.PS

Indicators of Compromise (IOCs)

CnC:

http://51[.]255[.]219[.]82/files/download/falconcoin[.]zip
http://51[.]255[.]219[.]82/files/download/falconcoin[.]pdf
http://51[.]255[.]219[.]82/theme[.]gif
https://dreamlabs[.]net/index[.]php?act=getps1
https://bodyshoppechiropractic[.]com/tbl_add[.]php
http://dreamlabs[.]net/logos[.]gif
http://dreamlabs[.]net/dreamlabs[.]net
bepis[.]space
juchniewicz[.]club
lawrencemedia[.]website
cabdinc[.]top

crossfr[.]site
canellas[.]cloud
gochuonpire[.]us
calvinm[.]io
ofiteksol[.]pw
terry[.]network
cwt[.]host
cmii[.]space
jetnetflow[.]online
millerrdserver[.]host
cmplex[.]host
mikeshomeserver[.]win
finishline[.]cc
sdroy[.]pw
derzh[.]club
thupa[.]info
trade[.]publicvm[.]com
bodyshoppechiropractic[.]com
eselevseuhdeste[.]site
utiwteehamecagsoin[.]site
ppepos-test[.]xyz
itidsegcaerunetrexe[.]site
alertas[.]club
kalicki[.]club
pavlovs[.]site
retaildealmanagerqa[.]cafe
soundboard[.]site
carlet[.]fun
liangz[.]xyz
arsenique[.]link
ecombox[.]store
spektra[.]app
yoann[.]host
brookju[.]us
dnas[.]cloud
wiemer[.]network
jhonizzle[.]us
sandwichan[.]fun
coachbot[.]win
middletownchiropractic[.]rocks
sharedrive[.]space
skemper[.]us
kalicki[.]fun

autoif[.]online
www[.]businesshop[.]net
reig[.]world
avia-tickets[.]services
betonghosp[.]us
ccheng[.]pw
shudaizi[.]app
jcnetworks[.]tech
werpo[.]win
azeroth[.]network
vilenpro[.]men
zcs[.]space
vtadrones[.]network
thesaleemfam[.]photos
sucio[.]supply
wkw2[.]us
scrfamous[.]club
sam1b[.]us
usersec[.]online
woolf[.]network
workspace1[.]app
geoenterprise[.]site
encorereg[.]us
caprica[.]link
youreinvitedtomy[.]club
gateserve[.]xyz
monkkx[.]info
firelightarchival[.]info
socowsareorteocsin[.]site
chateaude[.]chat
minglen[.]club
cgitool[.]online
morella[.]online
zkre[.]xyz
mdkder3[.]pro
ktn[.]services
kbh118[.]xyz
jtek[.]solutions
fwsod[.]info
polyant[.]mobi
oca1[.]pw
roguemedia[.]site
srv65[.]xyz

ecombox[.]online
thegordon[.]club
gdlaw[.]space
donovanclan[.]website
rilla[.]xyz
apps[.]got-game[.]org
vietcasino[.]linkpc[.]net
alexandroskokkinos[.]site
usasport[.]news
jayoung[.]xyz
dividebyzero[.]us
mcpcore[.]host
hopechannel[.]io
bukatiket[.]fun
vpnforthe[.]win
flashwitz[.]xyz
legalize[.]fun
freshlife[.]cloud
luckydog[.]network
dubovsky[.]site
dedoviq[.]website
dochelp[.]space
ronandlaura[.]rocks
vanhassel[.]zone
201[.]139[.]226[.]67
23[.]227[.]196[.]117
166[.]62[.]112[.]193
144[.]217[.]51[.]246
158[.]69[.]57[.]135
198[.]100[.]157[.]239
127[.]0[.]0[.]1
51[.]255[.]219[.]82
92[.]222[.]106[.]229
180[.]235[.]133[.]121
https://ecombox[.]store/tbl_add[.]php
104[.]227[.]146[.]249
https://ecombox[.]store/tbl_add[.]php?action=bgetpsc
https://ecombox[.]store/tbl_add[.]php?action=cgetpsa

MD5:

c9ed87e9f99c631cda368f6f329ee27e
911de8d67af652a87415f8c0a30688b2
1f7897b041a812f96f1925138ea38c46

1507e7a741367745425e0530e23768e6
79d09d46fd66085587afca579557bc89
17f0f148f53968effcb42230518aeb67
563db5fc71da5f3bfc216aa3ec52f074
ec264b9c938355f1a7d1dc97c73fa9a6
cb52c013f7af0219d45953bae663c9a2
34404a3fb9804977c6ab86cb991fb130
18a451d70f96a1335623b385f0993bcc
5d06ff8f43f631cd2a71a565dd10b7a5
eb30a58da33f1caca3a01e1467d6661c
3c2f5ff382b0ec132101e92f72256490
2025d91c1cdd33db576b2c90ef4067c7
9cee042ba1e447baf13eaeb9305f7280
5ad8143d954ebd5de6be0a40e0f65732
f34b72471a205c4eee5221ab9a349c55
df934e2d23507a7f413580eae11bb7dc
50ca734bfba54ed33af469537b5e22c1
cb29db3900204071323a940c2a9434b8
cba175498af45dca6970aeee83a6d9f4
ed2cace34381b6bbeb98af31e73e7904
6c360e9a6f933bf172591a81881ca79b
9216b29114fb6713ef228370cbfe4045
a8b14ca96830d3b1d4d2f70b92d2d186
636f8bd214d092ae3feb547599b4935e
8b51170fc6ecbea6b8496c8a8a8e4f1a

SHA-256:

20d94f7d8ee2c4367443a930370d5685789762b1d11794810dc0ac6c626ad78e
3cd0689b2bae5109caedeb2cf9dd4b3a975ab277fadbbb26065e489565470a5c
b265a5d984c4654ac0b25ddcf8048d0aabc28e36d3e2439d1c08468842857f46
99ad06cca4910c62e8d6b68801c6122137cf8458083bb58cbc767eebc220180d
20f7e342a5f3224cab8f0439e2ba02bb051cd3e1afcd603142a60ac8af9699ba
41f155f039448edb42c3a566e7b8e150829b97d83109c0c394d199cdcfd20f9b
db8163d054a35522d0dec35743cfd2c9872e0eb446467b573a79f84d61761471
1768f2e9cea5f8c97007c6f822531c1c9043c151187c54ebfb289980ff63d666
f7f2dd674532056c0d67ef1fb7c8ae8dd0484768604b551ee9b6c4405008fe6b
d844777dcafcde8622b9472b6cd442c50c3747579868a53a505ef2f5a4f0e26a

j. PowerTask

Backdoor of Lazarus group which was uploaded to VirusTotal on 29/03/2019.

Platform: Windows

Threat level: High

Category: Backdoor

Other Names: N/A

General information

- Researched file "stage.ps1" was uploaded to VirusTotal on 29.03.2019 from Nigeria. This file is a PowerShell script. It has following functions:
  - Checks presence of connection with specified network node
  - Updates configuration parameters
  - Executes commands in Windows CLI
  - Creates new processes
  - Launches PowerShell commands
  - Deletes itself
- File doesn't contain C&C address. Executed commands are read by the script from the file. The name of the file is transmitted during the launch of the script. Based on these facts we may assume that other tool is used for communication with C&C. On the moment we didn't detect it.

Indicators of Compromise (IOCs)

MD5:

ee664c219e8cf9a3ef6f9b7eb56f3c18
ae4e5917e3b4cf2e7c2457f411b66343
e186e60ab803d23d1cdf39c313cb34a4
c9b3b6bdc0cbb09f1ca5d4caab8bea9f

k. HOPLIGHT

On infected systems, the malware collects information about the target's device and sends the data to a remote server. It can also receive commands from its command and control (C&C) server and execute various operations on infected hosts.

Platform: N/A

Threat level: Middle

Category: Backdoor

Other Names: N/A

General information

- HOPLIGHT can:
  - Read, write, and move files
  - Enumerate system drives
  - Create and terminate processes
  - Inject code into running processes

- Create, start, and stop services
- Modify registry settings
- Connect to a remote host
- Upload and download files

- The malware also uses a built-in proxy application to mask its communications with the remote command-and-control (C&C) server.
- The proxies have the ability to generate fake TLS handshake sessions using valid public SSL certificates, disguising network connections with remote malicious actors.

Indicators of Compromise (IOCs)

CnC:

117[.]239[.]241[.]2
217[.]117[.]4[.]110
195[.]158[.]234[.]60
210[.]137[.]6[.]37
119[.]18[.]230[.]253
221[.]138[.]17[.]152

SHA256:

b05aae59b3c1d024b19c88448811debef1eada2f51761a5c41e70da3db7615a9
084b21bc32ee19af98f85aee8204a148032ce7eabef668481b919195dd62b319
c66ef8652e15b579b409170658c95d35cfd6231c7ce030b172692f911e7dcff8
05feed9762bc46b47a7dc5c469add9f163c16df4ddaafe81983a628da5714461
ba80cb0a08908782f4b6e88aa15e2d306b19bc93e79bd8770bf8be904fd1bd09
2151c1977b4555a1761c12f151969f8e853e26c396fa1a7b74ccbaf3a48f4525
4c372df691fc699552f81c3d3937729f1dde2a2393f36c92ccc2bd2a033a0818
b9a26a569257fbe02c10d3735587f10ee58e4281dba43474dbdef4ace8ea7101

I. BISTROMATH

It is a full-featured Remote Access Trojan (RAT).

Platform: N/A

Threat level: Middle

Category: remote-access-trojan

Indicators of Compromise (IOCs)

CnC:

159[.]100[.]250[.]231

SHA256:

43193c4efa8689ff6de3fb18e30607bb941b43abb21e8cee0cfd664c6f4ad97c
133820ebac6e005737d5bb97a5db549490a9f210f4e95098bc9b0a7748f52d1f

m. SLICKSHOES

It is a dropper that decodes and drops the embedded file.

Platform: N/A

Threat level: Middle

Category: Dropper

Indicators of Compromise (IOCs)

CnC:

188[.]165[.]37[.]168

MD5:

cca9fbb11c194fc53015185b741887a8

n. CROWDEDFLOUNDER

Malware, which is designed to unpack and execute a Remote Access Trojan (RAT) binary in memory

Platform: Windows

Threat level: Middle

Category: Trojan, remote-access-trojan

General information

- This sample (MD5: f2b9d1cb2c4b1cd11a8682755bcc52fa) a Themida packed 32-bit Windows executable, which is designed to unpack and execute a Remote Access Trojan (RAT) binary in memory. This application is designed to accept arguments during execution or can be installed as a service with command line arguments. It is designed to listen as a proxy for incoming connections containing commands or can connect to a remote server to receive commands.

- When executed, the application is designed to open the Windows Firewall on the victim's machine to allow for incoming and outgoing connections from the victim system. The firewall is modified using a (netsh firewall add portopening) command.
- The following command line arguments are utilized to control the RAT functionality:
  -p: You can use the -p command line argument to force the malware to listen on a specific port. Example: malware.exe -p 8888
  -h: You can use the -h CLI to force the malware to connect to a remote host and port. Example: malware.exe -h <url_string>:8888

- The RAT uses a rotating exclusive or (XOR) cryptographic algorithm to secure its data transfers and command-and-control (C2) sessions. The malware is designed to accept instructions from the remote server to perform the following functions:

  - Download and upload files
  - Execute secondary payloads
  - Execute shell commands
  - Terminate running processes
  - Delete files
  - Search files
  - Set file attributes
  - Collect device information from installed storage devices (disk free space and their type)
  - List running processes information
  - Collect and send information about the victim's system
  - Securely download malicious DLLs and inject them into remote processes

Indicators of Compromise (IOCs)

MD5:

f2b9d1cb2c4b1cd11a8682755bcc52fa

o. HOTCROISSANT

This is the full-featured implant for reconnaissance, uploading/dowloading files and executing commands

Platform: N/A

Threat level: Middle

Category: Trojan

General information

- Sample (MD5: 062e9cd9cdcabc928fc6186c3921e945), detected by experts, is a full-featured beaconing implant. his sample performs a custom XOR network encoding and is capable of many features including conducting system surveys, file upload/download, process and command execution, and performing screen captures.
- The sample performs dynamic DLL importing and API lookups using LoadLibrary and GetProcAddress on obfuscated strings in an attempt to hide it's usage of network functions. However, only a small number of API calls are obfuscated this way, and their selection is not consistent through the sample.
- The sample obfuscates strings used for API lookups as well as the strings used during the network handshake using a simple Byte xor with 0x0f.

- The sample attempts to connect to a hardcoded C2 IP and then immediately sends it's Victim Info. It then listens for commands from the C2 and returns the results. Network communications are first zipped and then encoded with a custom xor algorithm.

Indicators of Compromise (IOCs)

CnC:

94[.]177[.]123[.]138

MD5:

062e9cd9cdcabc928fc6186c3921e945

p. ARTFULPIE

An implant that performs downloading and in-memory loading and execution of a DLL from a hardcoded URL

Platform: N/A

Threat level: Middle

Category: Loader

General information

- An implant (MD5: 2d92116440edef4190279a043af6794b) that performs downloading and in-memory loading and execution of a DLL from a hardcoded URL.
- Downloads the hardcoded URL hxxp[:]//193[.]56[.]28[.]103:88/xampp/thinkmeter[.]dll into memory using the user-agent string: "Mozilla/5.0 (compatible; MSIE 9.0; Windows NT 6.1; Trident/5.0)".
- Loads the .dll into its own address space manually (fully in memory).
- Calls the .dll's entry-point.

Indicators of Compromise (IOCs)

CnC:

193[.]56[.]28[.]103

MD5:

2d92116440edef4190279a043af6794b

q. BUFFETLINE

A tool, which is used for uploading/downloading, deleting and executing files, accessing the Windows command-line interface, creating and process completion

Platform: Windows

Threat level: Middle

Category: Trojan

General information

- A sample (MD5: 11cb4f1cdd9370162d67945059f70d0d) is a full-featured beaconing implant. This sample uses PolarSSL for session authentication, but then utilizes a FakeTLS scheme for network encoding using a modified RC4 algorithm. It has the capability to download, upload, delete, and execute files; enable Windows CLI access; create and terminate processes; and perform target system enumeration.
- The sample performs dynamic DLL importing and API lookups using LoadLibrary and GetProcAddress on obfuscated strings in an attempt to hide it's usage of network functions.
- The sample obfuscates strings used for API lookups as well as the strings used during the network handshake using a modified RC4 algorithm. A Python 3 script to decrypt the obfuscated strings is given below. Note: The hardcoded command and control (C2) IP's are not obfuscated, but appear in plaintext within the executable.
- The sample attempts to perform a PolarSSL handshake to initiate a connection to each of these hardcoded C2 IPs using TLS version 1.1. It uses the PolarSSL server_name extension with the Server Name set to «!Q@W#E$R%T^Y&U*I(O)P».
- After the TLS authentication is completed this particular sample does NOT use the session key that is generated via TLS. Instead, it uses a FakeTLS scheme, where a 'fake' TLS packet header is prepended to the packet data which is encrypted with custom xor encryption scheme
- After the TLS authentication, the sample performs a handshake with the C&C, where hardcoded 32 Byte strings are exchanged, as well as a Victim ID and the Victim Internal IP. After this exchange, the implant sends it's Victim Information, and then waits for tasking from the C&C.

Indicators of Compromise (IOCs)

CnC:

107[.]6[.]12[.]135
210[.]202[.]40[.]35

MD5:

11cb4f1cdd9370162d67945059f70d0d

r. KEYMARBLE

Trojan such as Remote Access Trojan (RAT), which is used to attack hackers from the group Lazarus

Platform: Windows

Threat level: Middle

Category: Trojan

General information

- This RAT uses a customized XOR cryptographic algorithm to secure its data transfers and command-and-control (C2) sessions. It is designed to accept instructions from the remote server to perform the following functions:
  - Download and upload files
  - Execute secondary payloads
  - Execute shell commands
  - Terminate running processes
  - Delete files
  - Search files
  - Set file attributes
  - Create registry entries for storing data:(HKEY_CURRENT_USER\SOFTWARE\Microsoft\WABE\DataPath)
  - Collect device information from installed storage devices (disk free space and their type)
  - List running processes information
  - Capture screenshots
  - Collect and send information about the victim's system (operating system, CPU, MAC address, computer name, language settings, list of disk devices and their type, time elapsed since the system was started, and unique identifier of the victim's system)

Indicators of Compromise (IOCs)

CnC:

222[.]143[.]21[.]13
194[.]45[.]8[.]41
212[.]143[.]21[.]43
100[.]43[.]153[.]60
104[.]194[.]160[.]59
104[.]194[.]160[.]69
http://37[.]238[.]135[.]70/img/anan[.]jpg
37[.]238[.]135[.]70

MD5:

3e925fb44f6d408e9f0f52cc8f0be2b4
b1091ee2a5af5e9f9aa0b9e57ab4cc41
1ce252b7bf2bca58266ae89d79c19144
cf6fb91589af0951f34bad0785bec4c1
6526e4b8c5dd407382300497f974be37
704d491c155aad996f16377a35732cb4
50bc6970fd8a8594bad6c64dd8b80a01
d8e51f1b9f78785ed7449145b705b2e4
dc3fff0873c3e8e853f6c5e01aa94fcf

SHA-1:

7C55572E8573D08F3A69FB15B7FEF10DF1A8CB33
E7FDEAB60AA4203EA0FF24506B3FC666FBFF759F
18EA298684308E50E3AE6BB66D7321A5CE664C8E
8826D4EDBB00F0A45C23567B16BEED2CE18B1B6A

s. Dtrack

This spyware was created by the Lazarus group and is being used to upload and download files to victims' systems, record key strokes and conduct other actions typical of a malicious remote administration tool (RAT).

Platform: N/A

Threat level: High

Category: Backdoor, remote-access-trojan

General information

A list of features is provided in the table below.

- upload a file to the victim's computer
- make target file persistent with auto execution on the victim's host start
- download a file from the victim's computer
- dump all disk volume data and upload it to a host controlled by criminals
- dump a chosen disk volume and upload it to a host controlled by criminals
- dump a chosen folder and upload it to a host controlled by criminals
- set a new interval timeout value between new command checks
- exit and remove the persistence and the binary itself
- default execute a process on the victim's host

Indicators of Compromise (IOCs)

CnC:

http://www[.]totalmateria[.]net/wp/profile2[.]php
www[.]totalmateria[.]net
http://www[.]materialindia[.]in/wp/wp-main/gallery/profile2[.]php
www[.]materialindia[.]in
http://10[.]0[.]3[.]254/software[.]php
10[.]0[.]3[.]254
http://katawaku[.]jp/bbs/data/theme/profile2[.]php
http://10[.]44[.]0[.]2/openldap/scripts/profile[.]php
10[.]44[.]0[.]2
http://gamestoyshop[.]us/ocart2/catalog/demo/provision[.]php

gamestoyshop[.]us
51[.]91[.]7[.]156
http://newshoesfasion[.]com/oscom/private/identity[.]php
newshoesfasion[.]com
158[.]69[.]114[.]83
http://heromessi[.]com/wp-public/career/car_add[.]php
heromessi[.]com
http://hawai-tour[.]com/wp/wp-imgs/luxury/scenes/view[.]php
hawai-tour[.]com
http://www[.]trendshow[.]xyz/wp/wp-admin/control/
www[.]trendshow[.]xyz
http://eshopt[.]freeoda[.]com/phpBB3/phpbb/php/config/
eshopt[.]freeoda[.]com
10[.]6[.]139[.]114
http://www[.]trendshow[.]xyz/wp/wp-template/

MD5:

7b9f11c1f7e227b615600d92a1c2893e
79843ad2896ab0dd81e07f4b4a62b970
4c357078e539beca24f290ff532f5cfe

SHA256:

fe51590db6f835a3a210eba178d78d5eeafe8a47bf4ca44b3a6b3dfb599f1702
4f71c62df0163d301cbc96e70771ebec2d4410679240c1d94183f5e10879c2f1
93a01fbbdd63943c151679d037d32b1d82a55d66c6cb93c40ff63f2b770e5ca9
4de28886265c1c8dae529f8158bdc6fa88dc2f5a595f44f677ab56641a7d618f
394356a5fad986dc59bbbb13f51912d4651edeec25411a35ec7d11255dc7a85e
e68b35f526826971d7a8f3b3d622b9f3eec395512aa537336f6cef883488ea60
17507e78a9f2449394a55a9fa5cbf2f08a1d2b1fdeac01324b5257230d4dd202
fe51590db6f835a3a210eba178d78d5eeafe8a47bf4ca44b3a6b3dfb599f1702
58fef66f346fe3ed320e22640ab997055e54c8704fc272392d71e367e2d1c2bb
94c57c2f40e699e08c1a880e9d1a34f295d5fc3534d1401dfed608bf4f04bb9b
36f43755e5e5988d112f28fbc1dcd9bdee4a31fb7004b52db26dacdbfe7cb72f
9f8d0568db4442962d4cd876448437997fc546403d8842ccb78b377541a7be33
541ebc44761cace61b2939a73e6b40d2ed0b8805e52746260978e451e9944fa1
3c9e6b520acc5b2eb16a5d06b3c37418e7260c45b1aafa2c53c84950b19b727f
9d9571b93218f9a635cfeb67b3b31e211be062fd0593c0756eb06a1f58e187fd
e505da2176c80a99fb3659bdecc3e0d3622179e8d7db2b120ead5abd598aeabd
bf8e3f0430a2a53608432cca208ac7d932e84a557defcfcdcb468b68cfacd7f8

t. Dtrack.Stealer

The application code is based on the source code of Dtrack.Backdoor. The "1007" command of the Trojan Dtrack.Backdoor dumps all disk volume data to a file and uploads it to a host controlled by criminals. The stealer performs the similar actions.

Platform: N/A

Threat level: Middle

Category: Infostealer

Indicators of Compromise (IOCs)

CnC:

172[.]22[.]22[.]156
10[.]2[.]114[.]1
172[.]22[.]22[.]5
10[.]2[.]4[.]1
10[.]2[.]114[.]9
http://10[.]2[.]114[.]9/cgibin/lib/dbc/func[.]php

MD5:

4f8091a5513659b2980cb53578d3f798
a1d103ae93c8b7cba0ea5b03d0bd2d9d

u. BADCALL

BADCALL is composed of three separate files, the first two are Windows executables designed to disable the firewall (by modifying a registry key) and transform infected systems into proxy servers. They, too, disguise malicious C2 communications as encrypted HTTPS traffic, but in actuality they encrypt their activity using a rudimentary cipher (XOR/ADD and SUB/XOR, respectively). The third file is an Android Package Kit (APK) file designed to run on Android platforms as a fully functioning Remote Access Tool (RAT).

Platform: Android

Threat level: Middle

Category: remote-access-trojan

General information

The Trojan has the following functions of a backdoor:

- Record the microphone
- Capture from the camera
- Upload, execute, and manipulate local files
- Download remote files
- Record GPS information

- Read contact information
- Observe SMS or MMS messages
- Record web browsing history and bookmarks
- Scan and capture WiFi information

Indicators of Compromise (IOCs)

MD5:

12cc14bbbc421275c3c6145bfa186dff
150cc194e43a661288a43a422212dc3e
3ad421c887aee54527b22844baeabbfe
763f0e57113d5855bafafc03c15f5b8f
d93b6a5c04d392fc8ed30375be17beb4

SHA256:

edd2aff8fad0c76021adc74fe3cb3cb1a02913a839ad0f2cf31fdea8b5aa8195
a984a5ac41446db9592345e547afe7fb0a3d85fcbbbdc46e16be1336f7a54041
06cadaac0710ed1ef262e79c5cf12d8cd463b226d45d0014b2085432cdabb4f3
4607082448dd745af3261ebed97013060e58c1d3241d21ea050dcdf7794df416
4694895d6cc30a336d125d20065de25246cc273ba8f55b5e56746fddaadb4d8a

v. Electricfish

Electricfish is a malware variant that targets Windows systems and is used by the advanced persistent threat Lazarus Group. The malware contained a custom protocol that permits traffic to be funneled between source IP and destination IP addresses, allowing traffic to travel through proxies to outside a victim network, bypassing authentication requirements. This can be used by attackers to covertly exfiltrate data and stay hidden in the network.

