



NETMANAGEIT

Intelligence Report

BlueNoroff | How DPRK's macOS RustBucket Seeks to Evade Analysis and Detection

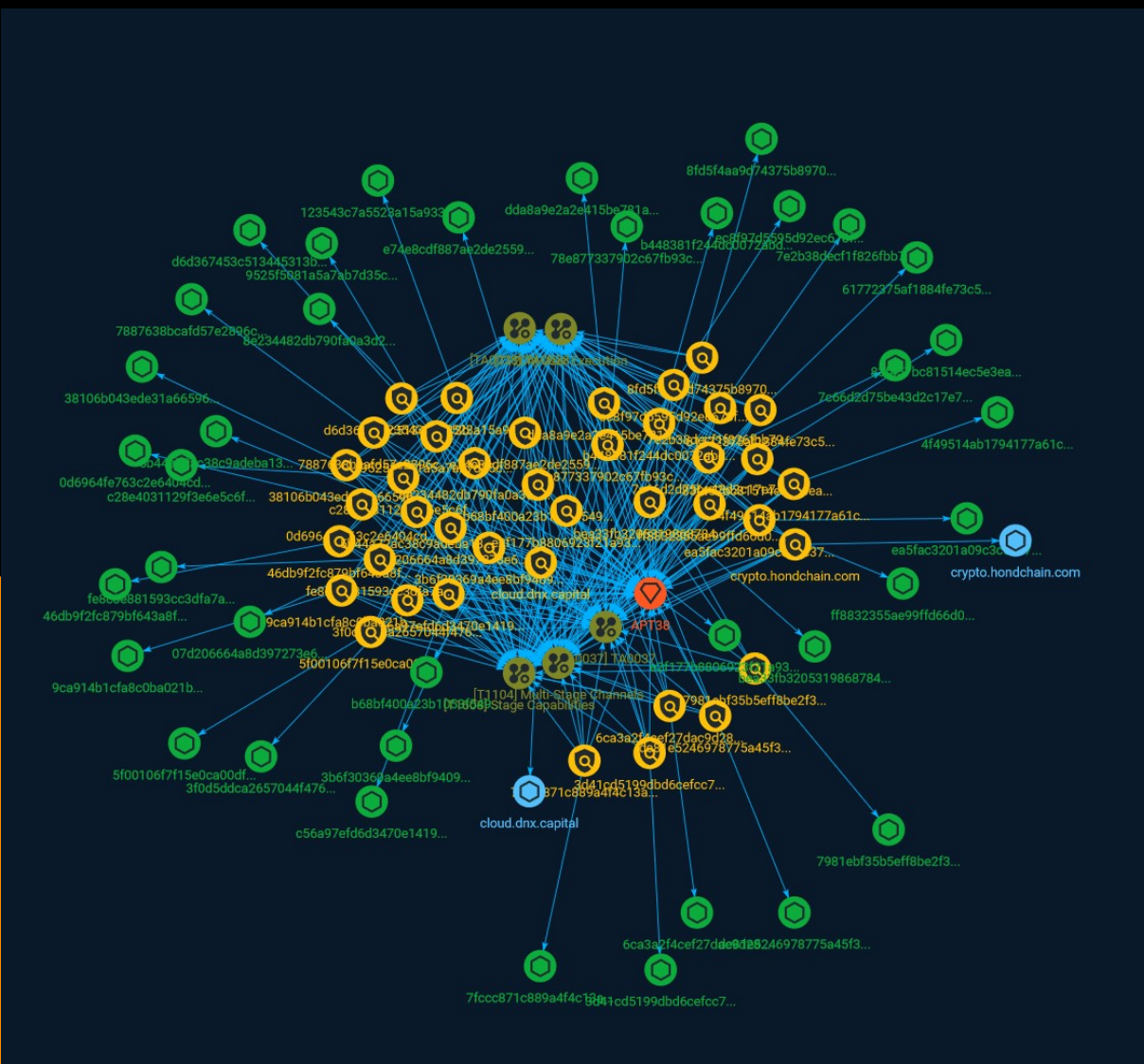


Table of contents

Overview

● Description	4
● Confidence	4

Entities

● Indicator	5
● Attack-Pattern	25
● Intrusion-Set	27

Observables

● StixFile	28
● Hostname	30



External References

-
- External References

31

Overview

Description

Back in April, researchers at JAMF detailed a sophisticated APT campaign targeting macOS users with multi-stage malware that culminated in a Rust backdoor capable of downloading and executing further malware on infected devices. 'RustBucket', as they labeled it, was attributed with strong confidence to the BlueNoroff APT, generally assumed to be a subsidiary of the wider DPRK cyber attack group known as Lazarus.

Confidence

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

15 / 100

Indicator

Name

ea5fac3201a09c3c5c3701723ea9a5fec8bbc4f1f236463d651303f40a245452

Description

SHA256 of 9121509d674091ce1f5f30e9a372b5dcf9bcd257

Pattern Type

stix

Pattern

```
[file:hashes:'SHA-256' =  
'ea5fac3201a09c3c5c3701723ea9a5fec8bbc4f1f236463d651303f40a245452']
```

Name

c56a97efd6d3470e14193ac9e194fa46d495e3dddc918219cca530b90f01d11e

Description

SHA256 of 7a5d57c7e2b0c8ab7d60f7a7c7f4649f33fea8aa

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'c56a97efd6d3470e14193ac9e194fa46d495e3dddc918219cca530b90f01d11e']

Name

3f0d5ddca2657044f4763ae53c4f33c8a7814ba451b60d24430a126674125624

Description

SHA256 of 338af1d91b846f2238d5a518f951050f90693488

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'3f0d5ddca2657044f4763ae53c4f33c8a7814ba451b60d24430a126674125624']

Name

5f00106f7f15e0ca00df4dbb0eecd57930b4b81bc9aa3fca0c5af4eda339ab7

Description

