

Table of contents

Overview

● Description	4
● Confidence	4
● Content	5

Entities

● Indicator	6
● Malware	16

Observables

● Hostname	17
● IPv4-Addr	18



External References

-
- External References

19

Overview

Description

SentinelLabs, Microsoft, and PwC threat intelligence researchers provide attribution-relevant information on the Sandman APT cluster.

Confidence

This value represents the confidence in the correctness of the data contained within this report.

15 / 100

Content

N/A

Indicator

Name

mode.encagil.com

Pattern Type

stix

Pattern

[hostname:value = 'mode.encagil.com']

Name

37.120.140.205

Pattern Type

stix

Pattern

[ipv4-addr:value = '37.120.140.205']

Name

185.51.134.27

Description

```

**ISP:** EstNOC OY **OS:** None ----- Hostnames:
----- Domains: ----- Services: **22:** ~ SSH-2.0-
OpenSSH_6.6.1 Key type: ssh-rsa Key:
AAAAB3NzaC1yc2EAAAADAQABAAQCrnRkvV5QPXOotk6upAUKDsHz+eH5JB0qu2MbimNw7
tWho
o+K9mgadtGiSmVoLniBUuLG0x4Lj7mYqYUSW3TlshPHPK1mancXpd7QgxM4FQcmjOUd2hwFm
hA6r RiUk+ue/5b4FjJwZfZAzbefd9j3AhdEBtVCN91gT2a1rfuwaEUEmDXzLcv1k6/
nHtzIbGI6yyWVR
bg5PUAX+GSekAwXDXqciOiHhP4e5u0Z7biOcx3IsUI+axBdX44IcSntfg65Msp2UPadvRhWfrBS7
GJ5xqzpl8khRs8Ti3mmrXsDhAqUdDpjDvHeidtXJohU9bPobdQOulXpkWjRA1QCPFpZT
Fingerprint: 14:7d:e8:17:da:0c:08:72:cd:34:fc:27:f5:a8:46:d7 Kex Algorithms: curve25519-
sha256@libssh.org ecdh-sha2-nistp256 ecdh-sha2-nistp384 ecdh-sha2-nistp521 diffie-
hellman-group-exchange-sha256 diffie-hellman-group-exchange-sha1 diffie-hellman-
group14-sha1 diffie-hellman-group1-sha1 Server Host Key Algorithms: ssh-rsa ecdsa-sha2-
nistp256 ssh-ed25519 Encryption Algorithms: aes128-ctr aes192-ctr aes256-ctr arcfour256
arcfour128 aes128-gcm@openssh.com aes256-gcm@openssh.com chacha20-
poly1305@openssh.com aes128-cbc 3des-cbc blowfish-cbc cast128-cbc aes192-cbc aes256-
cbc arcfour rijndael-cbc@lysator.liu.se MAC Algorithms: hmac-md5-etm@openssh.com
hmac-sha1-etm@openssh.com umac-64-etm@openssh.com umac-128-etm@openssh.com
hmac-sha2-256-etm@openssh.com hmac-sha2-512-etm@openssh.com hmac-ripemd160-
etm@openssh.com hmac-sha1-96-etm@openssh.com hmac-md5-96-etm@openssh.com
hmac-md5 hmac-sha1 umac-64@openssh.com umac-128@openssh.com hmac-sha2-256
hmac-sha2-512 hmac-ripemd160 hmac-ripemd160@openssh.com hmac-sha1-96 hmac-
md5-96 Compression Algorithms: none zlib@openssh.com ~ -----

```

Pattern Type

stix

Pattern

[ipv4-addr:value = '185.51.134.27']

Name

dan.det-ploshadka.com

Pattern Type

stix

Pattern

[hostname:value = 'dan.det-ploshadka.com']

Name

45.129.199.122

Pattern Type

stix

Pattern

[ipv4-addr:value = '45.129.199.122']

Name

yum.luxyries.com

Pattern Type

stix

Pattern

[hostname:value = 'yum.luxyries.com']

Name

5.2.72.130

Pattern Type

stix

Pattern

[ipv4-addr:value = '5.2.72.130']

Name

5.2.67.176

Pattern Type

stix

Pattern

[ipv4-addr:value = '5.2.67.176']

Name

ssl.e-novauto.com

Pattern Type

stix

Pattern

[hostname:value = 'ssl.e-novauto.com']

Name

45.80.148.151

Pattern Type

stix

Pattern

[ipv4-addr:value = '45.80.148.151']