Platform: Windows

Threat level: N/A

Category: tunneling-tool

Indicators of Compromise (IOCs)

MD5:

df934e2d23507a7f413580eae11bb7dc
41030182de3899cded5531fb0dad5a78
f9ced93b94c8c8a8c0de20028300e11d
8d9123cd2648020292b5c35edc9ae22e
fa51d3b55296436ad91099bc6fb13c9f
63440d2ba41916c5cb9f0f91f4c82b5a
ee54ae8df7b969c4fd6ffda465eeddd4
0ba6bb2ad05d86207b5303657e3f6874

22082079ab45ccc256e73b3a7fd54791

Network Signatures

TROJAN Win32/ElectricFish Authentication Packet Observed

alert tcp $HOME_NET any -> any any (msg:"TROJAN Win32/ElectricFish Authentication Packet Observed"; target:src_ip; flow:established,to_server; content:"aaaabbbbccccdddd|00 00 00 00 00 00 00 00|"; depth:24; fast_pattern; content:"|00 00 04 00 00 00|"; distance:2; within:6; reference:url,www.us-cert.gov/ncas/analysis-reports/AR19-129A; classtype:trojan-activity; sid:2027340; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, created_at 2019_05_09, deployment Perimeter, deployment Internal, former_category TROJAN, performance_impact Low, signature_severity Major, tag APT, tag T1090, tag connection_proxy, updated_at 2019_05_09, severity 3, ti_malware_id b44769790886c8833ba893d8927ff6c79108a51c, ti_malware_name Electricfish, malware_family Electricfish, rule_origin etpro;)

w. RATv3.ps

RATv3.ps - is a PowerShell remote access tool (RAT) or backdoor having the functionality to run commands, manipulate files, upload/download files from a C2 server, manipulate running processes, collect system information and manipulate the Windows registry.

Platform: Windows

Threat level: High

Category: Backdoor, remote-access-trojan

General information

It communicates over TLS with a custom protocol using XOR encoding. Minor obfuscation occurs throughout the script, which makes it slightly more difficult to analyse. The script uses several light forms of obfuscation. Function names and variable names are replaced with non-descriptive names, and strings are stored as base64 encoded Unicode.

This malware collects various operating system information and sends it to the C2 server. The collected data includes:

- Internal IP address
- Computer name
- Username
- OS version
- OS architecture
- Proxy status
- Proxy server

- Script path
- Last boot time
- OS caption
- OS language
- OS country code
- Primary C2 address and port
- Secondary C2 address and port
- 32/64 bit system

Indicators of Compromise (IOCs)

MD5:

b12325a1e6379b213d35def383da2986
aff88674d2869f79f9c6d5ecf5fc2d63
1e2795f69e07e430d9e5641d3c07f41e
3be75036010f1f2102b6ce09a9299bca
b88d4d72fdabfc040ac7fb768bf72dcd
7c651d115109fd8f35fddfc44fd24518
25376ea6ae0903084c45bf9c57bd6e4f
8a41520c89dce75a345ab20ee352fef0

x. Rising Sun

this is a full-featured modular backdoor that conducts reconnaissance on the victim's network.

Platform: N/A

Threat level: High

Category: Backdoor

General information

It was found that Rising Sun is based on the Duuzer Trojan family, which also belongs to cybercriminals from the Lazarus group.

The Rising Sun has 14 backdoor options:

- Execute commands
- Get disk information
- Disc type
- Total bytes on disk
- Total free bytes on disk
- Name of the specified volume
- Run a process from a binary Windows
- Get information about processes
- End the process

- Get file time
- Read file
- Clear process memory
- Burn file to disk
- Delete file
- Getting more information about files in a directory
- Connect to IP address
- Change file attributes

Indicators of Compromise (IOCs)

CnC:

87[.]101[.]243[.]252

MD5:

f3bd9e1c01f2145eb475a98c87f94a25
51b3e2c7a8ad29f296365972c8452621
f940a21971820a2fcf8433c28be1e967
71cdcc903f94f56c758121d0b442690f
bb6cbebd4ffd642d437afc605c32eca0

SHA256:

47181c973a8a69740b710a420ea8f6bf82ce8a613134a8b080b64ce26bb5db93
6b71465e59eb1e266d47efeaecc256a186d3e08f570bffcfd5ac55e635c67c2a
c7024cf43d285ec9671e8dc1eae87281a6ee6f28e92d69d94474efc2521f03ed
d57d772eefa6086b5c249efff01189cf4869c2b73007af63affc353474eaafcb
5b28c86d7e581e52328942b35ece0d0875585fbb4e29378666d1af5be7f56b46
fb6d81f4165b41febc739358aeba0fe15048e1d445296e8df9104875be30f9a7
d589043a6f460855445e35154c5a0ff9dbc8ee9e159ae880e38ca00ea2b9a94f
a01bd92c02c9ef7c4785d8bf61ecff734e990b255bba8e22d4513f35f370fd14
c327de2239034b6f6978884b33582ce97761bcc224239c955f62feebd01e5946
37f652e2060066a1c2c317195573a334416f5a9b9933cfb1ece55bea8048d80f
4cf3a7e17dc4628725dd34b8e98238ed0a2df2dc83189db98d85a38f73706fa5
fd5a7e54cfdd3b3f32b44d8fdd845e62d6b86c0ddb550c544d659588d06ceaee
4efeea9eeae3d668897206eeccb1444d542ea537ca5c2787f13dd5dadd0e6aaa
4a6aba1c182dd8304bac91cc9e1fc39291d78044995f559c1d3bce05afd19982
90d8643e7e52f095ed59ed739167421e45958984c4c9186c4a025e2fd2be668b
66df7660ddae300b1fcf1098b698868dd6f52db5fcf679fc37a396d28613e66b
89b25f9a454240a3f52de9bf6f9a829d2b4af04a7d9e9f4136f920f7e372909b
5a69bce8196b048f8b98f48c8f4950c8b059c43577e35d4af5f26c624140377c
477ca3e7353938f75032d04e232eb2c298f06f95328bca1a34fce1d8c9d12023
88a5287b6e9879e79240660408e2e868d9d332e3c37c753a05a40b87f1549646

y. KillDisk

KillDisk is a hard drive eraser software for secure formatting of hard drives without any possibility of following data recovery.

Platform: N/A

Threat level: N/A

Category: Trojan, wiper

Indicators of Compromise (IOCs)

SHA256:

edbc90c217eebabb7a9b618163716f430098202e904ddc16ce9db994c6509310
1a09b182c63207aa6988b064ec0ee811c173724c33cf6dfe36437427a5c23446
11b7b8a7965b52ebb213b023b6772dd2c76c66893fc96a18a9a33c8cf125af80
0dc82b9f257a3c03d51c4792fd6fc11a29814008651bbf40ae9cdd5f16455743
c4a07bfc37a44dc85df2c63f369abb530dc2193ab1be506fc5dd45d56a44ca76
91dfd9ef7d61ef1c1c20bf0dd29fd0e1862f02d94758d454cd7265d2171b8c88
5d2b1abc7c35de73375dd54a4ec5f0b060ca80a1831dac46ad411b4fe4eac4c6
368d5c536832b843c6de2513baf7b11bcafea1647c65df7b6f2648840fa50f75
c7536ab90621311b526aefd56003ef8e1166168f038307ae960346ce8f75203d
8a04f8481f1ef57f66b974802919e936c59a32d1cd9ef83186e6911b9ae773b0
a6a167e214acd34b4084237ba7f6476d2e999849281aa5b1b3f92138c7d91c7a
8a81a1d0fae933862b51f63064069aa5af3854763f5edc29c997964de5e284e5
f9f3374d89baf1878854f1700c8d5a2e5cf40de36071d97c6b9ff6b55d837fca

z. PowerSpritz

PowerSpritz is a Windows executable that hides both its valid payload and malicious PowerShell command using a custom implementation of the now rarely used Spritz encryption algorithm.

Platform: N/A

Threat level: N/A

Category: dropper

General information

Indicators of Compromise (IOCs)

CnC:

http://skype[.]2[.]vu/1
https://doc-00-64-docs[.]googleusercontent[.]com/docs/securesc/ha0ro937gcuc7l7deffksulhg5h7mbp1/

39cbphg8k5qve4q5rr6nonee1bueiu8o/1499428800000/13030420262846080952/*/0B63J1WTZC49hX1JnZUo4Y1pnRG8?e=download
http://122[.]248[.]34[.]23/Index[.]php?t=SkypeSetup&r=mail_new
http://201[.]211[.]183[.]215:8080/update[.]php?t=Skype&r=update
http://122[.]248[.]34[.]23/Index[.]php?t=Telegram&r=1[.]1[.]9
http://macintosh[.]linkpc[.]net:8080/mainls[.]cs
http://telegramupdate[.]2[.]vu/5
http://dogecoin[.]deaftone[.]com:8080/mainls[.]cs
http://skype[.]2[.]vu/k
http://skypeupdate[.]2[.]vu/1
https://drive[.]google[.]com/uc?export=download&id=0B63J1WTZC49hdDR0clR3cFplTVE
skype[.]2[.]vu
macintosh[.]linkpc[.]net
telegramupdate[.]2[.]vu
dogecoin[.]deaftone[.]com
skypeupdate[.]2[.]vu
104[.]236[.]48[.]227

MD5:

26466867557f84dd4784845280da1f27
ad99fd5711dbec2520f62385a595ee3b
b82f3e54bb97d4f92dc7c777f2e765ab
0518ca7a8bd6d93bbafc6022669d5459

SHA-256:

cbebafb2f4d77967ffb1a74aac09633b5af616046f31dddf899019ba78a55411
9ca3e56dcb2d1b92e88a0d09d8cab2207ee6d1f55bada744ef81e8b8cf155453
5a162898a38601e41d538f067eaf81d6a038268bc52a86cf13c2e43ca2487c07

aa. Joanap

Joanap is a fully functional RAT that can receive multiple commands that can be set remotely from a management server. Joanap usually infects the system as a file downloaded by other malware that users unknowingly downloaded either when visiting sites compromised by hackers or when opening malicious email attachments. Joanap gives cybercriminals the ability to expand data, load and run additional payloads, initialize proxy connections on a compromised Windows device, manage files and processes, create and delete directories, and manage nodes.

Platform: N/A

Threat level: N/A

Category: remote-access-trojan

Indicators of Compromise (IOCs)

CnC:

110[.]164[.]115[.]177
118[.]102[.]187[.]188
118[.]70[.]143[.]38
119[.]15[.]245[.]179
122[.]55[.]13[.]34
168[.]144[.]197[.]98
189[.]114[.]147[.]186
196[.]44[.]250[.]231
201[.]222[.]66[.]25
60[.]251[.]197[.]122
62[.]135[.]122[.]53
62[.]150[.]4[.]42
62[.]87[.]153[.]243
63[.]131[.]248[.]197
63[.]149[.]164[.]98
64[.]71[.]162[.]61
66[.]210[.]47[.]247
69[.]15[.]198[.]186
72[.]156[.]127[.]210
75[.]145[.]139[.]249
78[.]38[.]221[.]4
80[.]191[.]114[.]136
81[.]130[.]210[.]66
81[.]83[.]10[.]138
83[.]211[.]229[.]42
92[.]253[.]102[.]217
92[.]47[.]141[.]99
93[.]62[.]0[.]22
94[.]28[.]57[.]110
96[.]39[.]78[.]157

MD5:

298775B04A166FF4B8FBD3609E716945
4613f51087f01715bf9132c704aea2c2
fd59af723b7a4044ab41f1b2a33350d6
074dc6c0fa12cadbc016b8b5b5b7b7c5
27a3498690d6e86f45229acd2ebc0510
7a83c6cd46984a84c40d77e9acff28bc
1d8f0e2375f6bc1e045fa2f25cd4f7e0
304cea78b53d8baaa2748c7b0bce5dd0
a1ad82988af5d5b2c4003c42a81dda17

SHA-256:

29b8c57226b70fc7e095bb8bed4611d923f0bcefc661ebae5182168613b497f8
66d44e2bc7495662d068051c5a687d17c7e95c8f04acb0f06248b34cd255cd25
fae77c173815b561ad02d8994d0e789337a04d9966dd27a372fd9055f1ac58b1
c1c56c7eb2f6b406df908ae822a6ea936f9cc63010ee3c206186f356f2d1aa94
4c5b8c3e0369eb738686c8a111dfe460e26eb3700837c941ea2e9afd3255981e
113d705d7736c707e06fb37ac328080b3976838d0a7b021fd5fb299896c22c7c
1a6c3e5643d7e22554ac0a543c87a2897ea4ea5a07bc080943a310a391e20713
0b860af58a9d2d7607f09022aa69508b0966a1cc8d953d3995a5fe07f8fabcac
5d73d14525ced5bdf16181f70f4d931b9c942c1ae16e318517d1cd53f4cd6ea9
c34ad273d836b2f058bbd73ea9958d272bd63f4119dacacc310bf38646ff567b
500c713aa82a11c4c33e9617cad4241fcef85661930e4986c205233759a55ae8
5f5acf76a991c1ca33855a96ec0ac77092f2909e0344657fe3acf0b2419d1eea
c6d96be46ce3d616e0cb36d53c4fade7e954e74bfd2e34f9f15c4df58fc732d2
d558bb63ed9f613d51badd8fea7e8ea5921a9e31925cd163ec0412e0d999df58
006e0cc29697db70b2d4319f320aa0e52f78bf876646f687aa313e8ba04e6992
2d9edf45988614f002b71899740d724008e9a808efad00fa79760b31e0a08073
3d2a7ea04d2247b49e2dcad63a179ae6a47237eddbfd354082f1417a63e9696e
ea46ed5aed900cd9f01156a1cd446cbb3e10191f9f980e9f710ea1c20440c781
f4113e30d50e0afc4fa610a3181169bb03f6766aea633ed8c0c0d1639dfc5b29
08203b4ddc9571418b2631ebbc50bea57a00eadf4d4c28bd882ee8e831577a19
a3992ed9a4273de53950fc55e5b56cc5b1327ffee59b1cea9e45679adc84d008
575028bbfd1c3aaff27967c9971176ae7038902f1a67d70def55ae8456e6166d
428cf6ec1a4c947b51ec099a656f575ce42f67737ee53f3afc3068a25adb4c0d
f53e3e0b3c524471b1f064aabd0f782802abb4e29534a1b61a6b25ad8ec30e79

bb. Brambul

Brambul is a malicious SMB worm for 32-bit Windows that functions as a dynamic library service file or portable executable file that is frequently downloaded and installed on the victim's network by droppers. When executed, the malware attempts to contact victim systems and IP addresses on the local subnets of the victims. If successful, the application tries to gain unauthorized access via the SMB protocol (ports 139 and 445) by launching a brute force attack using a list of available passwords. In addition, the malware generates random IP addresses for further attacks.

Platform: N/A

Threat level: N/A

Category: remote-access-trojan

Indicators of Compromise (IOCs)

MD5:

e86c2f4fc88918246bf697b6a404c3ea
1c532fad2c60636654d4c778cfe10408
1db2dced6dfa04ed75b246ff2784046a
3844ec6ec70347913bd1156f8cd159b8
40878869de3fc5f23e14bc3f76541263
95a5f91931723a65dcd4a3937546da34
99d9f156c73bd69d5df1a1fe1b08c544
a1ad82988af5d5b2c4003c42a81dda17
ca4c2009bf7ff17d556cc095a4ce06dd
f273d1283364625f986050bdf7dec8bb

cc. BrowserPasswordDump

Browser Password Dump is the free command-line (cmd.exe) version of Browser Password Decryptor. This shady tool serves the purpose of recovering passwords from popular web browsers through cmd.exe.

Platform: Windows

Threat level: N/A

Category: N/A

Indicators of Compromise (IOCs)

MD5:

e74047ca6798423e47096c77efb0ca1d

dd. HARDRAIN

HARDRAIN is composed three malicious executable files. The first two are 32-bit, Windows-based dynamic link library (DLL) executables, which configure the Windows Firewall to allow incoming connections, thus allowing machines to function as proxies. Illicit communications are masked as HTTPS sessions by leveraging public certificates sourced from legitimate Internet services. In reality, however, the traffic is actually encrypted using an unidentified algorithm. Accompanying these two DLL files is an Android-based Executable Linkable Format (ELF) file that connects to hard-coded Internet Protocol (IP) addresses and acts as a RAT program.

Platform: Android

Threat level: Middle

Category: remote-access-trojan

Indicators of Compromise (IOCs)

MD5:

9ce9a0b3876aacbf0e8023c97fd0a21d
8b98bdf2c6a299e1fde217889af54845
24f61120946ddac5e1d15cd64c48b7e6

ee. Gh0st

Gh0st is a well-known Chinese RAT used on Windows platforms, and has been used to hack into some of the most sensitive computer networks on Earth. Gh0st presumably was made by. C.Rufus Security Team, source code is publicly available since 2011.

Platform: Windows

Threat level: High

Category: RAT

Other Name: Ghost, Gh0st RAT

General information

Gh0st is a well-known Chinese RAT used on Windows platforms, and has been used to hack into some of the most sensitive computer networks on Earth. Gh0st presumably was made by. C.Rufus Security Team, source code is publicly available since 2011.

Indicators of Compromise (IOCs)

CnC:

http://180[.]235[.]133[.]235/img[.]gif
http://phpvlan[.]com:8080
http://180[.]235[.]133[.]121/images/img[.]gif
phpvlan[.]com
Pi[.]mai1[.]info
162[.]251[.]120[.]179

MD5:

858eaa588a5e30cd5156b27f72caa0fe
a173106fa27ac9861054dbf881ba568a
f7b106acc281a9aa395fb944c858c0c0
bbf9822a903ef7b9f33544bc36197594
b47223ab622282cb5ae934cea8353a5b

SHA256:

0b1217bd95678ca4e6f81952226a0cfd639ce4b2f7e7fce94ab177d42c5abf62
afbcd0dd46988f3151a08da87740fb77d285fc4c6b20b4ae4456b7773050e960
3eb72d696525b2968a528bc66414c11f31babe7c19f815cba19b131ed35ffdb2
3a856d8c835232fe81711680dc098ed2b21a4feda7761ed39405d453b4e949f6

Network Signatures

Win32.Trojan.PCRat/Gh0st Beacon

alert tcp $HOME_NET any -> $EXTERNAL_NET any (msg:"Win32.Trojan.PCRat/Gh0st Beacon"; target:src_ip; flow:established,to_server; content:"greater!"; depth:8; threshold:type limit, track by_src, seconds 360, count 1; classtype:backdoor; reference:md5,44e65266280b6ab1832dc1bc24ea5a40; sid:1002066; rev:1; metadata:severity 5, ti_malware_id a4ed8587dd24232c3d4faf06f0be64b7ac0b2e6c, ti_malware_name Gh0st, malware_family Gh0st, rule_origin gib;)

TROJAN [CrowdStrike] ANCHOR PANDA - Adobe Gh0st Beacon

alert tcp $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN [CrowdStrike] ANCHOR PANDA - Adobe Gh0st Beacon"; target:src_ip; flow:established, to_server; content:"Adobe"; depth:5; content:"|e0 00 00 00 78 9c|"; distance:4; within:15; reference:url,blog.crowdstrike.com/whois-anchor-panda/index.html; classtype:backdoor; sid:2016656; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2013_03_22, deployment Perimeter, signature_severity Critical, tag PCRAT, tag Gh0st, tag RAT, updated_at 2016_07_01, severity 5, ti_malware_id a4ed8587dd24232c3d4faf06f0be64b7ac0b2e6c, ti_malware_name Gh0st, malware_family Gh0st, malware_family Panda, rule_origin etpro;)

TROJAN Backdoor family PCRat/Gh0st CnC traffic (OUTBOUND) 23

alert tcp $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Backdoor family PCRat/Gh0st CnC traffic (OUTBOUND) 23"; target:src_ip; flow:to_server,established; dsize:>11; content:"|78 9c|"; offset:8; byte_jump:4,-18,relative,little,from_beginning, post_offset 1; isdataat:!2,relative; pcre:"/^.{8}[\x20-\x7e]+?.{2}\x78\x9c/s"; reference:url,www.securelist.com/en/descriptions/10155706/Trojan-GameThief.Win32.Magania.eogz; reference:url,www.microsoft.com/security/portal/Threat/Encyclopedia/Entry.aspx?Name=Backdoor%3AWin32%2FPcClient.ZR&ThreatID=-2147325231; reference:md5,db1c4342f617798bcb2ba5655d32bf67; classtype:backdoor; sid:2018075; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2014_02_05, deployment Perimeter, former_category MALWARE, signature_severity Critical, tag PCRAT, tag Gh0st, tag RAT, updated_at 2016_07_01, severity 5, ti_malware_id a4ed8587dd24232c3d4faf06f0be64b7ac0b2e6c, ti_malware_name Gh0st, malware_family Gh0st, rule_origin etpro;)

TROJAN Gh0st_Apple Checkin

alert http $HOME_NET any -> $EXTERNAL_NET 110 (msg:"TROJAN Gh0st_Apple Checkin"; target:src_ip; flow:to_server,established; content:"GET"; http_method; content:".gif?pid"; fast_pattern; content:"&v="; content:"Mozilla/4.0("; http_user_agent; reference:url,contagiodump.blogspot.com.br/2013/09/sandbox-

miming-cve-2012-0158-in-mhtml.html;
reference:md5,82644661f6639c9fcb021ad197b565f7; classtype:backdoor;
sid:2017412; rev:8; metadata:affected_product
Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint,
created_at 2013_09_03, deployment Perimeter, former_category MALWARE,
signature_severity Critical, tag PCRAT, tag Gh0st, tag RAT, updated_at 2016_07_01,
severity 5, ti_malware_id a4ed8587dd24232c3d4faf06f0be64b7ac0b2e6c,
ti_malware_name Gh0st, malware_family Gh0st, rule_origin etpro;)

TROJAN Gh0st Trojan CnC 2

alert tcp $HOME_NET any -> $EXTERNAL_NET !25 (msg:"TROJAN Gh0st Trojan CnC
2"; target:src_ip; flow:established,to_server; dsize:<250; content:"Gh0st"; offset:8;
depth:5; classtype:backdoor; sid:2017505; rev:3; metadata:affected_product
Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint,
created_at 2013_09_20, deployment Perimeter, former_category MALWARE,
signature_severity Critical, tag PCRAT, tag Gh0st, tag RAT, updated_at 2016_07_01,
severity 5, ti_malware_id a4ed8587dd24232c3d4faf06f0be64b7ac0b2e6c,
ti_malware_name Gh0st, malware_family Gh0st, rule_origin etpro;)

TROJAN Backdoor family PCRat/Gh0st CnC traffic (OUTBOUND) 12 SET

alert tcp $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Backdoor family
PCRat/Gh0st CnC traffic (OUTBOUND) 12 SET"; target:src_ip;
flow:to_server,established; dsize:8; content:"|00 00|"; offset:2; depth:2; content:"|00
00|"; distance:2; within:2; flowbits:set,ET.gh0stFmly; flowbits:noalert;
reference:url,www.securelist.com/en/descriptions/10155706/Trojan-
GameThief.Win32.Magania.eogz;
reference:url,www.microsoft.com/security/portal/Threat/Encyclopedia/Entry.aspx?Na
me=Backdoor%3AWin32%2FPcClient.ZR&ThreatID=-2147325231;
reference:md5,3b1abb60bafbab204aeddf8acdf58ac9; classtype:backdoor;
sid:2017935; rev:3; metadata:affected_product
Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint,
created_at 2014_01_06, deployment Perimeter, former_category MALWARE,
signature_severity Critical, tag PCRAT, tag Gh0st, tag RAT, updated_at 2016_07_01,
severity 5, ti_malware_id a4ed8587dd24232c3d4faf06f0be64b7ac0b2e6c,
ti_malware_name Gh0st, malware_family Gh0st, rule_origin etpro;)