multiple_versions SHA256 of 7f8f43326f1ce505a8cd9f469a2ded81fa5c81be

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'5f00106f7f15e0ca00df4dbb0eecd57930b4b81bc9aa3fca0c5af4eda339ab7']

Name

3b6f30369a4ee8bf9409d141b6d1b3fb4286c34984b5de005ed7431df549b17e

Description

SHA256 of 5304031dc990790a26184b05b3019b2c5fa7022a

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'3b6f30369a4ee8bf9409d141b6d1b3fb4286c34984b5de005ed7431df549b17e']

Name

8e234482db790fa0a3d2bf5f7084ec4cfb74bffd5f6cbdc5abdbc1350f58e3fe

Description

multiple_versions SHA256 of 469236d0054a270e117a2621f70f2a494e7fb823

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'8e234482db790fa0a3d2bf5f7084ec4cfb74bffd5f6cbdc5abdbc1350f58e3fe']

Name

7c66d2d75be43d2c17e75d37c39344a9b5d29ee5c5861f178aa7d9f34208eb48

Description

SHA256 of dabb4372050264f389b8adcf239366860662ac52

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'7c66d2d75be43d2c17e75d37c39344a9b5d29ee5c5861f178aa7d9f34208eb48']

Name

ff8832355ae99ffd66d0fe9eda2d74efdf3ed87bb2a4c215b93ade93165f7c0b

Description

SHA256 of e2bcdfbda85c55a4d6070c18723ba4adb7631807

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'ff8832355ae99ffd66d0fe9eda2d74efdf3ed87bb2a4c215b93ade93165f7c0b']

Name

123543c7a5523a15a933e32477b8cba4cd79a680bb69ef2dba178700bfb9ec07

Description

multiple_versions SHA256 of e7158bb75adf27262ec3b0f2ca73c802a6222379

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'123543c7a5523a15a933e32477b8cba4cd79a680bb69ef2dba178700bfb9ec07']

Name

e74e8cdf887ae2de25590c55cb52dad66f0135ad4a1df224155f772554ea970c

Description

SHA256 of e0e42ac374443500c236721341612865cd3d1eec

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'e74e8cdf887ae2de25590c55cb52dad66f0135ad4a1df224155f772554ea970c']