Name

ssl.explorecell.com

Pattern Type

stix

Pattern

[hostname:value = 'ssl.explorecell.com']

Name

ssl.articella.com

Pattern Type

stix

Pattern

[hostname:value = 'ssl.articella.com']

Name

79.110.52.160

Description

```

**ISP:** M247 Europe SRL **OS:** None ----- Hostnames:
----- Domains: ----- Services: **22:** ~ SSH-2.0-
OpenSSH_7.4 Key type: ssh-rsa Key: AAAAB3NzaC1yc2EAAAADAQABAAQDKw5KpITV+/
0PrQADwZIDcGUBx1kxwliikhg4UGSwa8we3 MeR/
TMQwhhdPeRbr96ewlYz014PUosVbkdGQgd5OmlHZWxv/eRmnsySEnMRV8vLkzF2OnlqTbSxw
Yzl5bYjcjzcXKyJQ+DpbAyGAYQCXMCgcWYLjrJGhTmBn2dlPJTD8Lq+e+cRd2G9l8rEwzJmX5vgL
l+WssPkvGb7SPbd/KKUvAH1igDdzp15v+AL1lNY7WTVw34JTAxccZTF7zftUmUBbzhkN+yy/0G/
FopKGFTDYOmaVVcPfeolMGfTajobPFUA3bJ9PrinJwvM12ynH8r366KpD2Z1ePqfCnp5 Fingerprint:
d4:0a:d1:3c:f3:bb:bb:b3:69:6a:a3:f3:66:27:cb:2f Kex Algorithms: curve25519-sha256 curve25519-
sha256@libssh.org ecdh-sha2-nistp256 ecdh-sha2-nistp384 ecdh-sha2-nistp521 diffie-
hellman-group-exchange-sha256 diffie-hellman-group16-sha512 diffie-hellman-group18-
sha512 diffie-hellman-group-exchange-sha1 diffie-hellman-group14-sha256 diffie-hellman-
group14-sha1 diffie-hellman-group1-sha1 Server Host Key Algorithms: ssh-rsa rsa-sha2-512
rsa-sha2-256 ecdsa-sha2-nistp256 ssh-ed25519 Encryption Algorithms: chacha20-
poly1305@openssh.com aes128-ctr aes192-ctr aes256-ctr aes128-gcm@openssh.com
aes256-gcm@openssh.com aes128-cbc aes192-cbc aes256-cbc blowfish-cbc cast128-cbc
3des-cbc MAC Algorithms: umac-64-etm@openssh.com umac-128-etm@openssh.com
hmac-sha2-256-etm@openssh.com hmac-sha2-512-etm@openssh.com hmac-sha1-
etm@openssh.com umac-64@openssh.com umac-128@openssh.com hmac-sha2-256
hmac-sha2-512 hmac-sha1 Compression Algorithms: none zlib@openssh.com ~~~
-----

```

Pattern Type

stix

Pattern

[ipv4-addr:value = '79.110.52.160']

Name

146.70.157.20

Description

```

**ISP:** M247 Europe SRL **OS:** None ----- Hostnames:
----- Domains: ----- Services: **22:** ~~~ SSH-2.0-
OpenSSH_7.4 Key type: ssh-rsa Key:
AAAAB3NzaC1yc2EAAAADAQABAAQACqmiRliqCBV7cMHJDc823/sVTbVLwb5VkJZTMoC4YLXaxdf
TSPZ0bkAZ71HtBexWgR4fYVhT2hQzTXlwgu6m3pl9OSTYcPFqf33rg5+aj3eeR9ETgeoOLiAFcTq
4Bt5SklgGtw4j9g1S6COUXUSKE4ek15GNgeNmFrjrBB0tMZjnHE8pdBWrBHC3x3KPnc5ybHsOPrX
hdhvKZvRSYRuBCK19bK+YMY0nqfA4c80hVw8XrppXwSo23Lnk5fm6t2USgcU+L8Nqjj8Ggo3VGH
w qEoTBnaqPuFPTM8XbWQwh3wqVtwHF7CfUFzg1w0flwZDMcsHs+vjZ08HhRafluLNyuZx
Fingerprint: 53:5b:6f:5f:07:b8:ea:32:61:d8:70:8e:6b:84:22:e9 Kex Algorithms: curve25519-sha256
curve25519-sha256@libssh.org ecdh-sha2-nistp256 ecdh-sha2-nistp384 ecdh-sha2-nistp521
diffie-hellman-group-exchange-sha256 diffie-hellman-group16-sha512 diffie-hellman-
group18-sha512 diffie-hellman-group-exchange-sha1 diffie-hellman-group14-sha256 diffie-
hellman-group14-sha1 diffie-hellman-group1-sha1 Server Host Key Algorithms: ssh-rsa rsa-
sha2-512 rsa-sha2-256 ecdsa-sha2-nistp256 ssh-ed25519 Encryption Algorithms: chacha20-
poly1305@openssh.com aes128-ctr aes192-ctr aes256-ctr aes128-gcm@openssh.com
aes256-gcm@openssh.com aes128-cbc aes192-cbc aes256-cbc blowfish-cbc cast128-cbc
3des-cbc MAC Algorithms: umac-64-etm@openssh.com umac-128-etm@openssh.com
hmac-sha2-256-etm@openssh.com hmac-sha2-512-etm@openssh.com hmac-sha1-
etm@openssh.com umac-64@openssh.com umac-128@openssh.com hmac-sha2-256
hmac-sha2-512 hmac-sha1 Compression Algorithms: none zlib@openssh.com ~~~
-----