TROJAN Backdoor family PCRat/Gh0st CnC traffic (OUTBOUND) 15

alert tcp $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Backdoor family
PCRat/Gh0st CnC traffic (OUTBOUND) 15"; target:src_ip; flow:to_server,established;
dsize:>11; content:"FWKJGH"; offset:8; depth:6;
byte_jump:4,0,little,from_beginning,post_offset 5; isdataat:!2,relative;
reference:url,www.securelist.com/en/descriptions/10155706/Trojan-
GameThief.Win32.Magania.eogz;
reference:url,www.microsoft.com/security/portal/Threat/Encyclopedia/Entry.aspx?Na
me=Backdoor%3AWin32%2FPcClient.ZR&ThreatID=-2147325231;

reference:md5,edd8c8009fc1ce2991eef6069ae6bf82; classtype:backdoor; sid:2017974; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2014_01_16, deployment Perimeter, former_category MALWARE, signature_severity Critical, tag PCRAT, tag Gh0st, tag RAT, updated_at 2016_07_01, severity 5, ti_malware_id a4ed8587dd24232c3d4faf06f0be64b7ac0b2e6c, ti_malware_name Gh0st, malware_family Gh0st, rule_origin etpro;)

TROJAN Backdoor family PCRat/Gh0st CnC traffic (OUTBOUND) 17

alert tcp $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Backdoor family PCRat/Gh0st CnC traffic (OUTBOUND) 17"; target:src_ip; flow:to_server,established; dsize:>11; content:"AngeL"; depth:5; byte_jump:4,0,relative,little,from_beginning,post_offset -1; isdataat:!2,relative; reference:url,www.securelist.com/en/descriptions/10155706/Trojan-GameThief.Win32.Magania.eogz; reference:url,www.microsoft.com/security/portal/Threat/Encyclopedia/Entry.aspx?Name=Backdoor%3AWin32%2FPcClient.ZR&ThreatID=-2147325231; classtype:backdoor; sid:2018007; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2014_01_23, deployment Perimeter, former_category MALWARE, signature_severity Critical, tag PCRAT, tag Gh0st, tag RAT, updated_at 2016_07_01, severity 5, ti_malware_id a4ed8587dd24232c3d4faf06f0be64b7ac0b2e6c, ti_malware_name Gh0st, malware_family Gh0st, rule_origin etpro;

TROJAN Gh0st Remote Access Trojan Encrypted Session To CnC Server

alert tcp $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Gh0st Remote Access Trojan Encrypted Session To CnC Server"; target:src_ip; flow:established,to_server; dsize:100<>300; content:"Gh0st"; depth:5; reference:url,www.scribd.com/doc/13731776/Tracking-GhostNet-Investigating-a-Cyber-Espionage-Network; reference:url,www.symantec.com/connect/blogs/inside-back-door-attack; classtype:backdoor; sid:2013214; rev:5; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2011_07_06, deployment Perimeter, former_category MALWARE, signature_severity Critical, tag PCRAT, tag Gh0st, tag RAT, updated_at 2016_07_01, severity 5, ti_malware_id a4ed8587dd24232c3d4faf06f0be64b7ac0b2e6c, ti_malware_name Gh0st, malware_family Gh0st, rule_origin etpro;)

TROJAN Backdoor family PCRat/Gh0st CnC traffic (OUTBOUND) 5

alert tcp $HOME_NET any -> $EXTERNAL_NET [!5800] (msg:"TROJAN Backdoor family PCRat/Gh0st CnC traffic (OUTBOUND) 5"; target:src_ip; flow:to_server,established; dsize:>11; content:"|78 9c|"; fast_pattern; byte_jump:4,0,little,post_offset 1; isdataat:!2,relative; byte_extract:4,0,compressed_size,little; byte_test:4,>,compressed_size,4,little; pcre:"/^.{8}[\x20-\x7e]+?[\x00]*?\x78\x9c/s";

reference:url,www.securelist.com/en/descriptions/10155706/Trojan-GameThief.Win32.Magania.eogz; reference:url,www.microsoft.com/security/portal/Threat/Encyclopedia/Entry.aspx?Name=Backdoor%3AWin32%2FPcClient.ZR&ThreatID=-2147325231; classtype:backdoor; sid:2017876; rev:4; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2013_12_17, deployment Perimeter, former_category MALWARE, signature_severity Critical, tag PCRAT, tag Gh0st, tag RAT, updated_at 2019_10_07, severity 5, ti_malware_id a4ed8587dd24232c3d4faf06f0be64b7ac0b2e6c, ti_malware_name Gh0st, malware_family Gh0st, rule_origin etpro;)

ff. WannaCry

WannaCry, originally named as WanaCrypt, having aliases of Wana Crypt0r and Wana Decrypt0r, is a ransomware wormon Microsoft Windows (can be run on Linux via WINE) that uses two NSA-leaked tools that has wreaked havoc in airports, banks, universities, hospitals and many other facilities. It has spread to some 150 countries worldwide.

Platform: Windows

Threat level: High

Category: Ransomware

General information

On 12/05/2017, 2017 widespread use of ransomware WannaCry Cryptor that affects Microsoft Windows systems was observed. This ransomware has the behaviour of a worm and was spreader using exploit ETERNALBLUE. It scanned network and infected each vulnerable machine. Thus, great number of systems were infected in 11 countries during two hours. Big corporations and companies were affected. The threat actor is asking for $ 300 in Bitcoins to restore access to the files.

Security researches @MalwareTechBlog and Darien Huss (Proofpoint) established that the switch was hardcoded into the malware in case the creator wanted to stop it spreading. This involved a very long nonsensical domain name that the malware makes a request to – just as if it was looking up any website – and if the request comes back and shows that the domain is live, the kill switch takes effect and the malware stops spreading. This domain was unregistered, so researcher registered it in himself and stop spreading.

In addition, on 12/05/2017 Microsoft released patch for unsupported systems to fix this vulnerability.

Indicators of Compromise (IOCs)

CnC:

85[.]248[.]227[.]164
194[.]109[.]206[.]212
217[.]79[.]190[.]25
204[.]11[.]50[.]131
95[.]183[.]48[.]12
171[.]25[.]193[.]9
195[.]154[.]164[.]243
131[.]188[.]40[.]189
5[.]9[.]159[.]14
199[.]254[.]238[.]52
178[.]16[.]208[.]57
128[.]31[.]0[.]39
163[.]172[.]35[.]247
154[.]35[.]175[.]225
iuqssfsodp9ifjaposdfjhgosurijfaewrwergwea[.]com
ifferfsodp9ifjaposdfjhgosurijfaewrwergwea[.]com
104[.]17[.]37[.]137
104[.]17[.]38[.]137
104[.]17[.]39[.]137
104[.]17[.]40[.]137
104[.]17[.]41[.]137
212[.]51[.]134[.]123
5[.]199[.]142[.]236
197[.]231[.]221[.]221
149[.]202[.]160[.]69
46[.]101[.]166[.]19
91[.]121[.]65[.]179
2[.]3[.]69[.]209
146[.]0[.]32[.]144
50[.]7[.]161[.]218
87[.]101[.]243[.]252
184[.]74[.]243[.]67
203[.]69[.]210[.]247

MD5:

6f0338af379659a5155b3d2a4f1a1e92
3bc855bfadfea71a445080ba72b26c1c
f27cf59b00dacdd266ad7894a1df0894

TROJAN W32/WannaCry.Ransomware Killswitch Domain HTTP Request 1

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN W32/WannaCry.Ransomware Killswitch Domain HTTP Request 1"; target:src_ip; flow:established,to_server; content:"iuqerfsodp9ifjaposdfjhgosurijfaewrwergwea"; http_header; fast_pattern; content:"Host|3a 20|"; http_header; pcre:"/^[^\s]*iuqerfsodp9ifjaposdfjhgosurijfaewrwergwea\.[a-z]{2,5}\x0d\x0a/HRi"; reference:cve,2017-0144; reference:url,www.endgame.com/blog/wcrywanacry-ransomware-technical-analysis; reference:url,www.bleepingcomputer.com/news/security/telefonica-tells-employees-to-shut-down-computers-amid-massive-ransomware-outbreak/; classtype:ransomware; sid:2024298; rev:4; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_05_16, deployment Perimeter, former_category TROJAN, performance_impact Low, signature_severity Critical, tag Ransomware, updated_at 2019_10_07, severity 5, ti_malware_id 209b7f4c6f832f3d645dbf8ba8f6697ac649d3de, ti_malware_name WannaCry, malware_family WannaCry, rule_origin etpro;)

TROJAN W32/WannaCry.Ransomware Killswitch Domain HTTP Request 3

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN W32/WannaCry.Ransomware Killswitch Domain HTTP Request 3"; target:src_ip; flow:established,to_server; content:"ayylmaotjhsstasdfasdfasdfasdfasdfasdfasdf"; http_header; fast_pattern; content:"Host|3a 20|"; http_header; pcre:"/^[^\s]*ayylmaotjhsstasdfasdfasdfasdfasdfasdfasdf\.[a-z]{2,5}\x0d\x0a/HRi"; reference:cve,2017-0144; reference:url,www.endgame.com/blog/wcrywanacry-ransomware-technical-analysis; reference:url,www.bleepingcomputer.com/news/security/telefonica-tells-employees-to-shut-down-computers-amid-massive-ransomware-outbreak/; classtype:ransomware; sid:2024300; rev:5; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_05_16, deployment Perimeter, former_category TROJAN, performance_impact Low, signature_severity Critical, tag Ransomware, updated_at 2019_10_07, severity 5, ti_malware_id 209b7f4c6f832f3d645dbf8ba8f6697ac649d3de, ti_malware_name WannaCry, malware_family WannaCry, rule_origin etpro;)

TROJAN W32/WannaCry.Ransomware Killswitch Domain HTTP Request 2

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN W32/WannaCry.Ransomware Killswitch Domain HTTP Request 2"; target:src_ip; flow:established,to_server; content:"iuqerfsodp9ifjaposdfjhgosurijfaewrwergwea"; http_header; fast_pattern:only; content:"Host|3a 20|"; http_header; pcre:"/^[^\s]*iuqerfsodp9ifjaposdfjhgosurijfaewrwergwea\.[a-z]{2,5}\x0d\x0a/HRi"; reference:cve,2017-0144; reference:url,www.endgame.com/blog/wcrywanacry-ransomware-technical-analysis;

reference:url,www.bleepingcomputer.com/news/security/telefonica-tells-employees-to-shut-down-computers-amid-massive-ransomware-outbreak/; classtype:trojan-activity; sid:2024299; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_05_16, deployment Perimeter, former_category TROJAN, performance_impact Low, signature_severity Critical, tag Ransomware, updated_at 2017_05_18, severity 3, ti_malware_id 209b7f4c6f832f3d645dbf8ba8f6697ac649d3de, ti_malware_name WannaCry, malware_family WannaCry, rule_origin etpro;)

TROJAN W32/WannaCry.Ransomware Killswitch Domain HTTP Request 4

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN W32/WannaCry.Ransomware Killswitch Domain HTTP Request 4"; target:src_ip; flow:established,to_server; content:"iuqerfsodp9ifjaposdfjhgosurijfaewrwergwea"; http_header; fast_pattern:only; content:"Host|3a 20|"; http_header; pcre:"/^[^\s]*iuqerfsodp9ifjaposdfjhgosurijfaewrwergwea\.[a-z]{2,5}\x0d\x0a/HRi"; reference:cve,2017-0144; reference:url,www.endgame.com/blog/wcrywanacry-ransomware-technical-analysis; reference:url,www.bleepingcomputer.com/news/security/telefonica-tells-employees-to-shut-down-computers-amid-massive-ransomware-outbreak/; classtype:trojan-activity; sid:2024301; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_05_16, deployment Perimeter, former_category TROJAN, performance_impact Low, signature_severity Critical, tag Ransomware, updated_at 2017_05_18, severity 3, ti_malware_id 209b7f4c6f832f3d645dbf8ba8f6697ac649d3de, ti_malware_name WannaCry, malware_family WannaCry, rule_origin etpro;)

TROJAN W32/WannaCry.Ransomware Killswitch Domain HTTP Request 5

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN W32/WannaCry.Ransomware Killswitch Domain HTTP Request 5"; target:src_ip; flow:established,to_server; content:"iuqerfsodp9ifjaposdfjhgosurijfaewrwergwea"; http_header; fast_pattern:only; content:"Host|3a 20|"; http_header; pcre:"/^[^\s]*iuqerfsodp9ifjaposdfjhgosurijfaewrwergwea\.[a-z]{2,5}\x0d\x0a/HRi"; reference:cve,2017-0144; reference:url,www.endgame.com/blog/wcrywanacry-ransomware-technical-analysis; reference:url,www.bleepingcomputer.com/news/security/telefonica-tells-employees-to-shut-down-computers-amid-massive-ransomware-outbreak/; classtype:trojan-activity; sid:2024302; rev:3; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_05_16, deployment Perimeter, former_category TROJAN, performance_impact Low, signature_severity Critical, tag Ransomware, updated_at 2017_05_18, severity 3, ti_malware_id 209b7f4c6f832f3d645dbf8ba8f6697ac649d3de, ti_malware_name WannaCry, malware_family WannaCry, rule_origin etpro;)

TROJAN Possible WannaCry DNS Lookup 1

alert dns $HOME_NET any -> any any (msg:"TROJAN Possible WannaCry DNS Lookup 1"; target:src_ip; dns_query; content:"iuqerfsodp9ifjaposdfjhgosurijfaewrwergwea"; depth:41; nocase; reference:cve,2017-0144; reference:url,www.endgame.com/blog/wcrywanacry-ransomware-technical-analysis; reference:url,www.bleepingcomputer.com/news/security/telefonica-tells-employees-to-shut-down-computers-amid-massive-ransomware-outbreak/; classtype:ransomware; sid:2024291; rev:4; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_05_12, deployment Perimeter, former_category TROJAN, signature_severity Critical, tag Ransomware, updated_at 2020_08_20, severity 5, ti_malware_id 209b7f4c6f832f3d645dbf8ba8f6697ac649d3de, ti_malware_name WannaCry, malware_family WannaCry, rule_origin etpro;)

gg. DoublePulsar

DoublePulsar is a backdoor developed by Equation Group (Presumably, this group is part of ANB) that was leaked by The Shadow Brokers in early 2017. DoublePulsar can be classified as a "stager" - an implant that first gets on the infected device and serves to install other implants.

Platform: N/A

Threat level: High

Category: Backdoor

Indicators of Compromise (IOCs)

Network Signatures

EXPLOIT Possible DOUBLEPULSAR Beacon Response

alert smb $HOME_NET any -> any any (msg:"EXPLOIT Possible DOUBLEPULSAR Beacon Response"; target:src_ip; flow:from_server,established; content:"|00 00 00 23 ff|SMB2|02 00 00 c0 98 07 c0 00 00|"; depth:18; content:"|00 00 00 08 ff fe 00 08|"; distance:8; within:8; fast_pattern; pcre:"/^[\x50-\x59]/R"; content:"|00 00 00|"; distance:1; within:3; isdataat:!1,relative; classtype:ek-activity; sid:2024216; rev:1; metadata:attack_target SMB_Server, created_at 2017_04_17, deployment Internal, former_category EXPLOIT, signature_severity Critical, updated_at 2019_09_28, severity 3, ti_malware_id c7c12af404eff6f639799e6b103044f1aa0d7357, ti_malware_name DoublePulsar, malware_family DoublePulsar, rule_origin etpro;)

EXPLOIT [PTsecurity] DoublePulsar Backdoor installation communication

alert tcp any any -> $HOME_NET 445 (msg:"EXPLOIT [PTsecurity] DoublePulsar Backdoor installation communication"; target:src_ip; flow:to_server, established;

content:"|FF|SMB2|00 00 00 00|"; depth:9; offset:4;
byte_test:2,!=,0x0000,52,relative,little;
pcre:"/^.{52}(?:\x04|\x09|\x0A|\x0B|\x0C|\x0E|\x11)\x00/R";
reference:url,github.com/ptresearch/AttackDetection; classtype:attempted-admin;
sid:2024766; rev:2; metadata:affected_product
Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target SMB_Server, created_at
2017_09_25, deployment Internet, former_category EXPLOIT, performance_impact
Low, signature_severity Major, updated_at 2017_09_28, severity 1, ti_malware_id
c7c12af404eff6f639799e6b103044f1aa0d7357, ti_malware_name DoublePulsar,
malware_family DoublePulsar, rule_origin etpro;)

hh. Volgmer

Volgmer is a backdoor Trojan designed to provide covert access to a compromised system. Since at least 2013, Lazarus Group (aka Hidden Cobra) actors have been observed using Volgmer malware in the wild to target the government, financial, automotive, and media industries. It is a Destover-related backdoor and has several capabilities including: gathering system information, updating service registry keys, downloading and uploading files, executing commands, terminating processes, and listing directories. Also, a botnet controller functionality was discovered in one of the known samples. The malware communicates with its C&C server either through a custom binary protocol via TCP port 8080 or 8088 or by implementing Secure Socket Layer (SSL) encryption.

Platform: Windows

Threat level: High

Category: Backdoor

General information

Gather system information
Update service registry keys
Download and upload files
Execute commands
Terminate processes
List directories
Control botnets

Successful network intrusion could result in the following impacts:

Temporary or permanent loss of sensitive or proprietary information,
Disruption to regular operations,
Financial losses incurred to restore systems and files, and
Potential harm to an organization’s reputation.

Indicators of Compromise (IOCs)

CnC:

12[.]217[.]8[.]82
200[.]42[.]69[.]13
206[.]123[.]66[.]136
213[.]207[.]142[.]82
195[.]28[.]91[.]232
195[.]97[.]97[.]148
83[.]231[.]204[.]157
84[.]232[.]224[.]218
114[.]79[.]141[.]59
89[.]165[.]119[.]105
91[.]106[.]77[.]7
94[.]183[.]177[.]90
95[.]38[.]16[.]188
185[.]115[.]164[.]86
78[.]39[.]125[.]67
85[.]185[.]30[.]195
61[.]153[.]146[.]207
203[.]196[.]136[.]60
43[.]249[.]216[.]6
117[.]240[.]190[.]226
14[.]102[.]46[.]3
182[.]77[.]61[.]231
116[.]90[.]226[.]67
203[.]118[.]42[.]155
222[.]236[.]46[.]5
182[.]73[.]165[.]58
183[.]82[.]199[.]174
183[.]82[.]33[.]102
203[.]110[.]91[.]252
113[.]203[.]238[.]98
186[.]149[.]198[.]172
103[.]27[.]164[.]42
115[.]178[.]96[.]66
117[.]218[.]84[.]197
14[.]139[.]125[.]214
180[.]211[.]97[.]186
82[.]129[.]240[.]148
82[.]201[.]131[.]124
203[.]88[.]138[.]79
178[.]248[.]41[.]117

103[.]241[.]106[.]15
58[.]185[.]197[.]210
185[.]134[.]98[.]141
213[.]207[.]209[.]36
37[.]235[.]21[.]166
91[.]98[.]126[.]92
123[.]176[.]38[.]17
190[.]210[.]39[.]16
206[.]163[.]230[.]170
220[.]128[.]131[.]251
24[.]242[.]176[.]130
64[.]3[.]218[.]243
78[.]93[.]190[.]70
200[.]87[.]126[.]116
91[.]98[.]36[.]66
123[.]231[.]112[.]147
110[.]77[.]137[.]38
118[.]175[.]22[.]10
116[.]48[.]145[.]179
186[.]116[.]9[.]20
199[.]15[.]234[.]120
115[.]115[.]174[.]67
115[.]249[.]29[.]78
117[.]211[.]164[.]245
37[.]216[.]67[.]155
85[.]132[.]123[.]50
88[.]201[.]64[.]185
45[.]124[.]169[.]36
222[.]44[.]80[.]138
117[.]239[.]102[.]132
117[.]239[.]144[.]203
117[.]247[.]8[.]239
14[.]141[.]129[.]116
182[.]156[.]76[.]122
41[.]131[.]164[.]156
128[.]65[.]184[.]131
78[.]38[.]114[.]15
117[.]239[.]214[.]162
123[.]176[.]38[.]175
212[.]33[.]200[.]86
41[.]21[.]201[.]101
89[.]122[.]121[.]230
194[.]224[.]95[.]20

121[.]170[.]194[.]185
45[.]118[.]34[.]215
139[.]255[.]62[.]10
128[.]65[.]187[.]94
185[.]46[.]218[.]77
222[.]165[.]146[.]86
122[.]146[.]157[.]141
203[.]147[.]10[.]65
217[.]218[.]90[.]124
78[.]38[.]182[.]242
85[.]9[.]74[.]159
80[.]95[.]219[.]72
203[.]131[.]222[.]99
210[.]187[.]87[.]181
182[.]74[.]42[.]194
182[.]176[.]121[.]244
125[.]18[.]9[.]228
182[.]72[.]113[.]90
103[.]16[.]223[.]35
134[.]121[.]41[.]45
58[.]82[.]155[.]98
217[.]219[.]193[.]158
217[.]219[.]202[.]199
37[.]98[.]114[.]90
80[.]191[.]171[.]32
91[.]98[.]112[.]196
182[.]73[.]245[.]46
115[.]186[.]133[.]195
182[.]187[.]139[.]132
84[.]235[.]85[.]86
61[.]91[.]47[.]142
89[.]190[.]188[.]42
109[.]68[.]120[.]179
103[.]10[.]55[.]35
31[.]146[.]82[.]22
103[.]27[.]164[.]10
185[.]113[.]149[.]239
27[.]114[.]187[.]37
140[.]136[.]205[.]209
125[.]25[.]206[.]15
117[.]247[.]63[.]127
118[.]67[.]237[.]124
125[.]17[.]79[.]35

200[.]42[.]69[.]133
112[.]133[.]214[.]38
199[.]68[.]196[.]125
113[.]28[.]244[.]194

MD5:

2D2B88AE9F7E5B49B728AD7A1D220E84
9A5FA5C5F3915B2297A1C379BE9979F0
BA8C717088A00999F08984408D0C5288
1B8AD5872662A03F4EC08F6750C89ABC
E034BA76BEB43B04D2CA6785AA76F007
EB9DB98914207815D763E2E5CFBE96B9
143cb4f16dcfc16a02812718acd32c8f
1ecd83ee7e4cfc8fed7ceb998e75b996
35f9cfe5110471a82e330d904c97466a
5dd1ccc8fb2a5615bf5656721339efed
81180bf9c7b282c6b8411f8f315bc422
e3d03829cbec1a8cca56c6ae730ba9a8
82777a88d6f2ffd53f8c5ae5a6b6565b
b13ad0e8ffca0572b6ac9a5ee1d03f21
f9e6c35dbb62101498ec755152a8a67b
a545f548b09fdf61405f5cc07e4a7fa1
a976c54b849939b35a1b8dbc930c029d
aefcd8e98a231bccbc9b2c6d578fc8f3
8dc5877956229c5139670b1f75fb0953
53098c29b748e881e4d62720d7190ac5
af1f7d8ec11ce9bb4609a1088dea0e85
3a6b48871abbf2a1ce4c89b08bc0b7d8

Network Signatures

Possible Volgmer User-Agent

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Possible Volgmer User-Agent"; target:src_ip; flow:established,to_server; content:"Mozillar/"; http_user_agent; depth:9; classtype:backdoor; reference:url,https://www.us-cert.gov/ncas/alerts/TA17-318B; sid:1002080; rev:1; metadata:severity 5, ti_malware_id faece0aa10e65d5804c138704c65c4ed54e144df, ti_malware_name Volgmer, malware_family Volgmer, rule_origin gib;)

ii. FASTCash

This malware in turn intercepts fraudulent Lazarus cash withdrawal requests and sends fake approval responses, allowing the attackers to steal cash from ATMs.

Platform: ATM, Windows

Threat level: High

Category: atm-malware

Indicators of Compromise (IOCs)

MD5:

b3efec620885e6cf5b60f72e66d908a9
b66be2f7c046205b01453951c161e6cc
46b318bbb72ee68c9d9183d78e79fb5a
d790997dd950bb39229dc5bd3c2047ff
a2b1a45a242cee03fab0bedb2e460587

jj. Duuzer

Duuzer is a backdoor Trojan. After installing Duuzer, cybercriminals have the following capabilities:

- Gathering information about the system and disks
- Create, number and end processes
- Access, download, modify and delete files
- Change temporary file attributes
- Execute commands.