Name

78e877337902c67fb93c5fdc3b1d9710292a29b97dc98f3cc319ac3edbb760a4

Description

SHA256 of b02922869e86ad06ff6380e8ec0be8db38f5002b

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'78e877337902c67fb93c5fdc3b1d9710292a29b97dc98f3cc319ac3edbb760a4']

Name

38106b043ede31a66596299f17254d3f23cbe1f983674bf9ead5006e0f0bf880

Description

SHA256 of 72167ec09d62cdfb04698c3f96a6131dceb24a9c

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'38106b043ede31a66596299f17254d3f23cbe1f983674bf9ead5006e0f0bf880']

Name

b68bf400a23b1053f54911a2b826d341f6bf87c26bea5e6cf21710ee569a7aab

Description

SHA256 of 0738687206a88ecbee176e05e0518effa4ca4166

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'b68bf400a23b1053f54911a2b826d341f6bf87c26bea5e6cf21710ee569a7aab']

Name

cloud.dnx.capital

Pattern Type

stix

Pattern

[hostname:value = 'cloud.dnx.capital']

Name

d6d367453c513445313be7339666e4faeebeae71620c187012ea5ae2901df34

Description

SHA256 of d5971e8a3e8577dbb6f5a9aad248c842a33e7a26

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'd6d367453c513445313be7339666e4faeebeae71620c187012ea5ae2901df34']

Name

6ca3a2f4cef27dac9d28c1ec2b29a8fa09dfc6dbbaf58e00dddbf5c1dd3b3cc3

Description

SHA256 of 7e1870a5b24c78a5e357568969aae3a5e7ab857d

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'6ca3a2f4cef27dac9d28c1ec2b29a8fa09dfc6dbbaf58e00dddbf5c1dd3b3cc3']

Name

9525f5081a5a7ab7d35cf2fb2d7524e0777e37fe3df62730e1e7de50506850f7

Description

SHA256 of ca59874172660e6180af2815c3a42c85169aa0b2

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'9525f5081a5a7ab7d35cf2fb2d7524e0777e37fe3df62730e1e7de50506850f7']

Name

61772375af1884fe73c5d154b8637dd62f26d23bc38d18462a88e2bbed483fd7

Description

SHA256 of 9a5f6a641cc170435f52c6a759709a62ad5757c7

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'61772375af1884fe73c5d154b8637dd62f26d23bc38d18462a88e2bbed483fd7']

Name

3d41cd5199dbd6cefcc78d53bb44a2ecbea716de2bc8e547ead7c2aebd9925f0

Description

multiple_versions SHA256 of 7e69cb4f9c37fad13de85e91b5a05a816d14f490

Pattern Type

stix

Pattern

[file:hashes:'SHA-256' =
'3d41cd5199dbd6cefcc78d53bb44a2ecbea716de2bc8e547ead7c2aebd9925f0']

Name

c28e4031129f3e6e5c6fbd7b1cebd8dd21b6f87a8564b0fb9ee741a9b8bc0197

Description

SHA256 of 9676f0758c8e8d0e0d203c75b922bcd0aeaa0873

Pattern Type

stix

Pattern

[file:hashes:'SHA-256' =
'c28e4031129f3e6e5c6fbd7b1cebd8dd21b6f87a8564b0fb9ee741a9b8bc0197']

Name

b448381f244dc0072abd4f52e01ca93efaebb2c0a8ea8901c4725ecb1b2b0656

Description

SHA256 of a1a85cba1bc4ac9f6eafc548b1454f57b4dff7e0

Pattern Type

stix

Pattern

[file:hashes:'SHA-256' =
'b448381f244dc0072abd4f52e01ca93efaebb2c0a8ea8901c4725ecb1b2b0656']