```

Pattern Type

stix

Pattern

[ipv4-addr:value = '146.70.157.20']

Name

185.38.142.129

Description

```

**ISP:** Net Solutions - Consultoria Em Tecnologias De Informacao, Sociedade Unipessoal
LDA **OS:** None ----- Hostnames: - my.bl1111a.xyz
----- Domains: - bl1111a.xyz ----- Services: **22:** ~~~

```

```

SSH-2.0-OpenSSH_7.4 Key type: ssh-rsa Key:
AAAAB3NzaC1yc2EAAAADAQABAAQDMDLshMj0BvHYbQ+tBYWU1nPPUOTZZhNc35dCU1mH
ylgma bOjdEXf/
OrgVDnlsHAEPKWR31IbEOevd8nYjYGvBrKZ9BQXO5BRRX523ysIn8XVkUN4CgYBRLCZ
59aQtukV/QIlyjFTzJuZOpKG/y8hJFdOIRLQzePFswHSms8+mk+HFBnQAq0kQNBrM173pvk+2L6w
uhXIAFejZ4DtdqWxnAdpfYGgXv2yuLSY/LKvZy0JCjc7Y0Ah2YGCf8Ywl/WzNaRg0aOT2qqdxids
GhDLlckw7ExXAdQ0ZxtOvucQ5ceyq6UfKuODptoDjfc99fydDLB3LJq9fARXfsTaCviL Fingerprint:
dc:fe:31:2b:2f:bf:34:21:bd:8b:a8:d5:9a:28:a5:54 Kex Algorithms: curve25519-sha256 curve25519-
sha256@libssh.org ecdh-sha2-nistp256 ecdh-sha2-nistp384 ecdh-sha2-nistp521 diffie-
hellman-group-exchange-sha256 diffie-hellman-group16-sha512 diffie-hellman-group18-
sha512 diffie-hellman-group-exchange-sha1 diffie-hellman-group14-sha256 diffie-hellman-
group14-sha1 diffie-hellman-group1-sha1 Server Host Key Algorithms: ssh-rsa rsa-sha2-512
rsa-sha2-256 ecdsa-sha2-nistp256 ssh-ed25519 Encryption Algorithms: chacha20-
poly1305@openssh.com aes128-ctr aes192-ctr aes256-ctr aes128-gcm@openssh.com
aes256-gcm@openssh.com aes128-cbc aes192-cbc aes256-cbc blowfish-cbc cast128-cbc
3des-cbc MAC Algorithms: umac-64-etm@openssh.com umac-128-etm@openssh.com
hmac-sha2-256-etm@openssh.com hmac-sha2-512-etm@openssh.com hmac-sha1-
etm@openssh.com umac-64@openssh.com umac-128@openssh.com hmac-sha2-256
hmac-sha2-512 hmac-sha1 Compression Algorithms: none zlib@openssh.com ~~~
----- **111:** ~~~ Portmap Program Version Protocol Port portmapper 4 tcp 111
portmapper 3 tcp 111 portmapper 2 tcp 111 portmapper 4 udp 111 portmapper 3 udp 111
portmapper 2 udp 111 ~~~ ----- **111:** ~~~ Portmap Program Version Protocol Port
portmapper 4 tcp 111 portmapper 3 tcp 111 portmapper 2 tcp 111 portmapper 4 udp 111
portmapper 3 udp 111 portmapper 2 udp 111 ~~~ -----