Platform: N/A

Threat level: N/A

Category: Backdoor

Indicators of Compromise (IOCs)

MD5:

1205c4bd5d02782cc4e66dfa3fef749c
92d618db54690c6ae193f07a31d92098
3e6be312a28b2633c8849d3e95e487b5
41a6d7c944bd84329bd31bb07f83150a
7343f81a0e42ebf283415da7b3da253f
73471f41319468ab207b8d5b33b0b4be
84a3f8941bb4bf15ba28090f8bc0faec
b04fabf3a7a710aafe5bc2d899c0fc2b
e04792e8e0959e66499bfacb2a76802b
3a963e1de08c9920c1dfe923bd4594ff
51b3e2c7a8ad29f296365972c8452621

5f05a8f1e545457dbd42fe1329f79452
91e5a64826f75f74a5ae123abdf7cef5
9749a4b538022e2602945523192964ad
9ca7ec51a98c2b16fd7d9a985877a4ba
bb6cbebd4ffd642d437afc605c32eca0
fb4caaaf1ac1df378d05111d810a833e
4b2d221deb0c8042780376cb565532f8
cd7a72be9c16c2ece1140bc461d6226d
f032712aa20da98a1bbad7ae5d998767
f940a21971820a2fcf8433c28be1e967
71cdcc903f94f56c758121d0b442690f
0f844300318446a70c022f9487475490

kk. Destover

Destover is a trojan that has dropper, backdoor and wiper functions. Destover's destructive payload is produced using igfxtrayex.exe.

- Delete all files on stationary and remote drives
- Change the partition table
- Install additional modules
- Connect to multiple IP addresses on ports 8080 and 8000.

Platform: N/A

Threat level: N/A

Category: Backdoor

Indicators of Compromise (IOCs)

CnC:

124[.]47[.]73[.]194
165[.]138[.]120[.]35
187[.]176[.]34[.]40
203[.]131[.]222[.]102
177[.]19[.]132[.]216
185[.]30[.]198[.]1
202[.]39[.]254[.]231
203[.]113[.]122[.]163
140[.]134[.]23[.]140
203[.]131[.]210[.]247
114[.]143[.]184[.]19
211[.]76[.]87[.]252
59[.]125[.]119[.]135
65[.]117[.]146[.]5
93[.]157[.]14[.]154

62[.]0[.]79[.]45
59[.]90[.]208[.]171
206[.]248[.]59[.]124
87[.]101[.]243[.]252
187[.]111[.]14[.]62
209[.]237[.]95[.]19
71[.]40[.]211[.]3
85[.]112[.]29[.]106
201[.]25[.]189[.]114
208[.]87[.]77[.]153
201[.]216[.]206[.]49
69[.]54[.]32[.]30
223[.]255[.]129[.]230
37[.]148[.]208[.]67
200[.]87[.]126[.]117
94[.]199[.]145[.]55
185[.]20[.]218[.]28
177[.]52[.]193[.]198
201[.]22[.]95[.]127
1[.]202[.]129[.]201
113[.]10[.]158[.]4
124[.]81[.]92[.]85
196[.]36[.]64[.]50
103[.]233[.]121[.]22
200[.]202[.]169[.]103
202[.]152[.]17[.]116
37[.]34[.]176[.]14
202[.]182[.]50[.]211
208[.]105[.]226[.]235
213[.]42[.]82[.]243
31[.]210[.]53[.]11
59[.]125[.]62[.]35
91[.]183[.]41[.]5
148[.]238[.]251[.]30
175[.]111[.]4[.]4
185[.]81[.]99[.]17
201[.]163[.]208[.]37
203[.]115[.]13[.]105
210[.]211[.]124[.]229
67[.]229[.]173[.]226
91[.]183[.]71[.]18
208[.]69[.]30[.]151
161[.]139[.]39[.]234

31[.]210[.]54[.]14
5[.]22[.]140[.]93
87[.]101[.]243[.]246
90[.]80[.]152[.]49
110[.]77[.]140[.]155
161[.]246[.]14[.]35
186[.]167[.]17[.]115
175[.]45[.]4[.]158
61[.]91[.]100[.]211
62[.]141[.]29[.]175
184[.]20[.]197[.]204
110[.]78[.]165[.]32
202[.]9[.]100[.]206
41[.]21[.]201[.]107
184[.]173[.]254[.]54
101[.]76[.]99[.]183
199[.]83[.]230[.]236
187[.]54[.]39[.]210
37[.]58[.]148[.]34
112[.]206[.]230[.]54
177[.]189[.]204[.]214
203[.]170[.]66[.]206
41[.]76[.]46[.]182
78[.]38[.]114[.]213
203[.]132[.]205[.]250
113[.]160[.]112[.]125
177[.]0[.]154[.]88
194[.]165[.]149[.]51
196[.]202[.]33[.]106
88[.]53[.]215[.]64
217[.]96[.]33[.]164

MD5:

d1c27ee7ce18675974edf42d4eea25c6
760c35a80d758f032d02cf4db12d3e55
e1864a55d5ccb76af4bf7a0ae16279ba
b80aa583591eaf758fd95ab4ea7afe39
2618dd3e5c59ca851f03df12c0cab3b8

SHA-256:

201a9c5fe6a8ae0d1c4312d07ef2066e5991b1462b68f102154bb9cb25bf59f9
f6cb8343444771c3d03cc90e3ac5f76ff9a4cb9cd41e65c3b7f52b38b20c0c27
0753f8a7ae38fdb830484d0d737f975884499b9335e70b7d22b7d4ab149c01b5
4d4b17ddbcf4ce397f76cf0a2e230c9d513b23065f746a5ee2de74f447be39b9

e0066ddc9e6f62e687994a05027e3eaa02f6f3ad6d71d16986b757413f2fb71c
9ec83d39d160bf3ea4d829fa8d771d37b4f20bec3a68452dfc9283d72cee24f8
10d3ab45077f01675a814b189d0ac8a157be5d9f1805caa2c707eecbb2cbf9ac
33207f4969529ad367909e72e0f9d0a63c4d1db412e41b05a93a7184ec212af1
389ee412499fd90ef136e84d5b34ce516bda9295fa418019921356f35eb2d037
e0ce1f4b9ca61747467cee56307f9ea15dd6935f399837806f775e9b4f40e9ca
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47830371f6f3d90d6a9fbe39e7f8d43a2e126090457448d0542fcbec4982afd6
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d94ceade521452864ae8daae9d6b202a79d4761f755c7c769ec4e103c7c3127d
bebf6266e765f7a0eefcde7c51507cc9f6e3b5d5b82a001660454e4e84f6e032
4166f6637b3b11f69cccbeb775f9ee6987a5a30475c54db189b837ee3fbbf0d1
eeb146ebbc3f144f5a6156d07322a696eead9c4895a9a6f94212d24056acd41c
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68006e20a2f37609ffd0b244af30397e18df07483001150bcc685a9861e43d44
d8fedef123b3d386f0917f11db9fae0956ffe5b16a9aaad8805f72309437d066
2368ee0e0001599b7789d8199c7b19f362a87925118ae054309d85f960d982ec
6e3db4da27f12eaba005217eba7cd9133bc258c97fe44605d12e20a556775009
98abfcc9a0213156933ccd9cb0b85dc51f50e498dbfdec62f6a66dc0660d4d92
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453d8bd3e2069bc50703eb4c5d278aad02304d4dc5d804ad2ec00b2343feb7a4
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9b4c90ca8906e9fea63c9ea7a725db5fc66e1ca6c2a20bec2e8c1749b0000af5
b0cfaab0140f3ea9802dc6ed25bf208a2720fb590733966b7a3e9264a93a4e66
b3c0b7e355bee34cdb73d0bbdb1ba1b61797c035db31f0c82b19f9aa6a7abcc7
36844e66e5f4d802595909e2cbe90a96ad27da6b254af143b6611ab9ee85a13e
4efeea9eeae3d668897206eeccb1444d542ea537ca5c2787f13dd5dadd0e6aaa
5b28c86d7e581e52328942b35ece0d0875585fbb4e29378666d1af5be7f56b46
66df7660ddae300b1fcf1098b698868dd6f52db5fcf679fc37a396d28613e66b
72008e5f6aab8d58e4c8041cde20ee8a4d208c81e2b3770dbae247b86eb98afe
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899ff9489dde2c5f49d6835625353bfe5ea8ca3195ca01362987a9d4bdac162d
8b50d7d93565aab87c21e42af04230a63cd076d19f8b83b063ef0f61d510adc7
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ac27cfa2f2a0d3d66fea709d7ebb54a3a85bf5134d1b20c49e07a21b6df6255a
c5be570095471bef850282c5aaf9772f5baa23c633fe8612df41f6d1ebe4b565
ce0e43c2b9cb130cd36f1bc5897db2960d310c6e3382e81abfa9a3f2e3b781d7
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763d1cb589146dd44e082060053ffbf5040830c79be004f848a9593d6be124ac
02d1d4e7acd9d3ec22588d89aed31c9a9d55547ef74fa3749659b610893f5405
47181c973a8a69740b710a420ea8f6bf82ce8a613134a8b080b64ce26bb5db93
e187811826b2c33b8b06bd2392be94a49d068da7f703ae060ee4faffde22c2fe
2811fdceb8a8aa03bbf59c0b01a43bd1f2aee675a8f20d38194258046987e5fa
39e53ba6984782a06188dc5797571897f336a58b8d36020e380aa6cd8f1c40a2
530a0f370f6f3b78c853d1e1a6e7105f6a0f814746d8a165c4c694a40c7ad09a
7a2a740d60bd082c1b50ab915ef86cc689ba3a25c35ac12b24e21aa118593959
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477ca3e7353938f75032d04e232eb2c298f06f95328bca1a34fce1d8c9d12023
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89b25f9a454240a3f52de9bf6f9a829d2b4af04a7d9e9f4136f920f7e372909b
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b93793e3f9e0919641df0759d64d760aa3fdea9c7f6d15c47b13ecd87d48e6a9
d589043a6f460855445e35154c5a0ff9dbc8ee9e159ae880e38ca00ea2b9a94f
92cc25e9a87765586e05a8246f7edb43df1695d2350ed921df403bdec12ad889
f2a14c5ef6669d1eb08fababb47a4b13f68ec8847511d4c90cdca507b42a5cf3
520778a12e34808bd5cf7b3bdf7ce491781654b240d315a3a4d7eff50341fb18
e55fff05de6f2d5d714d4c0fa90e37ef59a5ec4d90fdf2d24d1cb55e8509b065
e506987c5936380e7fe0eb1625efe48b431b942f61f5d8cf59655dc6a9afc212
2477f5e6620461b9146b32a9b49def593755ac9788fc4beeee81bf248aa2e92a
f69747d654acc33299324e1da7d58a0c8a4bd2de464ec817ad201452a9fa4b54
44884565800eebf41185861133710b4a42a99d80b6a74436bf788c0e210b9f50
2f629c3c65c286c7f55929e3d0148722c768c730a7d172802afe4496c0abd683
b5e1740312b734fb70a011b6fe52c5504c526a4cccb55e154177abe21b1441c9
0e162a2f07454d65eaed0c69e6c91dd10d29bdb27e0b3b181211057661683812
a53e33c77ecb6c650ee022a1311e7d642d902d07dd519758f899476dbaae3e49
c95eaedaafd8041bb0fea414b4ebc0f893f54cdec0f52978be13f7835737de2a
da255866246689572474d13d3408c954b17d4cc969c45d6f45827799e97ed116
8465138c0638244adc514b2722fcb60b2a26a8756aa7d97f150e9bdc77e337cc
77a32726af6205d27999b9a564dd7b020dc0a8f697a81a8f597b971140e28976
794b5e8e98e3f0c436515d37212621486f23b57a2c945c189594c5bf88821228
c248da81ba83d9e6947c4bff3921b1830abda35fed3847effe6387deb5b8ddbb
fba0b8bdc1be44d100ac31b864830fcc9d056f1f5ab5486384e09bd088256dd0
c3f5e30b10733c2dfab2fd143ca55344345cc25e42fbb27e2c582ba086fe3326

II. Koredos

Trojan.Koredos / DDoS-KSig / DeltaAlfa Trojan.Koredos is a Trojan horse that attempts to carry out DDoS attacks and encrypts data files found on the infected computer.

Platform: N/A

Threat level: N/A

Category: DDoS

Other Name: Trojan.Koredos, DDoS-KSig, DeltaAlfa

Indicators of Compromise (IOCs)

SHA256:

a256459a3efa052aa924775d79a9ca28d0e304a45819ab49fef56cca9bf83d16
f09dae150921aa57673a0f1737f9c384399dcf1987eb735cef0111ea1ba3c895
57477b0ca0214ab4c73030aa652dd26131315e0350bfa5d7738236357a0fc93a

mm. KorDllBot

It is a family of small/medium size trojans that usually are configured to be installed as services.

Platform: N/A

Threat level: N/A

Category: Backdoor

Other Name: Redobot

General information

KorDllbot is a family of small/medium size trojans that usually are configured to be installed as services. Samples can vary a great deal in functionality - from just listening on a port and accepting commands, to harvesting data, to actively spreading over SMB. This functionality seems almost modular, using different encryption and encoding methods and different C&C command words.

Common capability seen in the KorDllbot family is:

- Get bot status
- List logical drives
- List directory
- Change directory
- Get process list
- Kill process
- Execute file
- Delete file
- Change file time
- Execute shell command
- Download file
- Upload file
- Get volume serial number

- Get file attributes

Indicators of Compromise (IOCs)

SHA-256:

2d9edf45988614f002b71899740d724008e9a808efad00fa79760b31e0a08073
6e8a2329567cdbbba68460ccb97209867d7508983cb638662b33bfe90d0134d4
e0cd4eb8108dab716f3c2e94e6c0079051bfe9c7c2ed4fcbfdd16b4dd1c18d4d
9d9889585f1a4048a3955d3a9cead2f426a509afaeacad27540382cc3266f0fa
9bc8fe605a4ad852894801271efd771da688d707b9fbe208106917a0796bbfdc
0a27acaaebc7db0878239b40ab9d2feff13888839c05a03348fc09b78de6ced5
f98c67c4cf9b02acaabb555664a0d9d648a1e43f681f9bf234af066d5451be8d
1226d3635c1a216be9316c9dfa97f103c79ed4c44397e5e675d3b1e37786bf31
e97a8909349a072ed945899fbe276fc27e9c5847bc578b0abccf017da3fd680c
82169a2d8f15680c93e1436687538afa01d6a2ecfe7a7cb613817c64a1a82342
162d6223c1c1219ca81a77e60e6b776058517272fe7cac828a3f64dcacd87811
c16a66c1d8e681e962f03728411230fe7c618b7294c143422005785d3a724ec4
87e68055959328d857b287e797896d9a96695b69ed300a843eee73319427b3b3
7b171a160cb2a17f87ca6a4a1c62b4cd9e718f987b7278d3effe0614b5b51be4
dda136bc51670e57a4b2f091f83ab7b44291a9323d5483abd9e91b78221e027f
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96c35225dc4cac65cc43a6cc6cdcce3d13b3bda286c8c65cad5f2879f696ad2a
29355f6d4341089b36834b4a941ef96b3bf758a4fe35fbb401cc4e74b9b1c90f
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6059cb08489170aea77caf0940131e5765b153a593e76d93a0f244e89ddb9e90
c4852ddba88e5c53a8711c4c7540b7ac98dac6b9e31d10dd999a81a4f0e117c3
888844c040be9d0fc3dab00dd004aa9e8619f939aff2eba21e4f48ca20e13784
d7044a35e76543a03cd343d71652c7bbd9a28e246d7f3a43f4a2e75cd0ef7366
c5baece9978649659220af2681a3a43b83f8ae47afdd3862185d1fec7735a7d2
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7a538c3eed1f01b62a19226750c1369e4e9210b1331d5829ca91fe2b69087f06
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ea46ed5aed900cd9f01156a1cd446cbb3e10191f9f980e9f710ea1c20440c781
87bae4517ff40d9a8800ba4d2fa8d2f9df3c2e224e97c4b3c162688f2b0d832e
fd95e095658314c9815df6a97558897cb344255bd54d03c965fa4cbd16d7bafd
a4b982d4e7137d7d3687f3127e6d5c2a8b2be1f53daeebce9175461c7e6a53cd

81067f057d523fdcddf7df1da39a7c3614c45f6bff6bd387274c049244efda3b
9e226a5eb4de19fcb3f7ecc3abcf52ea22a1f1a42a08dd104f5f7a00164e074e
08203b4ddc9571418b2631ebbc50bea57a00eadf4d4c28bd882ee8e831577a19
8e3c3398353931c513c32330c07f65b6ee6f62fc7a56edac7cbe4edb1bf4c74e
bb4204dd059849848e9492523ce32520bf37cb80974320c0ca71f3b79e83f462
2f8c448bb05ed1218e638c61bb56ebb953b962ed5e065b08fa03cfcf6f6a1c68
73edc54abb3d6b8df6bd1e4a77c373314cbe99a660c8c6eea770673063f55503
3ebb3d8292a1aa5dc81b028beeefdec0f0448516d6225b336ee37d550ab8c3ab
792b484ac94f0baefc7e016895373ba92c2927e3463f62adb701ddbe4c90604c
163571bd56001963c4dcb0650bb17fa23ba23a5237c21f2401f4e894dfe4f50d
3d2a7ea04d2247b49e2dcad63a179ae6a47237eddbfd354082f1417a63e9696e
af7b53ce584b83085488e1190e1458948eaf767631f766e446354d0d5523e9d0
041605e498bb41b07d2d43003152cc2a992e7e2ade7a47ee9aef2570bdb16d94
9bcecd6afa54eb4f343b7eb82a86ceee189cc10bc91fa83f8cdc98cc5aaef117
b7f2595dd62d1174ce6e5ddf43bf2b42f7001c7a4ec3c4cbe3359e30c674ed83
b039383a19e3da74a5a631dfe4e505020a5c5799578187e4ccc016c22872b246
94e14a85a2046b40842f6c898c5f6c3200de3d89c178a9a9f9a639c1d3de9ee9

nn. DYEPACK

DYEPACK is a tool, which is used to work with SWIFT, consists of SWIFT Alliance software Hook Files and SWIFT transactions Information Harvester. It allows attackers to initiate transactions, steal money, and hide any evidence of the fraudulent transactions from the victimized bank.

Indicators of Compromise (IOCs)

Yara Rules

```
rule win_dyepack_auto {

   meta:
      author = "Felix Bilstein - yara-signator at cocacoding dot com"
      date = "2021-10-07"
      version = "1"
      description = "Detects win.dyepack."
      info = "autogenerated rule brought to you by yara-signator"
      tool = "yara-signator v0.6.0"
      signator_config = "callsandjumps;datarefs;binvalue"
      malpedia_reference = "https://malpedia.caad.fkie.fraunhofer.de/details/win.dyepack"
      malpedia_rule_date = "20211007"
      malpedia_hash = "e5b790e0f888f252d49063a1251ca60ec2832535"
      malpedia_version = "20211008"
      malpedia_license = "CC BY-SA 4.0"
      malpedia_sharing = "TLP:WHITE"

   /* DISCLAIMER
    * The strings used in this rule have been automatically selected from the
    * disassembly of memory dumps and unpacked files, using YARA-Signator.
```

```
    * The code and documentation is published here:
    * https://github.com/fxb-cocacoding/yara-signator
    * As Malpedia is used as data source, please note that for a given
    * number of families, only single samples are documented.
    * This likely impacts the degree of generalization these rules will offer.
    * Take the described generation method also into consideration when you
    * apply the rules in your use cases and assign them confidence levels.
    */

    strings:
        $sequence_0 = { 8d542418 53 52 8d44242c 51 }
            // n = 5, score = 300
            //   8d542418           | lea             edx, dword ptr [esp + 0x18]
            //   53                 | push            ebx
            //   52                 | push            edx
            //   8d44242c           | lea             eax, dword ptr [esp + 0x2c]
            //   51                 | push            ecx

        $sequence_1 = { 56 ff15???????? 85c0 741e 8b442418 3bc3 }
            // n = 6, score = 300
            //   56                 | push            esi
            //   ff15????????       |
            //   85c0               | test            eax, eax
            //   741e               | je              0x20
            //   8b442418           | mov             eax, dword ptr [esp + 0x18]
            //   3bc3               | cmp             eax, ebx

        $sequence_2 = { 8b4c2410 33ed 33ff 3bc3 7c60 }
            // n = 5, score = 300
            //   8b4c2410           | mov             ecx, dword ptr [esp + 0x10]
            //   33ed               | xor             ebp, ebp
            //   33ff               | xor             edi, edi
            //   3bc3               | cmp             eax, ebx
            //   7c60               | jl              0x62

        $sequence_3 = { 3be9 72ac 56 ff15???????? 56 ff15???????? 8b8c2428100000 }
            // n = 7, score = 300
            //   3be9               | cmp             ebp, ecx
            //   72ac               | jb              0xffffffae
            //   56                 | push            esi
            //   ff15????????       |
            //   56                 | push            esi
            //   ff15????????       |
            //   8b8c2428100000     | mov             ecx, dword ptr [esp + 0x1028]

        $sequence_4 = { 81f900100000 760b b900100000 895c2420 eb04 89442420 }
            // n = 6, score = 300
            //   81f900100000       | cmp             ecx, 0x1000
            //   760b               | jbe             0xd
            //   b900100000         | mov             ecx, 0x1000
            //   895c2420           | mov             dword ptr [esp + 0x20], ebx
```

```
        // eb04             | jmp             6
        // 89442420         | mov             dword ptr [esp + 0x20], eax

    $sequence_5 = { ff15???????? 8d442410 895c2410 50 56 }
        // n = 5, score = 300
        // ff15????????     |
        // 8d442410         | lea             eax, dword ptr [esp + 0x10]
        // 895c2410         | mov             dword ptr [esp + 0x10], ebx
        // 50               | push            eax
        // 56               | push            esi

    $sequence_6 = { eb04 89442420 8d542418 53 52 8d44242c 51 }
        // n = 7, score = 300
        // eb04             | jmp             6
        // 89442420         | mov             dword ptr [esp + 0x20], eax
        // 8d542418         | lea             edx, dword ptr [esp + 0x18]
        // 53               | push            ebx
        // 52               | push            edx
        // 8d44242c         | lea             eax, dword ptr [esp + 0x2c]
        // 51               | push            ecx

    $sequence_7 = { ff15???????? 8b8c2428100000 53 51 e8???????? 83c408 }
        // n = 6, score = 300
        // ff15????????     |
        // 8b8c2428100000   | mov             ecx, dword ptr [esp + 0x1028]
        // 53               | push            ebx
        // 51               | push            ecx
        // e8????????       |
        // 83c408           | add             esp, 8

    $sequence_8 = { ffd7 8d4c2418 53 51 8d54242c }
        // n = 5, score = 300
        // ffd7             | call            edi
        // 8d4c2418         | lea             ecx, dword ptr [esp + 0x18]
        // 53               | push            ebx
        // 51               | push            ecx
        // 8d54242c         | lea             edx, dword ptr [esp + 0x2c]

    $sequence_9 = { 55 6a02 53 6aff 56 ffd7 8d4c2418 }
        // n = 7, score = 300
        // 55               | push            ebp
        // 6a02             | push            2
        // 53               | push            ebx
        // 6aff             | push            -1
        // 56               | push            esi
        // ffd7             | call            edi
        // 8d4c2418         | lea             ecx, dword ptr [esp + 0x18]

    condition:
        7 of them and filesize < 212992
}
```

Reference URL:

https://malpedia.caad.fkie.fraunhofer.de/details/win.dyepack

Related malware analysis video URL:

https://media.ccc.de/v/froscon2021-2670-der_cyber-bankraub_von_bangladesch

oo. Client_RAT

The Client_RAT program provides full control over the target system: it allows you to analyze the system, download and execute files, transfer data from the infected computer to the C&C server. Communications with the C&C server are performed over an encrypted SSL channel. For this purpose, Client_RAT uses statically linked libcurl libraries, version 7.47.1 (FEB 2016).