Name

0d6964fe763c2e6404cde68af2c5f86d34cf50a88bd81bc06bba739010821db0

Description

SHA256 of d9f1392fb7ed010a0ecc4f819782c179efde9687

Pattern Type

stix

Pattern

[file:hashes:'SHA-256' =
'0d6964fe763c2e6404cde68af2c5f86d34cf50a88bd81bc06bba739010821db0']

Name

dda8a9e2a2e415be781a39fdf41f1551af2344f1b1a0ddf921d8aeba90343d1b

Description

SHA256 of 5933f1a20117d48985b60b10b5e42416ac00e018

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'dda8a9e2a2e415be781a39fdf41f1551af2344f1b1a0ddf921d8aeba90343d1b']

Name

bea33fb3205319868784c028418411ee796d6ee3dfe9309f143e7e8106116a49

Description

SHA256 of fd1cef5abe3e0c275671916a1f3a566f13489416

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'bea33fb3205319868784c028418411ee796d6ee3dfe9309f143e7e8106116a49']

Name

46db9f2fc879bf643a8f05e2b35879b235cbb04aa06fe548f0bc7c7c02483cf3

Description

SHA256 of 963a86aab1e450b03d51628797572fe9da8410a2

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'46db9f2fc879bf643a8f05e2b35879b235cbb04aa06fe548f0bc7c7c02483cf3']

Name

83f457bc81514ec5e3ea123fc237811a36da6ce7f975ad56d62e34af4d1f37c0

Description

SHA256 of 89301dfdc5361f1650796fecdac30b7d86c65122

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'83f457bc81514ec5e3ea123fc237811a36da6ce7f975ad56d62e34af4d1f37c0']

Name

e2f177b8806923f21a93952b61aedbeb02d829a67a820a7aab5ee72512e3d646

Description

SHA256 of 27b101707b958139c32388eb4fd79fcd133ed880

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'e2f177b8806923f21a93952b61aedbeb02d829a67a820a7aab5ee72512e3d646']

Name

07d206664a8d397273e69ce37ef7cf933c22e93b62d95b673d6e835876feba06

Description

multiple_versions SHA256 of be234cb6819039d6a1d3b1a205b9f74b6935bbcc

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'07d206664a8d397273e69ce37ef7cf933c22e93b62d95b673d6e835876feba06']

Name

7e2b38decf1f826fbb792d762d9e6a29147e9ecb44eb2ad2c4dc08e7ee01a140

Description

SHA256 of 0be69bb9836b2a266bfd9a8b93bb412b6e4ce1be

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'7e2b38decf1f826fbb792d762d9e6a29147e9ecb44eb2ad2c4dc08e7ee01a140']

Name

5b44a72ac38c9adeba133b516250f53d3cd13f4018cff7daf44a328ebc6c5ad0

Description

SHA256 of 0df7e1d3b3d54336d986574441778c827ff84bf2

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'5b44a72ac38c9adeba133b516250f53d3cd13f4018cff7daf44a328ebc6c5ad0']

Name

8fd5f4aa9d74375b8970844a9d6c479bc7dfa257132ee8a25d5cd404e19168c8

Description

SHA256 of 7f9694b46227a8ebc67745e533bc0c5f38fdfa59

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'8fd5f4aa9d74375b8970844a9d6c479bc7dfa257132ee8a25d5cd404e19168c8']

Name

7981ebf35b5eff8be2f3849c8f3085b9cec10d9759ff4d3afd46990520de0407

Description

SHA256 of ac08406818bbf4fe24ea04bfd72f747c89174bdb

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'7981ebf35b5eff8be2f3849c8f3085b9cec10d9759ff4d3afd46990520de0407']

Name

7887638bcafd57e2896c7c16698e927ce92fd7d409aae698d33cdca3ce8d25b8

Description

SHA256 of ed4f16b36bc47a701814b63e30d8ea7a226ca906

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'7887638bcafd57e2896c7c16698e927ce92fd7d409aae698d33cdca3ce8d25b8']

Name

crypto.hondchain.com

Pattern Type

stix

Pattern

[hostname:value = 'crypto.hondchain.com']