```

Pattern Type

stix

Pattern

[ipv4-addr:value = '185.38.142.129']

Name

45.90.59.17

Description

```

**ISP:** GREEN FLOID LLC **OS:** None ----- Hostnames: - dan.det-
ploshadka.com - vds1166756.hosted-by-itldc.com ----- Domains: - det-
ploshadka.com - hosted-by-itldc.com ----- Services: **22:** ~~~ SSH-2.0-
OpenSSH_7.4 Key type: ssh-rsa Key:
AAAAB3NzaC1yc2EAAAADAQABAAQAw25AC+HeQLz1NdcKdKebfPJ7vBYBreRGAXL7tnrdxCpS5
4XD3KKVAFFQ+yKrSiwgb7AqbV4by7hxrSydyMu94Z8rmlkcSdbDv6nYonxuLHfbQA+HCuYev7Lz
1KXRT0jOj5ED/HRoh9ugaj3Cfj4WPGM3L7CSnJniN3y+Y/sb8MMbivtuolb18YNx4EtnTXSsps8j
+GIVSqSop0CmsZ4U0dxmAoX2YhNfsOI+ns+nSfdvQjGjx/W+pE1Vfh22SeCnuD0kBGBJq4mlu74l
LDWpx5NCYDus4TK+u7su6wUZQXhC41qDT5LIYVS6vmHa28mCWhW4bqN1MQQ6SZqsp8LH
Fingerprint: c3:3a:d7:37:22:ff:37:5b:53:91:d3:32:7b:d9:91:b6 Kex Algorithms: curve25519-sha256
curve25519-sha256@libssh.org ecdh-sha2-nistp256 ecdh-sha2-nistp384 ecdh-sha2-nistp521
diffie-hellman-group-exchange-sha256 diffie-hellman-group16-sha512 diffie-hellman-
group18-sha512 diffie-hellman-group-exchange-sha1 diffie-hellman-group14-sha256 diffie-
hellman-group14-sha1 diffie-hellman-group1-sha1 Server Host Key Algorithms: ssh-rsa rsa-
sha2-512 rsa-sha2-256 ecdsa-sha2-nistp256 ssh-ed25519 Encryption Algorithms: chacha20-
poly1305@openssh.com aes128-ctr aes192-ctr aes256-ctr aes128-gcm@openssh.com
aes256-gcm@openssh.com aes128-cbc aes192-cbc aes256-cbc blowfish-cbc cast128-cbc
3des-cbc MAC Algorithms: umac-64-etm@openssh.com umac-128-etm@openssh.com
hmac-sha2-256-etm@openssh.com hmac-sha2-512-etm@openssh.com hmac-sha1-
etm@openssh.com umac-64@openssh.com umac-128@openssh.com hmac-sha2-256
hmac-sha2-512 hmac-sha1 Compression Algorithms: none zlib@openssh.com ~~~
----- **443:** ~~~ HTTP/1.1 404 Not Found Content-Type: text/html; charset=us-
ascii Server: Microsoft-HTTPAPI/2.0 Date: Thu, 07 Dec 2023 04:31:44 GMT Connection: close
Content-Length: 315 ~~~ HEARTBLEED: 2023/12/06 04:38:25 45.90.59.17:443 - SAFE
-----

```

Pattern Type

stix

Pattern

[ipv4-addr:value = '45.90.59.17']

Name

185.82.218.230

Pattern Type

stix

Pattern

[ipv4-addr:value = '185.82.218.230']

Name

5.255.88.188

Pattern Type

stix

Pattern

[ipv4-addr:value = '5.255.88.188']

Malware

Name

KEYPLUG

Description

[KEYPLUG](<https://attack.mitre.org/software/S1051>) is a modular backdoor written in C++, with Windows and Linux variants, that has been used by [APT41](<https://attack.mitre.org/groups/G0096>) since at least June 2021.(Citation: Mandiant APT41)

Hostname

Value

ssl.explorecell.com

dan.det-ploshadka.com

yum.luxuries.com

mode.encagil.com

ssl.e-novauto.com

ssl.articella.com

IPv4-Addr

Value

79.110.52.160

185.82.218.230

5.2.72.130

45.90.59.17

185.38.142.129

45.80.148.151

146.70.157.20

5.255.88.188

37.120.140.205

185.51.134.27

5.2.67.176

45.129.199.122

External References

-
- <https://otx.alienvault.com/pulse/657880e45fb217d3766c1f55>
-
- <https://www.sentinelone.com/labs/sandman-apt-china-based-adversaries-embrace-lua/>