Threat level: High

Category: remote-access-trojan

Indicators of Compromise (IOCs)

MD5:

9216b29114fb6713ef228370cbfe4045
8e32fccd70cec634d13795bcb1da85ff

SHA256:

6c1d8c4afbc7f85f05fb2e4d17e5553255b0195a0b56ba5309e362e2156debfc

pp. Server_RAT

The Client_RAT program provides full control over the target system: it allows you to analyze the system, download and execute files, transfer data from the infected computer to the C&C server. Communications with the C&C server are performed over an encrypted SSL channel. For this purpose, Client_RAT uses statically linked libcurl libraries, version 7.47.1 (FEB 2016).

Category: remote-access-trojan

Indicators of Compromise (IOCs)

MD5:

570e6ea21cdce694a4a74876ca87534a
e4fb05a8c2da92ec5b19bdb59814464a
f38f6d976e6d66abc86f9992e808670a

qq. Server_TrafficForwarder

Server_TrafficForwarder redirects traffic from one external server to another. The file is a resident application that, once launched, waits for incoming connections on a specific port to provide further control of the PC to the attacker. Server_TrafficForwarder uses the wolfSSL staticly linked library to implement asymmetric encryption of traffic between the client and the server.

Threat level: High

Category: Backdoor

Indicators of Compromise (IOCs)

CnC:

104[.]168[.]202[.]24
186[.]177[.]30[.]152
192[.]119[.]81[.]132
103[.]48[.]194[.]106
103[.]248[.]72[.]78
142[.]11[.]229[.]152
182[.]176[.]147[.]86
103[.]5[.]124[.]222
205[.]252[.]217[.]18
70[.]164[.]255[.]184
8[.]9[.]30[.]59
83[.]101[.]154[.]203
185[.]227[.]109[.]38
113[.]161[.]212[.]29
187[.]248[.]42[.]21
86[.]98[.]75[.]98
200[.]38[.]60[.]135
220[.]163[.]251[.]43
209[.]208[.]109[.]38
82[.]65[.]132[.]156
185[.]144[.]83[.]73
46[.]21[.]147[.]26
104[.]168[.]211[.]86
186[.]74[.]136[.]91
202[.]182[.]102[.]14
83[.]101[.]154[.]197
104[.]168[.]218[.]6
23[.]30[.]140[.]235
176[.]9[.]157[.]50
46[.]44[.]248[.]134

MD5:

d032aeb54cf1229e011c070ecd64c33e

SHA256:

dd45954237cad570b93bcf1a55dac4600e5ee6f5cb830b0279933a4de489df88
11ca273353d44a6c81747f0cd54c4a84ff020aa2a6f3d4b45436660a1d673ff1

rr. Client_TrafficForwarder

Client_TrafficForwarder - Forwards operator's commands from external network into corporate network. This module was installed on one of the PCs in the internal network of the attacked organization. It proxies traffic from C&C server to PCs in the local network of the attacked organization.

Threat level: High

Category: Backdoor

Indicators of Compromise (IOCs)

SHA256:

70b494b0a8fdf054926829dcb3235fc7bd0346b6a19faf2a57891c71043b3b38
9a776b895e93926e2a758c09e341accb9333edc1243d216a5e53f47c6043c852

ss. WannaCry

WannaCry, originally named as WanaCrypt, having aliases of Wana Crypt0r and Wana Decrypt0r, is a ransomware wormon Microsoft Windows (can be run on Linux via WINE) that uses two NSA-leaked tools that has wreaked havoc in airports, banks, universities, hospitals and many other facilities. It has spread to some 150 countries worldwide

Threat level: High

Platfrom: Windows

Category: Ransomware

Indicators of Compromise (IOCs)

CnC:

57g7spgrzlojinas[.]onion
cwwnhwhlz52maqm7[.]onion
Xxlvbrloxvriy2c5[.]onion
iuqssfsodp9ifjaposdfjhgosurijfaewrwergwea[.]com
ifferfsodp9ifjaposdfjhgosurijfaewrwergwea[.]com
gx7ekbenv2riucmf[.]onion
sqjolphimrr7jqw6[.]onion
5[.]199[.]142[.]236

87[.]101[.]243[.]252
104[.]41[.]151[.]54
212[.]51[.]134[.]123
149[.]202[.]160[.]69
128[.]31[.]0[.]39
154[.]35[.]175[.]225
194[.]109[.]206[.]212
204[.]11[.]50[.]131
146[.]0[.]32[.]144
50[.]7[.]161[.]218
217[.]79[.]190[.]25
131[.]188[.]40[.]189
5[.]9[.]159[.]14
104[.]17[.]37[.]137"
2[.]3[.]69[.]209
178[.]16[.]208[.]57
171[.]25[.]193[.]9
197[.]231[.]221[.]221
184[.]74[.]243[.]67
203[.]69[.]210[.]247
85[.]248[.]227[.]164
199[.]254[.]238[.]52
163[.]172[.]35[.]247
95[.]183[.]48[.]12
195[.]154[.]164[.]243
46[.]101[.]166[.]19
91[.]121[.]65[.]179

SHA256:

92b0f4517fb22535d262a7f17d19f7c21820a011bfe1f72a2ec9fbffbdc7e3e0
77a250e81fdaf9a075b1244a9434c30bf449012c9b647b265fa81a7b0db2513f
51432d3196d9b78bdc9867a77d601caffd4adaa66dcac944a5ba0b3112bbea3b
f8812f1deb8001f3b7672b6fc85640ecb123bc2304b563728e6235ccbe782d85
96ac1e4330e092a05bc8bada12dd6f442d5afb2d5e75271a90dcaf697e662fca
f01b7f52e3cb64f01ddc248eb6ae871775ef7cb4297eba5d230d0345af9a5077
58be53d5012b3f45c1ca6f4897bece4773efbe1ccbf0be460061c183ee14ca19
2584e1521065e45ec3c17767c065429038fc6291c091097ea8b22c8a502c41dd
2ca2d550e603d74dedda03156023135b38da3630cb014e3d00b1263358c5f00d
c916b96aaa85bf2e6e985f38e2a2e78f80ad94c573838cdbe4aabc8d0b429115
1a7123fbb6f27b920acde8571945c2e11297e91b7168afad58e9ee06232a40ef
043e0d0d8b8cda56851f5b853f244f677bd1fd50f869075ef7ba1110771f70c2
ca8dc152dc93ec526e505cf2a173a635562ffbf55507e3980f7dc6d508f0f258
24d004a104d4d54034dbcffc2a4b19a11f39008a575aa614ea04703480b1022c
4a468603fdcb7a2eb5770705898cf9ef37aade532a7964642ecd705a74794b79

ed01ebfbc9eb5bbea545af4d01bf5f1071661840480439c6e5babe8e080e41aa
5cd126b4f8c77bdf0c5c980761a9c84411586951122131f13b0640db83f792d8
09a46b3e1be080745a6d8d88d6b5bd351b1c7586ae0dc94d0c238ee36421cafa
043e0d0d8b8cda56851f5b853f244f677bd1fd50f869075ef7ba1110771f70c2
35f05cb83c79ee76b126d6b0bdffffc4b6f1a7067621699fcdfa7110db47cd5b
6c77e67da7e0ad457e104eb15ad1e3cfe0243fb9458abaaa36ad62907c2f13e8
4a25d98c121bb3bd5b54e0b6a5348f7b09966bffeec30776e5a731813f05d49e
b9c5d4339809e0ad9a00d4d3dd26fdf44a32819a54abf846bb9b560d81391c25
aa958261eca99fa5389087bdb41ab20cba658bde504ca99726e43f7a4a2830a3
68c779f97a570513eb2c6ef04a0d3852d5077b2c226b77891686efb82efaace8

tt. EternalBlue

EternalBlue is an exploit that uses a vulnerability in Microsoft's implementation of the Server Message Block (SMB) protocol. It is developed by the U.S. National Security Agency (NSA) according to testimony by former NSA employees. It was leaked by the Shadow Brokers hacker group on April 14, 2017, one month after Microsoft released patches for the vulnerability. The vulnerability exists because the SMB version 1 (SMBv1) server in various versions of Microsoft Windows mishandles specially crafted packets from remote attackers, allowing them to execute arbitrary code on the target computer.

Threat level: High

Platfrom: Windows

Category: Exploit

Indicators of Compromise (IOCs)

SHA256:

42d57d7f0f65e78f3e4e5fb63828703d083395500c3b0aa0c603c221782c7af0

uu. RatankbaPOS

Malicious software for stealing bank card data from PoS terminals (point-of-sale). It can target an encrypted form of track data. From the confirmed data - RatankbaPOS is focused on a software application, framework or device associated with "SoftCamp POS".

Category: Trojan

Indicators of Compromise (IOCs)

CnC:

http://www[.]energydonate[.]com/images/character[.]gif
www[.]energydonate[.]com
81[.]95[.]5[.]179
http://www[.]webkingston[.]com/top[.]gif

www[.]webkingston[.]com
89[.]33[.]246[.]102
http://www[.]webkingston[.]com/update[.]jsp?action=need_update
www[.]webkingston[.]com
http://www[.]energydonate[.]com/files/download/bithumb[.]zip
http://www[.]energydonate[.]com/files/download/bithumb[.]pdf
www[.]energydonate[.]com
http://online-help[.]serveftp[.]com/list[.]jsp?action=up
online-help[.]serveftp[.]com

SHA256:

42d57d7f0f65e78f3e4e5fb63828703d083395500c3b0aa0c603c221782c7af0
2b05a692518a6102c540e209cb4eb1391b28944fdb270aef7ea47e1ddeff5ae2
d334c40b42d2e6286f0553ae9e6e73e7e7aaec04a85df070b790738d66fd14fb
b66624ab8591c2b10730b7138cbf44703abec62bfc7774d626191468869bf21c
79a4b6329e35e23c3974960b2cecc68ee30ce803619158ef3fefcec5d4671c98

vv. Mydoom

Mydoom is a computer worm affecting Microsoft Windows and Windows NT. It was first sighted on January 26, 2004. Mydoom sread primarily via e-mail and through the file-sharing network Kazaa. The worm's media file is about 29 kilobytes in size and contains the text string "sync-1.01; andy; I'm just doing my job, nothing personal, sorry." When infecting a computer, Mydoom modifies the operating system by blocking access to the websites of many antivirus companies, news feeds and various sections of the Microsoft website, blocks almost all antivirus activities and downloads additional virus programs from the network.

Threat Level: Low

Platform: Windows

Category: Trojan

Indicators of Compromise (IOCs)

SHA256:

a263ab215d67350bc4a05c88accecfd5414ebe375c34a50f808f949dbf47d146
57b76adc01c5712971c1d2d13c4bdc0527f6f4396131f3b362d3b329dcda3c86
685f3b0222fd7f4459a7a8f7e6591dbb6e158d4910de739abc3417856861bbd9
101fd3c73b1470f26d7d0c869c96187baade91bb20ab1c85f0e5ef8535d48028
ebfe51f8ec057e6c6c681a9a4781cf76ca81496ba849ed1c22cabc41cdb23d8b
e6e82910f9e78cdf0179338f5eaddcd8ca0419820261680a3ecf99a78d75645e
7b02f15dd2027abf3fda4fad30de74c4cc0229ae0edcea14029987796625b128
62d56a0c9d90b04b04c872c244c925700815357cebf2aedeed8aaa62e9835518
174a783e5eda640ed895e8fe7e955a35b291669b6b15e6c00bdc4f0e6f29a825
51b00941b52a07ef36fc5e02c27fa5c4409eeebc057c77d85c036dc66cc5357d

cae7f30dfa33b2be8e701440c32baf5f09eb9eb48133c7ccba3ea9c036dcb0f7
61c76a5b2d5cb64d15129ccaa8e6d1eb1a3fff70f355a1dc345b4c3adf47a1d0
8d4e971b1e8006cc692f435cb96d250d921ce3281946fa398e5a331c8135fd40
8439c80486f8dc7904f0bca895abbe982d192762f257cd6ca9b08ea95475d99e
38deb039a4e241d776c827775c05a04df748c7d61af12fff2b190d6a256f915d
a11730284b54e9cca469937c9e3a44bc4d44d50bc874b465936a13bc5840ed21
2eef31f51097013e3e4d0a5106bb4994acbf98f702f3523976beac7e1385c558
6e9ff7030954e6b1f07958fff37f3acfab011343d2f699ddfee03197f4256e66
3a7ac3c767bdefbf18d87a73ba5fd12d635f3ccb5e0dde1efa7114267fe17fa6
5a8cba64e930e2462ebf1a6a5dfa5ddf5ffe4077e1fefeb72cc40f703ae5815b
1ee9f95e80bf97b81bafebcdec1202c584ae9dd0370a1dc9daa28f705d0d0fd3
eafe61e75111b6ea41ffb4bed94d52d662855078c30fb2f71d37e8e81bcb4eb6
04c652b646cd966ffda5b2f42e39e637c810164f4cfa5d8eee6be697176dac40
051faffea3caee82ca0d9b921f14dca9947ddbdda77eb68b402b44eec89852e3
b33d24b0616e3da7e76d82dc3be03780f77d889952e80b6cc17b799540ce4a0c
5b03e17fe3f4e10186f3cdd199407cad1b2433774aa4809df67d216beee49952
1c51d5cf8ac5a0a0715ba67100597afb49c43643c2513dbc58b1bb512a96b0c9
5474960e814a9af0a3034fbdc8438338e43d59c7ee1d68d19a3cd01218027696
b83403362a379a049467e60834af4bba94dd50d042c947603ca906363fc7ef3a
1bd033d864637781497595dc8cbe0bd793782c9df3f0108a3d90a5f76bbb1b7c
c739492981608953fba2e52f4e52d0876490c32403dbd1fb54c2cd6dbd260f4f
a2cc01f4f3b8061f8ce50ea65f73f98ad8afe166018480b96c3081ba814941aa
1581d461f355a6ff3a756b7d656b1be1f28b4d0d04cef21983a978ed64dc68f0
7845924de55e750a25de391e4ef81268827dcf2c85b25d26fe7088a04f7d5a07
60d3ceae1d00a20c67677627ec15d087f380bbdb2280448486c0d8eedd43eb94
f9013facbdb0956a640e3a9db203e3b8a0ea541acb8a21e2ff0f2b331e47e916
284f4278f91074b319805b34136a5d8b4845b51303892d79f31ca95b3eb7f1ff
f4312e5237156c6395bb6d929561e1ad8738e52f2b9bb3b7f10f502ed2aae98f
2dc3762482c8befeef44b35bcd58c1c2ac5f5925be022ffa72904fb8ed30e57e
b7b421994ef322c083bb76591bcb01b1457a7fd9f2064661d056d53fa2107764
5a775d570b8db4fccb1e32a3e7046908218eb6c2300486a47af2e8c691ae2ad4
207e599a962706c20a044ea47e3e7442d8c4233cc8442317632189c2d4063101
09a5d3bf4131fa23b3384dc5fb4d193228f335c206c19613de47e86acfe8a024
3b7b9a86668c2ac021e64b5beafd6c9c87b5cea2ea8d228a2efdde6743f37dd0
e34401e88b11c6b52536b65a8252631aa0f904fba1a3e81470373ad2d7c8fba3
e12fac13c4cd2cc2f619a3dde8a05edb9b802ed96108daac7eea9b15e1cd37f0
febc4382a5bd6a8cc9f799a572c61a4016489bd5247f5aa5b08bb33010bf7520
3e6231e6c6fbaa75b98d1d4d3f8f592c78fb6302a79855ddca5a824ca95120a5
0b2fb6107a77df4a12deb8e4cc678e1d59cf7e0cd4f50c3793afb4ba76479336
ccd9f6afe4f8fcd616e610115cd5068511f53c1c0f9622bf3d4f481c7278253f
60ddc8bd836bd2c8b94645602a8139df46df5dcc779beaf594cbf768db7620f6
418627fc27f55d94874817ad02ce3600080e6603be2ad028a58e6b7dcb2e7151
0ce8fc3f53ee2513a0fbb958a43cafff1bdd468b754c507f11886b403e44169f

4b73928ddf05aa43d40c0a8325160a6508178284b54be70e5acea7e6f0bb67cc
7e076c42efa21d9078a373ef0052242a16c6ee523242cd6a9e99f923ae3b2723
bce3e83592bd3365904f0edd711721d8ee19b6ea6c901a059fc59bdbc536bd07
972f18a532ee833e868a5eec6f6598548a96b66e86ed2b15de0c6bd3f0d9d95e
375f8c7b65cc064e2a4b250a7685b94ceaea93b9addc801b31429ff437354df9
15d8e36411b8fc03f2b643d98e7ceb602b6019c1bf924dcd56cb26f67ec5e30f
b5b62df0458a90d61212588283c66634bc1e9899bf65308fa0286b36c91c43c7
f43b0fb0a276e13ee5319bc3723a1e4c842f5e8976b81f97b097009ef6312810
2027f6d667606b578a87352a5b71ccc169efdf1bd6d13e6509697605a2fa1a7b
74da9dab37a3e4b47e3341e5ee6526209400b16d089ab84beaf59b49d41aca3f
55f3e0cda8e89ba4045079657b798b5f0cc03e05e870d8fae47729caf2cdd38e
03c0bf5f19ad1ad923eef1b732aa4647f7c464aaf02cf0bf5603eaa88c64d27f
b1f71f677c974c688644c24aa1d82b561b2e670e21e6ee5782fdefbac0dd278d
48e331573bf0423ec07ba56f9df259717719fc7b99d9169996f2137cde95dc04
f603933b6eb456840b02c8e6a51eb38698270ae2d9406012c9ac36845a3a8852
db29b262eebae8f6632501a6770e7625587e7ee1474b1b3166c56e127237ad53
ea2f035ad26e35bcb1569e53ba3d22df10e757d9a61d00169466f1d7d3605776
15d50bcf232bc58c0da3ba683982720e0e7e5fd278ca2546cebffac8b7d2e3f7
27c8390835c7c5fa7437a35fc615a877819717edf90237816b314a355d9cfef9
d6ec2623029d98b800966fa737047a421559d66e550d16e038024303f9ce4a4b
71f343780289370fbbd84fb71165111b7dc5fcca496d8a7a43b5a42e496a2009
a4eb4c59254fdd541bb4eb6298a76d29388b60abcac036e8223b7a51ee7672df
c2bf169dbfd2d91df168d85a99acc99dcde6565f8e81588765e51e90ed94a5a8
bc450d2e1b979a16182c5abce17e2d48a93089f6a172dbc63dc923be310cff89
10da255e4ccf4a5fd21472cd113874d5a60ceda730dc37ee3ed0b5f4a4ac0884
60c83ced44d68aab4de54a799649100bceef8ac4b3958d948fb94933c7aded99
e455363ac22b3812d4b5acf7b0e3e6b514938e7603a724d85552a41f49be98d2
1a37b51440b26371a8da0be3edbe32aebebf2ed28642d3b6e24fc0ab5db1e17f
421ba61e106ee1bf151612b7907f46f5a9d9a8df9b14b21d86b1d9cf5baccf94
2a6f7123e394266264f1dd34e692d27d264d968d52dbdbe2fda91c5831540389
4c8b9ca17ac2bb7dd10bfc67d45b0be99ec794f57a1b243208fdae32755d4ff5
c1d4b540165fc6447cbead223eef5575b07d5b24c749eabc4d74dd657ba76c23
10042317bffa0de85f95fad52586af6584e3578eca844d46f1948884f24de55a
9551662334f772d22af97522905d12f9d976be9535cca556c01abba223bd3bf1
58801744ee6378b952356744ea237f6487d5bfe150716007c8f840f19fc17438
9e4a7d13499f2b382863281bb87b8518413d07183bcb0c8a50f15d5a3a160052
345e23a545fe7c2a354545ba22912baf9a87558049acac992f48562064d677f9

ww. EagleXP

EagleXP is closely related to NSTAR and HTTP Troy based on reused components. EagleXP used this compile path: D:\VMware\eaglexp(Backup)\eaglexp\vmshare\ Work\BsDll-up\Release\BsDll.pdb

Category: Spyware

Indicators of Compromise (IOCs)

Network Signature:

DNS Lookup (byonshop.com) related to Lazarus

alert dns $HOME_NET any -> any any (msg:"DNS Lookup (byonshop.com) related to Lazarus"; flow:from_client; dns_query; content:"byonshop.com"; nocase; pcre:"/(^|\.|\s)byonshop\.com($|\s)/U"; target:src_ip; classtype:apt-trojan; threshold:type limit, track by_src, seconds 60, count 1; sid:1551768; rev:1; metadata:malware_family Lazarus, rule_origin ti_cnc, severity 5, ti_threatactor_id 5e9f20fdcf5876b5772b3d09b432f4080711ac5f, ti_threatactor_name Lazarus, ti_malware_id 2473696fea0df21c871914d7e3866b81225f602e, ti_malware_name EagleXP, ti_malware_id e92e84ab91a20a1789b833bf903c91b7fdaf48af, ti_malware_name NSTAR;)

Domain request in SNI (byonshop.com) related to Lazarus

alert tls $HOME_NET any -> any any (msg:"Domain request in SNI (byonshop.com) related to Lazarus"; flow:established,to_server; tls_sni; content:"byonshop.com"; pcre:"/(^|\.|\s)byonshop\.com($|\s)/U"; target:src_ip; classtype:apt-trojan; threshold:type limit, track by_src, seconds 60, count 1; sid:1551767; rev:1; metadata:malware_family Lazarus, rule_origin ti_cnc, severity 5, ti_threatactor_id 5e9f20fdcf5876b5772b3d09b432f4080711ac5f, ti_threatactor_name Lazarus, ti_malware_id 2473696fea0df21c871914d7e3866b81225f602e, ti_malware_name EagleXP, ti_malware_id e92e84ab91a20a1789b833bf903c91b7fdaf48af, ti_malware_name NSTAR;)

Http request (byonshop.com) related to Lazarus

alert http $HOME_NET any -> any any (msg:"Http request (byonshop.com) related to Lazarus"; flow:established,to_server; content:"byonshop.com"; pcre:"/(^|\.|\s)byonshop\.com($|\s)/W"; http_host; target:src_ip; classtype:apt-trojan; threshold:type limit, track by_src, seconds 60, count 1; sid:1551766; rev:1; metadata:malware_family Lazarus, rule_origin ti_cnc, severity 5, ti_threatactor_id 5e9f20fdcf5876b5772b3d09b432f4080711ac5f, ti_threatactor_name Lazarus, ti_malware_id 2473696fea0df21c871914d7e3866b81225f602e, ti_malware_name EagleXP, ti_malware_id e92e84ab91a20a1789b833bf903c91b7fdaf48af, ti_malware_name NSTAR;)

xx. Jokra

It is a Trojan whose main task is to erase the hard drive of a compromised computer.

Category: wiper

Indicators of Compromise (IOCs)

SHA256:

239ed753232d3cc0e75323d16d359150937934d30da022628e575997c8dd60a2
d7a71f83d576fdf75e7978539bac04ad8b6605207b29379b89c24c0d0f31da61
929dc09a8bd8491b77f050a2736d39c30597ec7090d8f081eeb6179b6f8ab033

422c767682bee719d85298554af5c59cf7e48cf57daaf1c5bdd87c5d1aab40cc

yy. Dozer

Trojan.Dozer acts as a backdoor and connects to IP addresses through specific ports. The Trojan can start an HTTP session using GET or POST, UDP, ICMP, TCP ACK or TCP SYN to perform DDoS attacks.

Category: Backdoor

Indicators of Compromise (IOCs)

IoC:

216[.]199[.]83[.]203
213[.]33[.]116[.]41
213[.]23[.]243[.]210

zz. NSTAR

NSTAR appears to be the first production version of the Troy family. This Trojan is based upon malware created for a military espionage campaign that first emerged in 2009.The malware establishes an internet relay chat (IRC) channel to receive real-time commands in the same manner as the military espionage malware.