Name

fe8c0e881593cc3dfa7a66e314b12b322053c67cbc9b606d5a2c0a12f097ef69

Description

SHA256 of 69f24956fb75beb9b93ef974d873914500e35601

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'fe8c0e881593cc3dfa7a66e314b12b322053c67cbc9b606d5a2c0a12f097ef69']

Name

ec8f97d5595d92ec678ffb5ae1f60ce90e620088927f751c76935c46aa7dc41

Description

SHA256 of 3cc19cef767dee93588525c74fe9c1f1bf6f8007

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'ec8f97d5595d92ec678ffbf5ae1f60ce90e620088927f751c76935c46aa7dc41']

Name

de81e5246978775a45f3dbda43e2716aaa1b1c4399fe7d44f918fccecc4dd500

Description

SHA256 of 8a1b32ab8c2a889985e530425ae00f4428c575cc

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'de81e5246978775a45f3dbda43e2716aaa1b1c4399fe7d44f918fccecc4dd500']

Name

9ca914b1cfa8c0ba021b9e00bda71f36cad132f27cf16bda6d937badee66c747

Description

MacOS:Nukesped-A\ [Drp] SHA256 of 182760cbe11fa0316abfb8b7b00b63f83159f5aa

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'9ca914b1cfa8c0ba021b9e00bda71f36cad132f27cf16bda6d937badee66c747']

Name

4f49514ab1794177a61c50c63b93b903c46f9b914c32ebe9c96aa3cbc1f99b16

Description

SHA256 of cd8f41b91e8f1d8625e076f0a161e46e32c62bbf

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'4f49514ab1794177a61c50c63b93b903c46f9b914c32ebe9c96aa3cbc1f99b16']

Name

7fccc871c889a4f4c13a977fdd5f062d6de23c3ffd27e72661c986fae6370387

Description

SHA256 of 831dc7bc4a234907d94a889bcb60b7bedf1a1e13

Pattern Type

stix

Pattern

[file:hashes:'SHA-256' =
'7fccc871c889a4f4c13a977fdd5f062d6de23c3ffd27e72661c986fae6370387']

Attack-Pattern

Name

TA0028

ID

TA0028

Name

TA0037

ID

TA0037

Name

Stage Capabilities

ID

T1608

Description

Adversaries may upload, install, or otherwise set up capabilities that can be used during targeting. To support their operations, an adversary may need to take capabilities they

developed ([Develop Capabilities](https://attack.mitre.org/techniques/T1587)) or obtained ([Obtain Capabilities](https://attack.mitre.org/techniques/T1588)) and stage them on infrastructure under their control. These capabilities may be staged on infrastructure that was previously purchased/rented by the adversary ([Acquire Infrastructure](https://attack.mitre.org/techniques/T1583)) or was otherwise compromised by them ([Compromise Infrastructure](https://attack.mitre.org/techniques/T1584)). Capabilities may also be staged on web services, such as GitHub or Pastebin, or on Platform-as-a-Service (PaaS) offerings that enable users to easily provision applications.(Citation: Volexity Ocean Lotus November 2020)(Citation: Dragos Heroku Watering Hole)(Citation: Malwarebytes Heroku Skimmers)(Citation: Netskope GCP Redirection)(Citation: Netskope Cloud Phishing) Staging of capabilities can aid the adversary in a number of initial access and post-compromise behaviors, including (but not limited to): * Staging web resources necessary to conduct [Drive-by Compromise](https://attack.mitre.org/techniques/T1189) when a user browses to a site.(Citation: FireEye CFR Watering Hole 2012)(Citation: Gallagher 2015)(Citation: ATT ScanBox) * Staging web resources for a link target to be used with spearphishing.(Citation: Malwarebytes Silent Librarian October 2020)(Citation: Proofpoint TA407 September 2019) * Uploading malware or tools to a location accessible to a victim network to enable [Ingress Tool Transfer](https://attack.mitre.org/techniques/T1105).(Citation: Volexity Ocean Lotus November 2020) * Installing a previously acquired SSL/TLS certificate to use to encrypt command and control traffic (ex: [Asymmetric Cryptography](https://attack.mitre.org/techniques/T1573/002) with [Web Protocols](https://attack.mitre.org/techniques/T1071/001)).(Citation: DigiCert Install SSL Cert)