Platform: Windows

Category: Spyware

Indicators of Compromise (IOCs)

IoC:

byonshop.com

Advanced Persistent Threat (APT): Silence

Silence APT, a cybercriminal group, known for targeting financial organizations primarily in former Soviet states and neighboring countries is now aggressively targeting banks in more than 30 countries across America, Europe, Africa, and Asia including: Bangladesh.

Silence uses phishing as their infection vector. The threat actor's emails usually contain a picture or a link without a malicious payload and are sent out to a huge recipient database of up to 85,000 users.

Silence has made a number of changes to their toolset with one goal: to complicate detection by security tools. In particular, they changed their encryption alphabets, string encryption, and commands for the bot and the main module. In addition, the actor has completely rewritten TrueBot loader, the first-stage module, on which the success of the group's entire attack depends. The hackers also started using Ivoke, a fileless loader, and EDA agent, both written in PowerShell. Silence has also made a move to including fileless modules in their arsenal, albeit much later than other APT groups, suggesting that the group is still playing catch-up compared to other cybercriminal groups.

Related Tools

EmpireDNSAgent
Radmin
Mimikatz
Nmap

Malware List of Silence APT:

a. Silence Backdoor

Platform: Windows

Threat level: High

Category: Backdoor

Other Name: Silence.MainModule

Indicators of Compromise (IOCs)

CnC:

195[.]123[.]246[.]126
37[.]120[.]145[.]253
185[.]29[.]10[.]13
185[.]236[.]76[.]216
167[.]99[.]43[.]101
185[.]70[.]184[.]32
counterstat[.]pw

counterstat[.]club
185[.]161[.]208[.]9
151[.]248[.]115[.]41
193[.]124[.]18[.]72
185[.]154[.]52[.]83
185[.]154[.]52[.]142
185[.]29[.]9[.]41
zaometallniva[.]ru
1mliked[.]ru
185[.]20[.]187[.]89
http://185[.]161[.]208[.]61/index[.]php?xy=1
http://185[.]29[.]10[.]117/index[.]php

MD5:

363df0b3c8b7b390573d3a9f09953feb
800060b75675493f2df6d9e0f81474fd
E81CD10C838F5A268944AAF50B1BB3B5
0512D025AD198A94E16D03EF31F790EF
ff411742f5e8b970d27bef660349b559
fd133e977471a76de8a22ccb0d9815b2
8b437da524c25d03ab33d7d78d2d6a77
afdfe8c799aa76420622d370416a72be
39537145ce7f01aa8b8c27f9fd40eaa2
7EAF9BBD855C6A124E2EE962BF2DB735
c4f18d40b17e506f42f72b8ff111a614
F1954B7034582DA44D3F6A160F0A9322

b. Silence.ProxyBot

The program is designed to access isolated segments of the network via an intermediate node

Platform: N/A

Threat level: N/A

Category: Bot

Indicators of Compromise (IOCs)

CnC:

91[.]92[.]136[.]193
79[.]141[.]168[.]114
45[.]84[.]0[.]201
185[.]29[.]10[.]13
167[.]99[.]43[.]101
185[.]70[.]184[.]32

counterstat[.]pw
counterstat[.]club
185[.]20[.]187[.]89
84[.]38[.]134[.]103
http://185[.]161[.]208[.]61/run[.]exe
46[.]183[.]221[.]89

MD5:

ce04972114bbd5844aa2f63d83cdd333
3f5372c2776e5cc8aec8a7107f49cf8a
f1f73008183d1b161f25b62a76cd2513
043b383e895a26848bef90abb8da2216
1136c47332daa275d2ecc179a0bf4c0c
BEBB2DE1C051B4E847EE6501D118D522
2fe01a04d6beef14555b2cf9a717615c
b33cd8d369a7167351c69fe57bae0bb1
50565c4b80f41d2e7eb989cd24082aab
88cb1babb591381054001a7a588f7a28

c. APT.Silence.EDA.ps1

Platform: N/A

Threat level: High

Category: remote-access-trojan

General information

This program is intended for remote management of compromised system via DNS protocol and processes following modules: changing the address of the management server, downloading the file from the network, sending a local file to the management server, executing commands in the cmd.exe, collecting system information, rebooting and turning off the system, traffic tunneling.

Indicators of Compromise (IOCs)

CnC:

91[.]92[.]136[.]193
79[.]141[.]168[.]114
45[.]84[.]0[.]201
167[.]99[.]43[.]101
counterstat[.]pw
counterstat[.]club

MD5:

ce04972114bbd5844aa2f63d83cdd333

3f5372c2776e5cc8aec8a7107f49cf8a
f1f73008183d1b161f25b62a76cd2513
043b383e895a26848bef90abb8da2216
1136c47332daa275d2ecc179a0bf4c0c
9812a3436f917af18a7f93a2c71dc846
dcba65555652431c8d3cd773bf873118

d. Truebot (Silence's loader)

Loader for backdoor of Silence group, was first detected end of 2017.

Platform: Windows

Threat level: High

Category: Loader

Other Name: N/A

Indicators of Compromise (IOCs)

CnC:

185[.]70[.]186[.]149
151[.]248[.]115[.]41
193[.]124[.]18[.]72
185[.]154[.]52[.]83
185[.]154[.]52[.]142
185[.]29[.]9[.]41
zaometallniva[.]ru
1mliked[.]ru
84[.]38[.]133[.]22
itablex[.]com
213[.]183[.]63[.]227
185[.]70[.]187[.]188
http://185[.]70[.]187[.]188/inf/getsi[.]php
http://185[.]70[.]187[.]188/inf/logs/logpc[.]php
217[.]160[.]233[.]141
185[.]244[.]131[.]68
http://basch[.]eu/administrator/components/com_admin/sql/updates/mysql/exe[.]exe
http://185[.]244[.]131[.]68/z/get[.]php
185[.]175[.]58[.]136
http://185[.]175[.]58[.]136/gif/gifupload[.]php
http://146[.]0[.]77[.]112/a/logs/logpc[.]php
146[.]0[.]77[.]112
http://146[.]0[.]77[.]112/a/getsi[.]php
http://146[.]0[.]72[.]139/flk

146[.]0[.]72[.]139
http://5[.]39[.]218[.]204/ks
5[.]39[.]218[.]204
http://5[.]8[.]88[.]254/HUYfhwuiGYUR/opensource[.]php/name=?
fpbank[.]ru
http://91[.]243[.]80[.]200/yre
91[.]243[.]80[.]200
5[.]8[.]88[.]254
http://144[.]217[.]14[.]173/file[.]exe
http://137[.]74[.]224[.]142/z/get[.]php

MD5:

7441cca252b7a2da481ddf2c70eed727
b2ad4409323147b63e370745e5209996
8cc6d41f5be9144093a2ff8a5c3b32a3
65f673a77c93c4a2c9db34b3704279e2
edf59a111cce8ea1d09a2b4e8febdfdf
e2e1035f382c397d64303e345876a9db
5127fff71a4251e3c62c420a4de57010
f1a4e74e72390ef98c23f19589d3c7cd
81f3e843b26d254ae58c44d778c7ee5b
13cc98fcb654ac83cda6d3ec9946fa9b
C2A00949DDACFED9ED2EF83A8CB44780
97599e2edc7e7025d5c2a7d7a81dac47
C2F1AF367576FFA39182864044769E42
404d69c8b74d375522b9afe90072a1f4
43eda1810677afe6791dd7a33eb3d83c
7d3614df9409da3933637f09587af28c
15d097a50718f2e7251433ea65401588
a58a830dce460e91217328bdefb25cbe
9b037ead562c789620a167af85d32f72
c6c84da4f27103db4ff593f4d4f45d95

Network Signatures

Win32.Trojan_YU Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Win32.Trojan_YU Checkin"; target:src_ip; flow:established,to_server; content:"GET"; http_method; content:".php?name="; http_uri; fast_pattern; pcre:"/\.php\?name=[0-9a-f]+ HTTP\/1\.1\x0d\x0aHost\: ([0-9]{1,3}\.){3}[0-9]{1,3}\x0d\x0a\x0d\x0a$/"; threshold:type limit, track by_src, count 1, seconds 360; classtype:apt-trojan; reference:md5,9b037ead562c789620a167af85d32f72; sid:1001404; rev:1; metadata:severity 5, ti_malware_id 8ad76d853cdeb0644cda053bb7f0d50275847648,

ti_malware_name Truebot (Silence's loader), malware_family Truebot (Silence's loader), rule_origin gib;)

TrueBot (Silence APT) CnC activity 1

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TrueBot (Silence APT) CnC activity 1"; flow:established,to_server; content:".php?xy=1"; http_uri; isdataat:!1,relative; fast_pattern; content:"User-Agent|3a 20 0d 0a 0d 0a|"; target:src_ip; classtype:apt-trojan; reference:md5,c4f18d40b17e506f42f72b8ff111a614; sid:1002195; rev:1; metadata:severity 5, ti_malware_id 8ad76d853cdeb0644cda053bb7f0d50275847648, ti_malware_name Truebot (Silence's loader), malware_family Truebot (Silence's loader), rule_origin gib;)

TROJAN TrueBot/Silence.Downloader CnC Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN TrueBot/Silence.Downloader CnC Checkin"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:".php"; http_uri; isdataat:!1,relative; content:"Content-Disposition|3a 20|form-data|3b 20|name=|22|file|22 3b 20|filename=|22|C|3a 5c|"; http_client_body; content:".DAT|22 3b 0d 0a|"; http_client_body; distance:0; content:"|0d 0a|Host Name|3a 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20|"; http_client_body; distance:0; content:"|0d 0a|OS Name|3a 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20|"; http_client_body; distance:0; content:"|0d 0a|OS Version|3a 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20|"; http_client_body; distance:0; http_header_names; content:!"Referer"; content:!"User-Agent"; content:!"Accept"; reference:md5,c2a00949ddacfed9ed2ef83a8cb44780; classtype:apt-trojan; sid:2026559; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2018_10_29, deployment Perimeter, former_category MALWARE, performance_impact Moderate, signature_severity Major, updated_at 2020_09_16, severity 5, ti_malware_id 8ad76d853cdeb0644cda053bb7f0d50275847648, ti_malware_name Truebot (Silence's loader), malware_family Truebot (Silence's loader), rule_origin etpro;)

TROJAN TrueBot/Silence.Downloader Keep-Alive

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN TrueBot/Silence.Downloader Keep-Alive"; target:src_ip; flow:established,to_server; content:"GET"; http_method; content:".php?dns="; http_uri; fast_pattern; pcre:"/^[a-f0-9]{8}$/RUs"; http_header_names; content:"|0d 0a|Host|0d 0a 0d 0a|"; depth:10; isdataat:!1,relative; reference:md5,c2a00949ddacfed9ed2ef83a8cb44780; classtype:apt-trojan; sid:2026560; rev:1; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2018_10_29, deployment Perimeter, former_category TROJAN, performance_impact Moderate, signature_severity Major, updated_at 2020_09_16, severity 5, ti_malware_id 8ad76d853cdeb0644cda053bb7f0d50275847648, ti_malware_name Truebot (Silence's loader), malware_family Truebot (Silence's loader), rule_origin etpro;)

TrueBot (Silence APT) CnC activity 2

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TrueBot (Silence APT) CnC activity 2"; flow:established,to_server; content:".php?xy=2&axy="; http_uri; target:src_ip; classtype:apt-trojan; reference:md5,c4f18d40b17e506f42f72b8ff111a614; sid:1002196; rev:1; metadata:severity 5, ti_malware_id 8ad76d853cdeb0644cda053bb7f0d50275847648, ti_malware_name Truebot (Silence's loader), malware_family Truebot (Silence's loader), rule_origin gib;)

e. FlawedAmmyy

It is malicious program for remote control, based on leaked source codes of legitimate utility Ammyy Admin. After infection, it allows full access to threat actors: opportunity to remote entering to the system, to restart it, process commands and upload any files. In addition, it has function of remote desktop. It was discovered in 2016. In August 2018 there were malicious email sendings with this malware to banks.

Platform: Windows

Threat level: High

Category: remote-access-trojan

Indicators of Compromise (IOCs)

CnC:

http://n57u[[.]]com/inform
195[.]123[.]224[.]99
http://g78k[.]com/set
51[.]254[.]167[.]115
http://g50e[[.]]com/security
http://g50e[[.]]com/benat[.]exe
31[.]202[.]132[.]13
http://r48t[[.]]com/input
54[.]36[.]91[.]25
http://f67i[[.]]com/con
81[.]4[.]101[.]187
185[.]99[.]132[.]12

MD5:

b2f2ce77063476ef9c8ebb3c63fad402
a471555caf8dbb9d30fac3014172515f
73964f92d3e5e142047574afa78726e3
627ae12b487dfacad66d4ff3bf8a5134
0906ab6a9ed0fa8f173d6800f8957f4a
919c8bd911850741522fedf362effca3
92feb5c5358835e80dd1f62ef6ebc475

aa0a5f274d4c612b6fdfb91f66aef94f
65713d26cf111eb64de1aa524bbecb2b
5fdeaa5e62fabc9933352efe016f1565
bacd1120ad0918b81d98de9b9acb69ce
85e1828d863004ff681f2908297c7fee
1094ec2f32abc7780f0856928cb0c261

Network Signatures

RAT.FlawedAmmyy CnC communication

alert tcp $HOME_NET any -> $EXTERNAL_NET any (msg:"RAT.FlawedAmmyy CnC communication"; flow:established,to_server; content:"id="; content:"&os="; distance:0; content:"&priv="; distance:0; content:"&cred="; distance:0; content:"&pcname="; distance:0; content:"&avname="; distance:0; content:"&build_time="; distance:0; content:"&card="; distance:0; target:src_ip; classtype:backdoor; reference:md5,b2f2ce77063476ef9c8ebb3c63fad402; sid:1002344; rev:1; metadata:severity 5, ti_malware_id 34c0a6e49e3384309ce0f552beb14ca6c14060f8, ti_malware_name FlawedAmmyy, malware_family FlawedAmmyy, rule_origin gib;)

TROJAN Win32/FlawedAmmyy RAT Reporting System Details

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Win32/FlawedAmmyy RAT Reporting System Details"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:"|2e|php"; http_uri; isdataat:!1,relative; content:"Host|20|Name|3a 20 20 20 20 20|"; http_client_body; depth:17; fast_pattern; content:"OS|20|Name|3a 20 20 20 20|"; http_client_body; distance:0; content:"OS|20|Version|3a 20 20 20 20|"; http_client_body; distance:0; reference:md5,d334c877fb1adc37fd68bf2b40275d7e; reference:md5,cf1e4eb6325ed0d9969bddac56eeda58; classtype:backdoor; sid:2837164; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2019_07_01, deployment Perimeter, former_category TROJAN, performance_impact Low, signature_severity Major, tag RAT, updated_at 2019_09_28, severity 5, ti_malware_id 34c0a6e49e3384309ce0f552beb14ca6c14060f8, ti_malware_name FlawedAmmyy, malware_family FlawedAmmyy, rule_origin etpro;)

TROJAN Win32/FlawedAmmyy RAT Reporting Loader Results

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Win32/FlawedAmmyy RAT Reporting Loader Results"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:"|2e|php"; http_uri; isdataat:!1,relative; content:"running loader|0d 0a|"; http_client_body; depth:16; fast_pattern; content:"exiting loader"; http_client_body; distance:0; reference:md5,d334c877fb1adc37fd68bf2b40275d7e;

reference:md5,cf1e4eb6325ed0d9969bddac56eeda58; classtype:backdoor; sid:2837165; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2019_07_01, deployment Perimeter, former_category TROJAN, performance_impact Low, signature_severity Major, tag RAT, updated_at 2019_09_28, severity 5, ti_malware_id 34c0a6e49e3384309ce0f552beb14ca6c14060f8, ti_malware_name FlawedAmmyy, malware_family FlawedAmmyy, rule_origin etpro;)

TROJAN Win32/FlawedAmmyy RAT Reporting Installed Software

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Win32/FlawedAmmyy RAT Reporting Installed Software"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:"|2e|php"; http_uri; isdataat:!1,relative; content:"|ff fe 4e 00 61 00 6d 00 65 00 20 00 20 00 20 00|"; http_client_body; depth:16; fast_pattern; content:"|56 00 65 00 72 00 73 00 69 00 6f 00 6e 00 20 00 20 00 20|"; http_client_body; distance:0; reference:md5,d334c877fb1adc37fd68bf2b40275d7e; reference:md5,cf1e4eb6325ed0d9969bddac56eeda58; classtype:backdoor; sid:2837166; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2019_07_01, deployment Perimeter, former_category TROJAN, performance_impact Low, signature_severity Major, tag RAT, updated_at 2019_09_28, severity 5, ti_malware_id 34c0a6e49e3384309ce0f552beb14ca6c14060f8, ti_malware_name FlawedAmmyy, malware_family FlawedAmmyy, rule_origin etpro;)

f. Ammyy Admin

Ammyy Admin - is a free remote desktop sharing and PC remote control software that can be used for remote administration, remote office arrangement, remote support or distant education purposes.

Platform: Windows

Threat level: Middle

Category: remote-access-trojan

Indicators of Compromise (IOCs)

CnC:

http://31[.]207[.]45[.]85/d[.]dat
31[.]207[.]45[.]85
http://185[.]179[.]188[.]185/ldr[.]exe
185[.]179[.]188[.]185

MD5:

7af426e0952b13ef158a4220e25df1ae

e71819cf79b1d5627acd9ac9aec6a4bc

Network Signatures

POLICY RemoteAdmin Win32.Ammyy.z Checkin

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"POLICY RemoteAdmin Win32.Ammyy.z Checkin"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:!"User-Agent|3a| "; http_header; content:"v="; depth:2; http_client_body; content:"&d="; distance:3; within:3; http_client_body; pcre:"/^v=\d\.\d&d=[a-zA-Z0-9-/]+?$/P"; reference:md5,da83a04e05d95f8b68b4bd2198de2097; classtype:trojan-activity; sid:2806289; rev:10; metadata:created_at 2013_04_23, updated_at 2020_06_09, severity 3, ti_malware_id 6ddc5de6cfaf12b1adb729a4f26e0358efe648a0, ti_malware_name Ammyy Admin, malware_family Ammyy Admin, rule_origin etpro;)

g. Atmosphere

Atmosphere is a software created by Silence group for controlling the ATM dispenser. It was first discovered in October 2017. It allows to get information on the content of ATM cassettes and to issue cash. Another version of Atmosphere discovered in April 2018. There were minor differences compared to the previous versions, but it was clear that the developer went a long way to debug the program and that he eventually got rid of the unnecessary functions and enhanced the program's sustainability. For example, this version didn't process commands from the PIN pad.

Platform: ATM

Threat level: High

Category: atm-malware

Indicators of Compromise (IOCs)

MD5:

44f15f1657a64423cb49ea317ce0c631

h. Smoke Bot

Smoke bot is malware with functions of loader and form grabber. This malware is known since 2011.

Platform: ATM

Threat level: High

Category: atm-malware

Other Names: Sharik, Dofoil, Smoke Loader

Indicators of Compromise (IOCs)

MD5:

44f15f1657a64423cb49ea317ce0c631

Network Signatures

TROJAN Smokeloader getgrab Command

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Smokeloader getgrab Command"; target:src_ip; flow:established,to_server; content:"cmd=getgrab"; http_uri; classtype:backdoor; sid:2014009; rev:3; metadata:created_at 2011_12_08, updated_at 2020_04_20, severity 5, ti_malware_id 5b5cd1f6f7dc81a094c5ae3d166841e709e57622, ti_malware_name Smoke Bot, malware_family Smoke Bot, rule_origin etpro;)

TROJAN Smokeloader getproxy Command

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Smokeloader getproxy Command"; target:src_ip; flow:established,to_server; content:"cmd=getproxy&login="; http_uri; classtype:backdoor; sid:2014010; rev:3; metadata:created_at 2011_12_08, updated_at 2020_04_20, severity 5, ti_malware_id 5b5cd1f6f7dc81a094c5ae3d166841e709e57622, ti_malware_name Smoke Bot, malware_family Smoke Bot, rule_origin etpro;)

TROJAN Smokeloader getsock Command

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Smokeloader getsock Command"; target:src_ip; flow:established,to_server; content:"cmd=getsocks&login="; http_uri; classtype:backdoor; sid:2014011; rev:3; metadata:created_at 2011_12_08, updated_at 2020_04_20, severity 5, ti_malware_id 5b5cd1f6f7dc81a094c5ae3d166841e709e57622, ti_malware_name Smoke Bot, malware_family Smoke Bot, rule_origin etpro;)

TROJAN Smokeloader getload Command

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Smokeloader getload Command"; target:src_ip; flow:established,to_server; content:"cmd=getload&login="; http_uri; reference:url,sophosnews.files.wordpress.com/2013/07/sophosszappanosplugxrevisitedintroducingsmoaler-rev1.pdf; reference:url,symantec.com/security_response/writeup.jsp?docid=2011-100515-1838-99&tabid=2; classtype:backdoor; sid:2014012; rev:3; metadata:created_at 2011_12_08, updated_at 2020_04_20, severity 5, ti_malware_id 5b5cd1f6f7dc81a094c5ae3d166841e709e57622, ti_malware_name Smoke Bot, malware_family Smoke Bot, rule_origin etpro;)

TROJAN Smoke Loader Checkin r=gate

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Smoke Loader Checkin r=gate"; target:src_ip; flow:established,to_server; content:".php?r=gate&"; http_uri; content:"&group="; http_uri; distance:0; content:"&debug="; http_uri; distance:0; content:"5.0 (Windows|3b| U|3b| MSIE 9"; http_header; reference:md5,7ef1e61d9b394a972516cc453bf0ec06; classtype:trojan-activity; sid:2014728; rev:6; metadata:created_at 2012_05_09, former_category MALWARE, updated_at 2020_05_13, severity 3, ti_malware_id 5b5cd1f6f7dc81a094c5ae3d166841e709e57622, ti_malware_name Smoke Bot, malware_family Smoke Bot, rule_origin etpro;)

TROJAN Smoke Loader C2 Response

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"TROJAN Smoke Loader C2 Response"; target:dest_ip; flow:established,from_server; content:"Content-Length|3a| 4|0d 0a|"; http_header; file_data; content:"Smk"; depth:3; fast_pattern; pcre:"/^\d+[\r\n]*?$/Rs"; classtype:trojan-activity; sid:2015835; rev:7; metadata:created_at 2012_10_22, former_category MALWARE, updated_at 2012_10_22, severity 3, ti_malware_id 5b5cd1f6f7dc81a094c5ae3d166841e709e57622, ti_malware_name Smoke Bot, malware_family Smoke Bot, rule_origin etpro;)

TROJAN SmokeBot grab data plaintext

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN SmokeBot grab data plaintext"; target:src_ip; flow:established,to_server; content:"cmd=grab&data="; fast_pattern; http_client_body; content:"&login="; http_client_body; classtype:trojan-activity; sid:2016011; rev:5; metadata:created_at 2012_12_07, updated_at 2020_09_17, severity 3, ti_malware_id 5b5cd1f6f7dc81a094c5ae3d166841e709e57622, ti_malware_name Smoke Bot, malware_family Smoke Bot, rule_origin etpro;)

Smoke Loader domain +uri

alert http any any -> any any (msg:"Smoke Loader domain +uri"; target:src_ip; flow:from_client; content:"GET"; http_method; pcre:"/\.php\?act\=([^&]*)\&file\=/I"; nocase; content:!"www.tumcivil.com"; classtype:backdoor; http_host; sid:1000429; rev:2; metadata:severity 5, ti_malware_id 5b5cd1f6f7dc81a094c5ae3d166841e709e57622, ti_malware_name Smoke Bot, malware_family Smoke Bot, rule_origin gib;)

TROJAN SmokeLoader - Init 0x

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"TROJAN SmokeLoader - Init 0x"; target:dest_ip; flow:established,to_client; content:"Init|3a| 0x"; http_header; classtype:backdoor; sid:2016088; rev:2; metadata:created_at 2012_12_21, updated_at 2020_04_22, severity 5, ti_malware_id 5b5cd1f6f7dc81a094c5ae3d166841e709e57622, ti_malware_name Smoke Bot, malware_family Smoke Bot, rule_origin etpro;)

SMOKE LOADER

alert http any any -> any any (msg:"SMOKE LOADER"; target:src_ip; flow:from_client; content:"index.php?cmd=getgrab"; classtype:general-suspicious; http_uri; sid:1000412; rev:1; metadata:severity 2, ti_malware_id 5b5cd1f6f7dc81a094c5ae3d166841e709e57622, ti_malware_name Smoke Bot, malware_family Smoke Bot, rule_origin gib;)

TROJAN Sharik/Smoke CnC Beacon 2

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Sharik/Smoke CnC Beacon 2"; target:src_ip; flow:established,to_server; urilen:1; content:"POST"; http_method; content:!"Accept"; http_header; content:!"Referer|3a|"; http_header; content:"Cache-Control|3a 20|no-cache|0d 0a|Pragma|3a 20|no-cache|0d 0a|Content-Type|3a 20|application/x-www-form-urlencoded|0d 0a|User-Agent|3a 20|"; depth:104; http_header; fast_pattern:76,20; content:"Connection|3a 20|Keep-Alive|0d 0a|Content-Length|3a 20|"; distance:0; http_header; pcre:"/^[\x20-\x7e\r\n]{0,20}[^\x20-\x7e\r\n]/P"; pcre:"/User-Agent\x3a[^\r\n]+(?:MSIE|rv\x3a)[^\r\n]+\r\nConnection\x3a\x20Keep-Alive\r\nContent-Length\x3a\x20\d+\r\nHost\x3a[^\r\n]+\r\n(?:\r\n)?$/Hm"; reference:md5,789ee114125a6e1db363b505a643c03d; classtype:backdoor; sid:2021631; rev:2; metadata:created_at 2015_08_14, former_category MALWARE, updated_at 2020_05_29, severity 5, ti_malware_id 5b5cd1f6f7dc81a094c5ae3d166841e709e57622, ti_malware_name Smoke Bot, malware_family Smoke Bot, rule_origin etpro;)

TROJAN Sharik/Smoke Loader Receiving Payload

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"TROJAN Sharik/Smoke Loader Receiving Payload"; target:dest_ip; flow:established,from_server; content:"404"; http_stat_code; file_data; content:"|00|"; distance:1; within:1; content:"|00|MZ"; distance:1; within:3; content:"This program must be run under Win32"; distance:0; fast_pattern; reference:md5,65c7426b056482fcda962a7a14e86601; classtype:backdoor; sid:2023567; rev:2; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2016_11_30, deployment Perimeter, performance_impact Low, signature_severity Major, updated_at 2020_08_03, severity 5, ti_malware_id 5b5cd1f6f7dc81a094c5ae3d166841e709e57622, ti_malware_name Smoke Bot, malware_family Smoke Bot, rule_origin etpro;

i. Silence's ATM malware

Malware for ATM cashing out used by Silence group

Platform: Windows

Threat level: High

Category: atm-malware

Other Names: ATMRod

Indicators of Compromise (IOCs)

CnC:

http://149[.]56[.]131[.]140:443/microsoft
http://149[.]56[.]131[.]140:443/win

MD5:

B3ABB10CC8F4CBB454992B95064A9006
14863087695D0F4B40F480FD18D061A4
79E61313FEBE5C67D168CFC3C88CD743
4107F2756EDB33AF1F79B1DCE3D2FD77
86EA1F46DF745A30577F02FC24E266FF
6743F474E3A6A02BC1CCC5373E5EBBFA
DDB276DBFBCE7A9E19FEECC2C453733D

j. Silence.SurveillanceModule

A module for spying on users. It used for secretly taking screenshots and proceeded to investigate the operator's work via a pseudo-video stream

Platform: Windows

Threat level: High

Category: Spyware

Other Names: N/A

General information

- Silence.SurveillanceModule a module for secretly taking screenshots and proceeded to investigate the operator's work via a pseudo-video stream.

Indicators of Compromise (IOCs)

MD5:

242b471bae5ef9b4de8019781e553b85
d7491ed06a7f19a2983774fd50d65fb2

k. Perl IRC DDoS bot

This bot is a Perl script designed to run on Linux OS. Its functionality includes retrieving information about the infected machine, executing shell commands (cmd), sending emails, downloading files, scanning ports and carrying out DDoS attacks.

Platform: Linux

Threat level: Middle

Category: DDoS

Other Names: N/A

Indicators of Compromise (IOCs)

CnC:

http://92[.]222[.]68[.]32/bot[.]pl
http://92[.]222[.]68[.]32/wolf/

MD5:

081ee959cbe6bc7dde7a6d13168e4fb4
ee650c800d2eedd471ed59aa9435e55f
aa9c31883b3d8e493efad2f983908be3

l. Kikothac

Kikothac is a Trojan horse that opens a back door on the compromised computer and downloads potentially malicious files.

Platform: Windows

Threat level: Middle

Category: Backdoor

Indicators of Compromise (IOCs)

CnC:

46[.]183[.]221[.]89
193[.]169[.]245[.]89
185[.]29[.]9[.]45

MD5:

9628d7ce2dd26c188e04378d10fb8ef3
0074d8c3183e2b62b85a2b9f71d4ccd8
440b21958ad0e51795796d3c1a72f7b3

Advanced Persistent Threat (APT): OceanLotus

Group OceanLotus began active operations in late 2009. Among the objects of the attacks noted: government agencies, organizations for the protection of human rights, media, companies in the oil industry, research institutes, enterprises of marine industry, retail, hospitality, banking, it companies, companies involved in information security, individuals and activists. Various researchers noted the long-term nature of the group's campaigns, the active phase is preceded by a long period of preparation. OceanLotus is interested in cyber espionage, intelligence, and intellectual property theft. Along with phishing mailings disseminated by e-mail addresses of potential victims, OceanLotus also conduct a spa attack, an attack supported compromise of a large range of legitimate sites. alternative aliases: APT32, APT-C-00, SeaLotus, cobalt Kitty. throughout its activities, the criminal group used the subsequent vulnerabilities:

During its activities, the criminal group used the following vulnerabilities:

• CVE-2016-7255

• CVE-2017-11882

• CVE-2017-8759

• CVE-2017-0199

Related Tools

NBTScan
Matomo
fingerprintjs2
Cobalt Strike
Mimikatz
GetPassword_x64
OceanLotus.Custom Outlook Credential Dumper
HookPasswordChange
OceanLotus.Custom Windows Credential Dumper
NetCat
PSUnlock
OceanLotus.IPCheckTool

Malware List of OceanLotus APT:

a. Cobalt Strike

"Cobalt Strike" is a framework that offers a range of methods for conducting attacks, including delivery and control of malware on the victim's computer. Connection with the "Cobalt Strike" server is conducted through creation of hidden channels via DNS, HTTP, HTTPS protocols to avoid detection.

Platform: Windows

Threat level: Middle

Category: remote-access-trojan

Other Name: Framwork

General information

"Cobalt Strike" is a framework that offers a range of methods for conducting attacks, including delivery and control of malware on the victim's computer. Connection with the "Cobalt Strike" server is conducted through creation of hidden channels via DNS, HTTP, HTTPS protocols to avoid detection. The payload can carry out the following commands:

- Receive system information (OS, hardware, list of processes, computer name, etc.)
- Receive information on the network
- Execute commands in shell
- Download and launch .exe files
- Launch programs for copying of logins and passwords from Windows memory using the exploit in the lsass.exe process (using "mimikatz")
- Bypass Windows (UAC) user account management
- Make copies of hash passwords for Windows
- Gain remote access via VNC protocols with the ability to intervene in current Windows processes
- Provide access to file system
- Scan ports
- Take print screens
- Log keystrokes from specific processes
- Launch a SOCKS proxy server on a specified port, which allows tunnelling of traffic to other applications using DNS, HTTP, HTTPS protocols to avoid detection.
- Provide VPN server functionality
- Provide access to infected computer using «psexec»;
- Change file timestamp attributes

Indicators of Compromise (IOCs)

CnC:

cdn[.]redirectme[.]net
137[.]74[.]181[.]105
http://www[.]hkbytes[.]info/resource/image[.]jpg
www[.]hkbytes[.]info
http://27[.]102[.]102[.]139/lcpd/index[.]jpg
27[.]102[.]102[.]139
https://27[.]102[.]102[.]139/oEcE
http://www[.]hkbytes[.]info/logo[.]gif

MD5:

DFBF9CC304E36C0B67DB02AAA062297B
AD43D67ED35472D4D6541D9C555F05DB
8ADFD63DE516FCB142EA443FD5AB3B95

045451fa238a75305cc26ac982472367

Network Signatures

Cobalt Strike http related X-Malware EICAR header

alert http any any -> any any (msg:"Cobalt Strike http related X-Malware EICAR header"; target:dest_ip; content:"X-Malware"; http_header; content:"EICAR-STANDARD-ANTIVIRUS-TEST-FILE"; http_header; within:64; classtype:apt-trojan; reference:url,http://bytesdarkly.com/2014/11/cobalt-strike-review/; sid:1000829; rev:1; metadata:severity 5, ti_malware_id b69fc9d439d2fd41e98a7e3c60b9a55340012eb6, ti_malware_name Cobalt Strike, malware_family Cobalt Strike, rule_origin gib;)

Cobalt Strike reported domain name (host4.marketshigh.com)

alert http any any -> any any (msg:"Cobalt Strike reported domain name (host4.marketshigh.com)"; target:src_ip; flow:established,to_server; content:"host4.marketshigh.com"; http_host; classtype:apt-trojan; reference:url,http://bytesdarkly.com/2014/11/cobalt-strike-review/; sid:1001420; rev:1; metadata:severity 5, ti_malware_id b69fc9d439d2fd41e98a7e3c60b9a55340012eb6, ti_malware_name Cobalt Strike, malware_family Cobalt Strike, rule_origin gib;)

Cobalt-related DNS Lookup (host4.marketshigh.com)

alert udp any any -> any 53 (msg:"Cobalt-related DNS Lookup (host4.marketshigh.com)"; target:src_ip; flow:from_client; content:"|05|host4|0b|marketshigh|03|com|00|"; nocase; classtype:apt-trojan; reference:url,http://bytesdarkly.com/2014/11/cobalt-strike-review/; sid:1001421; rev:1; metadata:severity 5, ti_threatactor_id c509eac2111b5bd8b67314feb259572255c6f6cc, ti_threatactor_name Cobalt, ti_malware_id b69fc9d439d2fd41e98a7e3c60b9a55340012eb6, ti_malware_name Cobalt Strike, malware_family Cobalt Strike, rule_origin gib;)

Cobalt Backdoor JS DNS Lookup (wecloud.biz)

alert udp $HOME_NET any -> any 53 (msg:"Cobalt Backdoor JS DNS Lookup (wecloud.biz)"; target:src_ip; flow:from_client; content:"|07|wecloud|03|biz|00|"; classtype:apt-trojan; nocase; sid:1001650; rev:1; metadata:severity 5, ti_malware_id b69fc9d439d2fd41e98a7e3c60b9a55340012eb6, ti_malware_name Cobalt Strike, malware_family Cobalt Strike, rule_origin gib;)

Cobalt Backdoor JS DNS Lookup (mail.maincdn.biz)

alert udp $HOME_NET any -> any 53 (msg:"Cobalt Backdoor JS DNS Lookup (mail.maincdn.biz)"; target:src_ip; flow:from_client; content:"|04|mail|07|maincdn|03|biz|00|"; classtype:apt-trojan; nocase; sid:1001651;

rev:1; metadata:severity 5, ti_malware_id b69fc9d439d2fd41e98a7e3c60b9a55340012eb6, ti_malware_name Cobalt Strike, malware_family Cobalt Strike, rule_origin gib;)

Cobalt Backdoor JS DNS Lookup (document.com.kz)

alert udp $HOME_NET any -> any 53 (msg:"Cobalt Backdoor JS DNS Lookup (document.com.kz)"; target:src_ip; flow:from_client; content:"|08|document|03|com|02|kz|00|"; classtype:apt-trojan; nocase; sid:1001652; rev:1; metadata:severity 5, ti_malware_id b69fc9d439d2fd41e98a7e3c60b9a55340012eb6, ti_malware_name Cobalt Strike, malware_family Cobalt Strike, rule_origin gib;)

Cobalt Strike reported IP address

alert tcp $HOME_NET any -> [92.63.111.201,192.52.167.228,89.33.64.134,45.32.165.110,37.1.207.202,176.9.99.134,46.21.147.63,86.105.1.116] !445 (msg:"Cobalt Strike reported IP address"; target:src_ip; threshold:type limit, track by_src, seconds 30, count 1; classtype:apt-trojan; reference:url,http://bytesdarkly.com/2014/11/cobalt-strike-review/; sid:1001419; rev:2; metadata:severity 5, ti_malware_id b69fc9d439d2fd41e98a7e3c60b9a55340012eb6, ti_malware_name Cobalt Strike, malware_family Cobalt Strike, rule_origin gib;)

Win32.Trojan.Dropper Downloading Cobalt Strike Beacon

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"Win32.Trojan.Dropper Downloading Cobalt Strike Beacon"; target:src_ip; flow:established,to_server; content:"GET"; http_method; content:!"Referer|3a|"; nocase; http_header; content:!"Accept-Language|3a|"; nocase; http_header; content:"%20?id="; http_raw_uri; fast_pattern; pcre:"/\/%20\?id=\d*&act=\d*$/I"; classtype:apt-trojan; reference:md5,7edca868c6c52a9f7b24892dc361e444; sid:1001493; rev:1; metadata:severity 5, ti_malware_id b69fc9d439d2fd41e98a7e3c60b9a55340012eb6, ti_malware_name Cobalt Strike, malware_family Cobalt Strike, rule_origin gib;)

Cobalt Backdoor JS DNS Lookup (address-in.kz)

alert udp $HOME_NET any -> any 53 (msg:"Cobalt Backdoor JS DNS Lookup (address-in.kz)"; target:src_ip; flow:from_client; content:"|0a|address-in|02|kz|00|"; classtype:apt-trojan; nocase; sid:1001790; rev:1; metadata:severity 5, ti_malware_id b69fc9d439d2fd41e98a7e3c60b9a55340012eb6, ti_malware_name Cobalt Strike, malware_family Cobalt Strike, rule_origin gib;)

Cobalt Backdoor JS Response with payload

alert http $EXTERNAL_NET any -> $HOME_NET any (msg:"Cobalt Backdoor JS Response with payload"; target:dest_ip; flow:established,to_client;

flowbits:isset,GIB.cobalt.backdoor.js.payload; file_data; content:"<package"; depth:8; content:"<component id="; distance:0; content:"<registration"; distance:0; content:"progid="; distance:0; content:"classid="; distance:0; content:"<script language=|22|JScript|22|"; distance:0; classtype:apt-trojan; reference:md5,bd07b04e008093a40f60e48b903c59cf; sid:1001728; rev:1; metadata:severity 5, ti_malware_id b69fc9d439d2fd41e98a7e3c60b9a55340012eb6, ti_malware_name Cobalt Strike, malware_family Cobalt Strike, rule_origin gib;)

TROJAN Cobalt Strike Exfiltration

alert http $HOME_NET any -> $EXTERNAL_NET any (msg:"TROJAN Cobalt Strike Exfiltration"; target:src_ip; flow:established,to_server; content:"POST"; http_method; content:"|43 6f 62 61 6c 74 20 53 74 72 69 6b 65 20 42 65 61 63 6f 6e 29|"; fast_pattern; http_user_agent; isdataat:!1,relative; http_header_names; content:!"Referer"; classtype:apt-trojan; sid:2025636; rev:1; metadata:affected_product Web_Browsers, attack_target Client_Endpoint, created_at 2018_07_03, deployment Perimeter, former_category TROJAN, signature_severity Major, updated_at 2020_09_16, severity 5, ti_malware_id b69fc9d439d2fd41e98a7e3c60b9a55340012eb6, ti_malware_name Cobalt Strike, malware_family Cobalt Strike, rule_origin etpro;)

TROJAN CopyKittens Cobalt Strike DNS Lookup (cloudflare-analyse . com)

alert dns $HOME_NET any -> any any (msg:"TROJAN CopyKittens Cobalt Strike DNS Lookup (cloudflare-analyse . com)"; target:src_ip; dns_query; content:"cloudflare.analyse.com"; depth:22; nocase; isdataat:!1,relative; fast_pattern; threshold:type limit, track by_src, count 1, seconds 60; reference:url,www.clearskysec.com/wp-content/uploads/2017/07/Operation_Wilted_Tulip.pdf; reference:md5,752240cddda5acb5e8d026cef82e2b54; classtype:apt-trojan; sid:2024497; rev:4; metadata:affected_product Windows_XP_Vista_7_8_10_Server_32_64_Bit, attack_target Client_Endpoint, created_at 2017_07_25, deployment Perimeter, former_category MALWARE, performance_impact Moderate, signature_severity Major, updated_at 2020_09_17, severity 5, ti_malware_id b69fc9d439d2fd41e98a7e3c60b9a55340012eb6, ti_malware_name Cobalt Strike, malware_family Cobalt Strike, rule_origin etpro;)

b. METALJACK

Platform: Windows

Threat level: Middle

Category: remote-access-trojan

Other Name: Framwork

Indicators of Compromise (IOCs)

CnC:

vitlescaux[.]com
141[.]98[.]212[.]23

MD5:

a4808a329b071a1a37b8d03b1305b0cb

c. KerrDown

The loader used by the OceanLotus group since March 2018.

Platform: N/A

Threat level: N/A

Category: N/A

Other Name: downloader

Indicators of Compromise (IOCs)

CnC:

vitlescaux[.]com
141[.]98[.]212[.]23
account[.]dvrdns[.]org
https://outlook[.]updateoffices[.]net/vean32[.]png
88[.]150[.]138[.]114
https://cortanasyn[.]com/kirr64[.]png
cortanasyn[.]com
https://syn[.]servebbs[.]com/kuss32[.]gif
syn[.]servebbs[.]com

MD5:

6875F307D95790CA25C1DA542EA736A8
8D42D9FD3A4D32BC0474D07052CE8984
05b5707d79ca0aee269eb1b02db75b19
8ac2841fbb960a36739a958783ad1694
0a5e5a9a77e64d4fdd987ef7ae66fbe3
d279e98e77d895dc5a981bb8312a5918
3b36fb3a8cf15b0c5a288329e357e916
8ccfd46a24d3bcbee934af91dda8483d
a91e0c32ea93465b80d1bab41193ea4f
d568d10f3e66b89159abf402b31a37b8
f198ab61bc0bf8e5ae8c237d93c7b95d
cab262b84dbd319f3df84f221e5c451f
9bcd0b2590c53e4c0ed5614b127c6ba7
ac5f18f1c20901472d4708bd06a2d191
85dc4f704ee017844e84b42d4b17a1c3

50c6e221e5cd4f41973f3d6779ae1c4c
f5ad93917cd5b119f82b52a0d62f4a93
d6955b482cb67558e2152f6cdd0a2c91
77390c852addc3581d14acf06991982e
4973d4d95b17150153fddc07bbdb6575
49e969a9312ee2ae639002716276073f
6aa22d6c51ea5abe9a9af3a3fb51721b
b75bf1c32bcbe5dfd9261dd558b63277
611f35b485bf2b79db911842bb9d4e8f
c9093362a83b0e7672a161fd9ef9498a
305d992821740a9cbbda9b3a2b50a67c
c28abdfe45590af0ef5c4e7a96d4b979
bf040c081ad1b051fdf3e8ba458d3a9c
751c735585fdff7cb1bf2ae2f281393c
6c2a8612c6511df2876bdb124c33d3e1
1211dea7b68129d48513662e546c6e21
a406626173132c8bd6fe52672deacbe7
e04594ba7e2c63d4f48d92cc99246cce
43c03994e843164625794f4ac727811e
7338852de96796d7f733123f04dd1ae9
6b8fc8c9fe4f4ef90b2fcbcc0d24cfc9
4bdada3dea9b6bb14418e584c1b6af08
2f1f8142d479a1daf3cbd404c7c22f9f
c3bb2b1eabfb34181a9a052e4f06397c
7a6ba3e26c86f3366f544f4553c9d00a
4e7e56be0fdea72564ba761916897895
7df61bc3a146fcf56fe1bbd3c26ea8c0
d40b4277e0d417e2e0cff47458ddd62d
b1990e19efaf88206f7bffe9df0d9419
3c04352c5230b8cbaa12f262dc01d335
d65287550672dac1a89b804c90e7accf
9a10292157ac3748212fb77769873f6c
2756b2f6ba5bcf811c8baced5e98b79f
f3551be56b9f72374787442453bf0428
a530410bca453c93b65d0de465c428e4
c78fd680494b505525d706c285d5ebce
f42611ac0ea2c66d9f27ae14706c1b00
518f52aabd9a059d181bfe864097091e
3a869e8a7b7022082d5a8661ed2fb602
865a7e3cd87b5bc5feec9d61313f2944
760024b35e51a06dcde2128843b1bfdb
ce0afd0b440e25267a96e181d3d9ec5a
546bb6ef89bebfb053999777f6930d7e
38f9655c72474b6c97dc9db9b3609677
9972111cc944d20c9b315fd56eb3a177
0f877ad5464fcbb12e1c019adf7065cc

SHA-256:

5cda7d8294a8804d09108359dd2d96cdf4fdcf22ec9c00f0182d005afff76743

d. OceanLotus.Denis

Denis is a simple backdoor developed by the OceanLotus Group, well observed in-the-wild and renowned for using DNS tunneling as a transport mechanism for C2 communications.

Platform: Windows

Threat level: Middle

Category: Backdoor

Other Name: N/A

Indicators of Compromise (IOCs)

CnC:

udt[.]sophiahoule[.]com
ourkekwiciver[.]com
dieordaunt[.]com
straliaenollma[.]xyz
andreagahuvrauvin[.]com
byronorenstein[.]com
stienollmache[.]xyz
Andreagbridge[.]Com
illagedrivestralia[.]Xyz
http://dload01[.]s3[.]amazonaws[.]com/b89fdbf4-9f80-11e7-abc4-2209cec278b6b50a/FirefoxInstaller[.]exe
nasahlaes[.]com
jeffreyue[.]com
rackerasr[.]com
urnage[.]com
maerferd[.]com
harinarach[.]com
eoneorbin[.]com
74[.]119[.]239[.]234
tsworthoa[.]com
orinneamoure[.]com
lbertussbau[.]com
arinaurna[.]com
icmannaws[.]com
avidsontre[.]com
aulolloy[.]com

MD5:

a8ff3e6abe26c4ce72267154ca604ce3
c7931fa4c144c1c4dc19ad4c41c1e17f
56b5a96b8582b32ad50d6b6d9e980ce7
DD8B36F8F967A26314820C35632FA0D0

F3551BE56B9F72374787442453BF0428
655C536462944D0F3C9FCF4EC19D2015
6AA3115FA1F3ADB8F0539E93D2CF21CA
DDD161A6BB63CA46E8CB0663587920FE
74731674920C51668C36CC3C16F30553
b612735909c41fb7a47e9c12fd1b6cfc
b123f9151c5e7057f061f3e03c1e8416
9453f31cdb02533d509948cc4fd0c44f
4282c6633122dce395de35c05159282d
eb2b52ed27346962c4b7b26df51ebafa
62944e26b36b1dcace429ae26ba66164
fcd7227891271a65b729a27de962c0cb
58d2907361f6414742dcc5071ca20980
1fa011e6a692ee95452c626e61b5263a
627e3ff5659b9a0ab9dc4b283c3288dd
d592b06f9d112c8650091166c19ea05a
88152846c45924d5706a11523942c82b
05bc07fc6265e6affa8478118c02942a

e. OceanLotus.masOS.Backdoor

It was discovered in November 2014. The Trojan was disguised as an Adobe Flash update and was used to attack macOS users by the OceanLotus APT group. The Trojan allows an attacker to manipulate the file system: transfer commands for execution via the command line; download files at a specific URL; modify files (as well as delete, move, copy); terminate processes. The components of the Trojan itself are encrypted, which complicates its analysis; in addition, the malware makes changes to the security settings of the Internet browser, thereby allowing attackers to download arbitrary files without the user's knowledge. The malware also checks for a running virtual environment and reads the OS version.