Intrusion-Set

Name

APT38

Description

[APT38](<https://attack.mitre.org/groups/G0082>) is a North Korean state-sponsored threat group that specializes in financial cyber operations; it has been attributed to the Reconnaissance General Bureau.(Citation: CISA AA20-239A BeagleBoyz August 2020) Active since at least 2014, [APT38](<https://attack.mitre.org/groups/G0082>) has targeted banks, financial institutions, casinos, cryptocurrency exchanges, SWIFT system endpoints, and ATMs in at least 38 countries worldwide. Significant operations include the 2016 Bank of Bangladesh heist, during which [APT38](<https://attack.mitre.org/groups/G0082>) stole \$81 million, as well as attacks against Bancomext (2018) and Banco de Chile (2018); some of their attacks have been destructive.(Citation: CISA AA20-239A BeagleBoyz August 2020) (Citation: FireEye APT38 Oct 2018)(Citation: DOJ North Korea Indictment Feb 2021)(Citation: Kaspersky Lazarus Under The Hood Blog 2017) North Korean group definitions are known to have significant overlap, and some security researchers report all North Korean state-sponsored cyber activity under the name [Lazarus Group](<https://attack.mitre.org/groups/G0032>) instead of tracking clusters or subgroups.

StixFile

Value

e2f177b8806923f21a93952b61aedbeb02d829a67a820a7aab5ee72512e3d646

c28e4031129f3e6e5c6fbd7b1cebd8dd21b6f87a8564b0fb9ee741a9b8bc0197

7e2b38decf1f826fbb792d762d9e6a29147e9ecb44eb2ad2c4dc08e7ee01a140

bea33fb3205319868784c028418411ee796d6ee3dfe9309f143e7e8106116a49

3b6f30369a4ee8bf9409d141b6d1b3fb4286c34984b5de005ed7431df549b17e

78e877337902c67fb93c5fdc3b1d9710292a29b97dc98f3cc319ac3edbb760a4

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b448381f244dc0072abd4f52e01ca93efaebb2c0a8ea8901c4725ecb1b2b0656

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b68bf400a23b1053f54911a2b826d341f6bf87c26bea5e6cf21710ee569a7aab

123543c7a5523a15a933e32477b8cba4cd79a680bb69ef2dba178700bfb9ec07

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9525f5081a5a7ab7d35cf2fb2d7524e0777e37fe3df62730e1e7de50506850f7

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7981ebf35b5eff8be2f3849c8f3085b9cecc10d9759ff4d3afd46990520de0407

5f00106f7f15e0ca00df4dbb0eeccd57930b4b81bc9aa3fca0c5af4eda339ab7

38106b043ede31a66596299f17254d3f23cbe1f983674bf9ead5006e0f0bf880

61772375af1884fe73c5d154b8637dd62f26d23bc38d18462a88e2bbed483fd7

6ca3a2f4cef27dac9d28c1ec2b29a8fa09dfc6dbbaf58e00dddbf5c1dd3b3cc3

0d6964fe763c2e6404cde68af2c5f86d34cf50a88bd81bc06bba739010821db0

ff8832355ae99ffd66d0fe9eda2d74efdf3ed87bb2a4c215b93ade93165f7c0b

e74e8cdf887ae2de25590c55cb52dad66f0135ad4a1df224155f772554ea970c

5b44a72ac38c9adeba133b516250f53d3cd13f4018cff7daf44a328ebc6c5ad0

07d206664a8d397273e69ce37ef7cf933c22e93b62d95b673d6e835876feba06

Hostname

Value

cloud.dnx.capital

External References

-
- <https://otx.alienvault.com/pulse/64a5a12895965c20e52afd15>
-
- <https://www.sentinelone.com/blog/bluenoroff-how-dprks-macos-rustbucket-seeks-to-evade-analysis-and-detection/>