Platform: Mac

Threat level: N/A

Category: Backdoor

Other Name: N/A

Indicators of Compromise (IOCs)

CnC:

web[.]dalalepredaa[.]com
rio[.]imbandaad[.]com
web[.]dalalepredaa[.]com
5[.]135[.]199[.]9

MD5:

06334cb14c1512bf2794af8dae5ab357
a76be0181705809898d5d7d9aed86ee8

da71b64e77ad45bab56cf71ecd4f55d4
306d3ed0a7c899b5ef9d0e3c91f05193
9831a7bfcf595351206a2ea5679fa65e

f. WINDSHIELD

A malicious program used by the group since 2014. Features WINDSHIELD communication via TCP; 4 C2 servers and 6 configured ports - a pair is chosen at random; manipulation of the registry / file system; collecting information about the values of the registry, username and computer; termination of processes; loading additional modules.

Platform: N/A

Threat level: N/A

Category: Backdoor

Other Name: N/A

Indicators of Compromise (IOCs)

MD5:

7a81a6fdaee15162a3a231751bdd0259
189a078150b12baff608fc18af4bb837
5bcf16810c7ef5bce3023d0bbefb4391
79D06DD20768FD8CD4A043833C1F2D4B

g. Denes

A dropper used by the OceanLotus group to install other malicious components and programs.

Platform: N/A

Threat level: N/A

Category: dropper

Other Name: N/A

Indicators of Compromise (IOCs)

MD5:

49a2e438309e219fa4d9c51dfb7ffcb1
96b971c9ac868c8d9ae98618b9a9bddc
88152846c45924d5706a11523942c82b
d592b06f9d112c8650091166c19ea05a

h. OceanLotus.SteganoLoader

Loader used since September 2018 by the OceanLotus group. The downloader combines steganography and Dll Side-loading techniques, which allows you to download malware using legitimate software along with .png images.

Platform: N/A

Threat level: N/A

Category: Loader, APT

Other Name: N/A

Indicators of Compromise (IOCs)

MD5:

c55f1145ecc9ea52b2872a99a3f04eb4
bbeba6edfea62c34ab92a60e86fd7ce7
ec52a11625bdb4aad3740ff8cc6d8c0f
1675afb65f32c7b148f5d8acbeed2acc
43b57414a07f69aa87ad3ec85fb06b6d
f6c672a15b2c5101279a6420f8d4ecc7
71f512da26deeeceb7e41fbb6a5e3267
08c984ac6b0e0a291f16d0c249310a14

SHA-256:

a2719f203c3e8dcdcc714dd3c1b60a4cbb5f7d7296dbb88b2a756d85bf0e9c1e

i. Downloader

A program that can install malicious components and programs. The dropper can be either another malicious program or legitimate software infected with malicious code.

Platform: N/A

Threat level: N/A

Category: Trojan

Other Name: N/A

Indicators of Compromise (IOCs)

CnC:

ourkekwiciver[.]com
dieordaunt[.]com
straliaenollma[.]xyz
andreagahuvrauvin[.]com
byronorenstein[.]com
stienollmache[.]xyz
Andreagbridge[.]Com
illagedrivestralia[.]Xyz
164[.]132[.]45[.]67
192[.]34[.]109[.]173
http://defprocindia[.]com/register[.]doc

defprocindia[.]com
162[.]255[.]119[.]117
http://www[.]oxfam[.]org/en/invitation<https://drive/google/com/file/s/0B7fMhZc0wl0OeTJpZmViQXU4YVE/edit?usp=sharing
www[.]oxfam[.]org
151[.]236[.]216[.]85
tripadvisor[.]dyndns[.]info
62[.]75[.]204[.]91
neuro[.]dyndns-at-home[.]com
foursquare[.]dyndns[.]tv
wowwiki[.]dynalias[.]net
yelp[.]webhop[.]org
179[.]43[.]134[.]61

MD5:

b123f9151c5e7057f061f3e03c1e8416
9453f31cdb02533d509948cc4fd0c44f
4282c6633122dce395de35c05159282d
3dfc49add45ad35a7c6e21054a53a351
a3d09d969df1742a7cc9511f07e9b44b
6ecb19b51d50af36179c870f3504c623
109cd896f8e13f925584dbbad400b338
A08b9a984b28e520cbde839d83db2d14
877ecaa43243f6b57745f72278965467
87d108b2763ce08d3f611f7d240597ec
5f69999d8f1fa69b57b6e14ab4730edd
75a00fcede0b91793a19295a8b9a7060
cd74dd88322431441fb1088ac7dd6715
e3e99f6d1333ca76a80ba2899a4e2587
02AE075DA4FB2A6D38CE06F8F40E397E
B10F93CDBCDF43D4C5C5770872E239F4
fd4e2b72bbd5f0f27eb5788cc6a7dedd
da71b64e77ad45bab56cf71ecd4f55d4
9831a7bfcf595351206a2ea5679fa65e
d1233d34fcbd643b8c03c026dc4b2e7e
af170750a8228c9e5f21bfc35fc67721
6e667d6c9e527ada1a3284aa333d954d
616d32151c907fdd4e718bde2163cc40
1a60715c51da0caa8a5ebff6fdc9d472

SHA-256:

2fa7ad4736e2bb1d50cbaec625c776cdb6fce0b8eb66035df32764d5a2a18013

j. OceanLotus.Backdoor

The backdoor that the OceanLotus group has been using since May 2017. Backdoor features: system fingerprint; setting the session identifier; creating a process and getting the result of execution; getting information from a file or registry key and calculating MD5; creating /

deleting / moving directories / files; creating an entry in the registry or a stream in memory; file system search; creating a list of logical drives; install and run the program; switch to HTTP; reboot; setting / retrieving environment variables; running shellcode in a new thread.

Platform: N/A

Threat level: N/A

Category: Trojan

Other Name: N/A

Indicators of Compromise (IOCs)

CnC:

tephens[.]com
traveroyce[.]com

MD5:

B10F93CDBCDF43D4C5C5770872E239F4
72A5AD375401F33A5079CAEE18884C9D
79D06DD20768FD8CD4A043833C1F2D4B
EC505565E4CB5A22BFD3F63E4AD83FF3
93da064e3fc4422c63fecca93ee1b157
a7f98d3b7b7e2a7d1c194c2f26045618
96b971c9ac868c8d9ae98618b9a9bddc

k. PhantomLance

PhantomLance is a malicious program for the Android operating system. This malware able to collect confidential information from the victim's device. To do this, the malware can obtain root rights on the device, and thus gain the ability to transmit geolocation data, a call log, SMS messages, a list of installed applications, and full information about the infected device to its operators. At the same time, its functionality can be expanded at any time by loading additional modules from the C&C server.

Platform: N/A

Threat level: N/A

Category: Backdoor

Other Name: N/A

Indicators of Compromise (IOCs)

MD5:

2e06bbc26611305b28b40349a600f95c
b1990e19efaf88206f7bffe9df0d9419
7048d56d923e049ca7f3d97fb5ba9812
e648a2cc826707aec33208408b882e31

3285ae59877c6241200f784b62531694
8d5c64fdaae76bb74831c0543a7865c3
6bf9b834d841b13348851f2dc033773e
0d5c03da348dce513bf575545493f3e3
0e7c2adda3bc65242a365ef72b91f3a8
a795f662d10040728e916e1fd7570c1d
d23472f47833049034011cad68958b46
8b35b3956078fc28e5709c5439e4dcb0
af44bb0dd464680395230ade0d6414cd
65d399e6a77acf7e63ba771877f96f8e
79f06cb9281177a51278b2a33090c867
b107c35b4ca3e549bdf102de918749ba
83cd59e3ed1ba15f7a8cadfe9183e156
c399d93146f3d12feb32da23b75304ba
83c423c36ecda310375e8a1f4348a35e
94a3ca93f1500b5bd7fd020569e46589
54777021c34b0aed226145fde8424991
872a3dd2cd5e01633b57fa5b9ac4648d
243e2c6433815f2ecc204ada4821e7d6
a330456d7ca25c88060dc158049f3298
a097b8d49386c8aab0bb38bbfdf315b2
7285f44fa75c3c7a27bbb4870fc0cdca
b4706f171cf98742413d642b6ae728dc
8008bedaaebc1284b1b834c5fd9a7a71
0e7b59b601a1c7ecd6f2f54b5cd8416a

I. OceanLotus.Encryptor

OceanLotus Encryptor - First discovered in February 2014. The Trojan is an executable file masquerading as JPG or Word files. To bypass security systems, the program, by filling with random characters, increases the file size, which leads to the fact that the file becomes too large for uploading to cloud systems for their subsequent analysis. The Trojan is also capable of detecting the virtual environment and, in case of a positive result, stops further execution.

Platform: N/A

Threat level: N/A

Category: Trojan

Other Name: N/A

Indicators of Compromise (IOCs)

CnC:

active[.]soariz[.]com
193[.]169[.]244[.]73

MD5:

0529b1d393f405bc2b2b33709dd57153
d39edc7922054a0f14a5b000a28e3329
d1233d34fcbd643b8c03c026dc4b2e7e
41bced8c65c5822d43cadad7d1dc49fd

Log4Shell-CVE-2021-44228: Critical Apache Log4j Vulnerability

Apache Log4j is a Java-based logging utility it is part of the Apache Logging Services, a project of the Apache Software Foundation. Log4j is one of several Java logging frameworks.

A critical remote code execution vulnerability in the popular Apache Foundation Log4j library has been disclosed. Log4Shell (CVE-2021-44228) is a zero-day vulnerability in Log4j, the popular Java logging framework, involving arbitrary code execution. CVE-2021-44228/ Log4Shell received a CVSS severity score of a maximum 10[1]. It has been characterized by Tenable as "the single biggest, most critical vulnerability of the last decade"[2].

1. https://nvd.nist.gov/vuln/detail/CVE-2021-44228
2. https://www.theguardian.com/technology/2021/dec/10/software-flaw-most-critical-vulnerability-log-4-shell

Indicators of Compromise (IOCs)

CnC:

1[.]116[.]59[.]211
1[.]14[.]17[.]89
1[.]179[.]247[.]182
1[.]209[.]249[.]188
1[.]209[.]47[.]241
101[.]204[.]24[.]28
101[.]206[.]168[.]120
101[.]35[.]154[.]34
101[.]35[.]199[.]152
101[.]43[.]40[.]206
101[.]71[.]37[.]219
101[.]71[.]37[.]47
101[.]71[.]38[.]179
101[.]71[.]38[.]231
101[.]89[.]19[.]197
101[.]93[.]86[.]68
103[.]103[.]0[.]141
103[.]103[.]0[.]142
103[.]107[.]198[.]108
103[.]107[.]198[.]109
103[.]112[.]31[.]26
103[.]13[.]220[.]57
103[.]130[.]166[.]234
103[.]145[.]22[.]103
103[.]149[.]162[.]116
103[.]149[.]248[.]27
103[.]194[.]184[.]98

103[.]200[.]38[.]236
103[.]214[.]5[.]13
103[.]232[.]136[.]12
103[.]232[.]137[.]187
103[.]244[.]80[.]194
103[.]4[.]30[.]79
103[.]47[.]48[.]65
103[.]90[.]239[.]209
104[.]200[.]138[.]39
104[.]244[.]72[.]115
104[.]244[.]72[.]129
104[.]244[.]72[.]136
104[.]244[.]72[.]7
104[.]244[.]73[.]126
104[.]244[.]73[.]43
104[.]244[.]73[.]85
104[.]244[.]73[.]93
104[.]244[.]74[.]121
104[.]244[.]74[.]211
104[.]244[.]74[.]55
104[.]244[.]74[.]57
104[.]244[.]75[.]225
104[.]244[.]75[.]74
104[.]244[.]76[.]13
104[.]244[.]76[.]170
104[.]244[.]76[.]173
104[.]244[.]76[.]44
104[.]244[.]77[.]139
104[.]244[.]77[.]235
104[.]244[.]78[.]213
104[.]244[.]79[.]234
104[.]244[.]79[.]6
104[.]248[.]144[.]120
106[.]92[.]114[.]249
107[.]172[.]214[.]23
107[.]189[.]1[.]160
107[.]189[.]1[.]178
107[.]189[.]10[.]137
107[.]189[.]10[.]143
107[.]189[.]11[.]153
107[.]189[.]11[.]228
107[.]189[.]12[.]135
107[.]189[.]13[.]143
107[.]189[.]14[.]182
107[.]189[.]14[.]27
107[.]189[.]14[.]76
107[.]189[.]14[.]98

107[.]189[.]28[.]100
107[.]189[.]28[.]241
107[.]189[.]29[.]107
107[.]189[.]29[.]41
107[.]189[.]3[.]244
107[.]189[.]31[.]195
107[.]189[.]31[.]241
107[.]189[.]7[.]88
107[.]189[.]8[.]65
108[.]61[.]148[.]110
109[.]201[.]133[.]100
109[.]237[.]96[.]124
109[.]70[.]100[.]19
109[.]70[.]100[.]22
109[.]70[.]100[.]23
109[.]70[.]100[.]25
109[.]70[.]100[.]26
109[.]70[.]100[.]27
109[.]70[.]100[.]28
109[.]70[.]100[.]31
109[.]70[.]100[.]34
109[.]70[.]100[.]36
109[.]70[.]150[.]139
109[.]73[.]65[.]32
110[.]191[.]179[.]149
110[.]42[.]200[.]96
111[.]127[.]128[.]136
111[.]193[.]180[.]158
111[.]205[.]62[.]212
111[.]28[.]189[.]51
111[.]59[.]85[.]209
112[.]10[.]117[.]77
112[.]103[.]102[.]184
112[.]215[.]172[.]64
112[.]27[.]199[.]180
112[.]74[.]185[.]158
112[.]74[.]34[.]48
112[.]74[.]52[.]90
113[.]141[.]64[.]14
113[.]17[.]41[.]134
113[.]207[.]68[.]47
113[.]68[.]61[.]30
113[.]98[.]224[.]68
114[.]112[.]161[.]155
114[.]132[.]231[.]19
114[.]24[.]19[.]243
114[.]246[.]35[.]153

114[.]254[.]20[.]186
114[.]32[.]82[.]82
115[.]151[.]228[.]146
115[.]151[.]228[.]18
115[.]151[.]228[.]235
115[.]151[.]228[.]4
115[.]151[.]228[.]64
115[.]151[.]228[.]83
115[.]151[.]228[.]92
115[.]151[.]228[.]95
115[.]151[.]229[.]14
115[.]151[.]229[.]16
115[.]151[.]229[.]27
115[.]151[.]229[.]39
115[.]60[.]103[.]185
116[.]206[.]103[.]246
116[.]206[.]231[.]53
116[.]24[.]67[.]213
116[.]246[.]0[.]93
116[.]62[.]20[.]122
116[.]89[.]189[.]19
116[.]89[.]189[.]30
117[.]139[.]38[.]130
117[.]192[.]11[.]154
117[.]36[.]0[.]131
117[.]89[.]128[.]117
118[.]112[.]74[.]135
118[.]112[.]74[.]218
118[.]27[.]36[.]56
119[.]160[.]234[.]68
119[.]84[.]170[.]84
120[.]195[.]30[.]152
120[.]211[.]140[.]116
120[.]228[.]88[.]232
120[.]239[.]67[.]147
120[.]24[.]23[.]84
121[.]229[.]219[.]55
121[.]24[.]8[.]114
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121[.]36[.]213[.]142
121[.]4[.]56[.]143
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121[.]5[.]219[.]20
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122[.]155[.]174[.]180
122[.]161[.]48[.]150
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194[.]163[.]45[.]31
194[.]195[.]112[.]76
194[.]195[.]118[.]221
194[.]233[.]71[.]145
194[.]48[.]199[.]78
194[.]87[.]236[.]154
195[.]123[.]247[.]209
195[.]144[.]21[.]219
195[.]176[.]3[.]19
195[.]176[.]3[.]24
195[.]19[.]192[.]26
195[.]201[.]175[.]217
195[.]206[.]105[.]217
195[.]251[.]41[.]139
195[.]254[.]135[.]76
195[.]54[.]160[.]149
196[.]240[.]57[.]190
197[.]246[.]171[.]111
197[.]246[.]171[.]83
198[.]144[.]121[.]43
198[.]54[.]128[.]94
198[.]96[.]155[.]3
198[.]98[.]51[.]189
198[.]98[.]57[.]191
198[.]98[.]57[.]207
198[.]98[.]59[.]65
198[.]98[.]60[.]19
198[.]98[.]62[.]150
199[.]195[.]248[.]29
199[.]195[.]250[.]77
199[.]195[.]252[.]18
199[.]195[.]253[.]162
199[.]217[.]117[.]92

199[.]249[.]230[.]110
199[.]249[.]230[.]119
199[.]249[.]230[.]158
199[.]249[.]230[.]163
199[.]249[.]230[.]84
2[.]56[.]57[.]208
20[.]205[.]104[.]227
20[.]71[.]156[.]146
20[.]73[.]161[.]16
203[.]175[.]13[.]14
203[.]218[.]252[.]81
203[.]27[.]106[.]141
203[.]27[.]106[.]142
203[.]27[.]106[.]165
204[.]8[.]156[.]142
205[.]185[.]115[.]217
205[.]185[.]115[.]45
205[.]185[.]117[.]149
205[.]185[.]125[.]45
205[.]185[.]126[.]167
205[.]185[.]127[.]35
206[.]188[.]196[.]219
206[.]189[.]20[.]141
206[.]189[.]29[.]232
207[.]246[.]101[.]221
209[.]127[.]17[.]234
209[.]127[.]17[.]242
209[.]141[.]34[.]232
209[.]141[.]36[.]206
209[.]141[.]41[.]103
209[.]141[.]45[.]189
209[.]141[.]45[.]227
209[.]141[.]46[.]203
209[.]141[.]49[.]232
209[.]141[.]54[.]195
209[.]141[.]58[.]146
209[.]141[.]59[.]180
209[.]58[.]146[.]134
209[.]58[.]146[.]160
209[.]97[.]133[.]112
210[.]217[.]18[.]76
211[.]138[.]191[.]69
211[.]148[.]73[.]182
211[.]154[.]194[.]21
211[.]218[.]126[.]140
212[.]102[.]40[.]36
212[.]102[.]50[.]103

212[.]102[.]50[.]87
212[.]102[.]50[.]89
212[.]109[.]197[.]1
212[.]192[.]216[.]30
212[.]192[.]246[.]95
212[.]193[.]30[.]142
212[.]193[.]57[.]225
212[.]47[.]237[.]67
213[.]152[.]188[.]4
213[.]156[.]18[.]247
213[.]164[.]204[.]146
213[.]173[.]34[.]93
213[.]202[.]216[.]189
213[.]203[.]177[.]219
213[.]61[.]215[.]54
213[.]95[.]149[.]22
216[.]218[.]134[.]12
216[.]24[.]191[.]27
217[.]112[.]83[.]246
217[.]138[.]200[.]150
217[.]138[.]208[.]92
217[.]138[.]208[.]94
217[.]146[.]83[.]136
217[.]146[.]83[.]229
217[.]68[.]181[.]100
217[.]79[.]189[.]13
218[.]28[.]128[.]14
218[.]29[.]217[.]234
218[.]89[.]222[.]71
219[.]100[.]36[.]177
219[.]159[.]77[.]109
220[.]189[.]250[.]86
221[.]199[.]187[.]100
221[.]222[.]155[.]240
221[.]226[.]159[.]22
221[.]228[.]87[.]37
222[.]128[.]62[.]127
222[.]211[.]205[.]179
223[.]104[.]67[.]7
223[.]89[.]64[.]12
23[.]105[.]194[.]3
23[.]108[.]92[.]140
23[.]120[.]182[.]121
23[.]128[.]248[.]13
23[.]129[.]64[.]130
23[.]129[.]64[.]131
23[.]129[.]64[.]132

23[.]129[.]64[.]133
23[.]129[.]64[.]134
23[.]129[.]64[.]135
23[.]129[.]64[.]136
23[.]129[.]64[.]137
23[.]129[.]64[.]138
23[.]129[.]64[.]139
23[.]129[.]64[.]140
23[.]129[.]64[.]141
23[.]129[.]64[.]142
23[.]129[.]64[.]143
23[.]129[.]64[.]144
23[.]129[.]64[.]145
23[.]129[.]64[.]146
23[.]129[.]64[.]148
23[.]129[.]64[.]149
23[.]154[.]177[.]2
23[.]154[.]177[.]4
23[.]154[.]177[.]6
23[.]154[.]177[.]7
23[.]160[.]193[.]176
23[.]183[.]83[.]71
23[.]184[.]48[.]209
23[.]234[.]200[.]135
23[.]82[.]194[.]113
23[.]82[.]194[.]114
23[.]82[.]194[.]166
23[.]82[.]194[.]167
23[.]82[.]194[.]168
3[.]139[.]218[.]90
3[.]94[.]114[.]30
31[.]171[.]154[.]132
31[.]191[.]84[.]199
31[.]42[.]184[.]34
31[.]42[.]186[.]101
31[.]6[.]19[.]41
34[.]125[.]76[.]237
34[.]247[.]50[.]189
35[.]170[.]71[.]122
35[.]193[.]211[.]95
35[.]232[.]163[.]113
35[.]76[.]31[.]198
36[.]155[.]14[.]163
36[.]227[.]164[.]189
36[.]4[.]92[.]53
37[.]120[.]158[.]20
37[.]120[.]158[.]22

37[.]120[.]189[.]247
37[.]120[.]199[.]196
37[.]120[.]203[.]182
37[.]120[.]204[.]142
37[.]120[.]232[.]51
37[.]123[.]163[.]58
37[.]187[.]122[.]82
37[.]187[.]96[.]183
37[.]19[.]212[.]103
37[.]19[.]212[.]104
37[.]19[.]212[.]88
37[.]19[.]213[.]10
37[.]19[.]213[.]148
37[.]19[.]213[.]149
37[.]19[.]213[.]150
37[.]19[.]213[.]168
37[.]19[.]213[.]170
37[.]19[.]213[.]198
37[.]19[.]213[.]199
37[.]19[.]213[.]200
37[.]221[.]66[.]128
37[.]228[.]129[.]109
38[.]143[.]9[.]76
39[.]102[.]236[.]51
41[.]203[.]140[.]114
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42[.]192[.]11[.]41
42[.]192[.]17[.]155
42[.]192[.]69[.]45
42[.]193[.]8[.]97
42[.]98[.]70[.]127
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45[.]129[.]56[.]200
45[.]13[.]104[.]179
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45[.]83[.]67[.]0
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45[.]83[.]67[.]183
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45[.]83[.]67[.]75
45[.]83[.]67[.]77
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46[.]166[.]139[.]111
46[.]173[.]218[.]146
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49[.]36[.]231[.]105
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5[.]183[.]209[.]217
5[.]199[.]143[.]202

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5[.]254[.]101[.]169
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51[.]15[.]244[.]188
51[.]15[.]43[.]205
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51[.]68[.]190[.]9
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62[.]102[.]148[.]69
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68[.]183[.]36[.]244
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68[.]183[.]41[.]150
68[.]183[.]44[.]143
68[.]183[.]44[.]164
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82[.]221[.]131[.]71
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84[.]17[.]42[.]118
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86[.]106[.]103[.]29
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92[.]242[.]40[.]21
92[.]38[.]178[.]27
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94[.]230[.]208[.]147
94[.]230[.]208[.]148
95[.]141[.]35[.]15
95[.]214[.]54[.]97
143[.]198[.]163[.]225
46[.]101[.]26[.]182
64[.]227[.]8[.]178
137[.]184[.]156[.]166
138[.]68[.]13[.]60
138[.]68[.]57[.]60
138[.]68[.]246[.]18
143[.]110[.]208[.]87
159[.]65[.]97[.]137
159[.]65[.]110[.]107
165[.]22[.]232[.]67
165[.]227[.]0[.]252
165[.]227[.]4[.]86
103[.]93[.]199[.]4
128[.]90[.]152[.]68