NETMANAGEIT Intelligence Report Mysterious Decoy Dog malware toolkit still lurks in DNS shadows

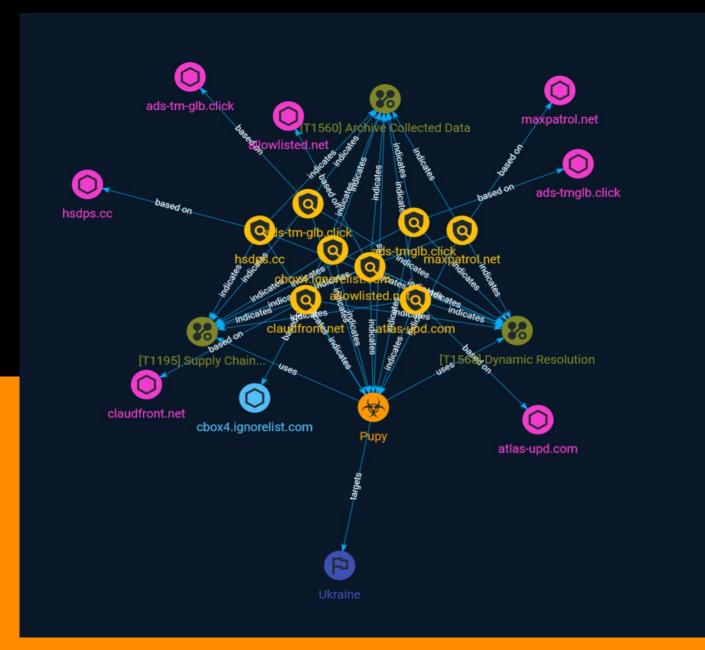


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Overview

Description

New details have emerged about Decoy Dog, a largely undetected sophisticated toolkit likely used for at least a year in cyber intelligence operations, relying on the domain name system (DNS) for command and control activity.

Confidence

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

15 / 100



Indicator

Name
ads-tmglb.click
Pattern Type
stix
Pattern
[domain-name:value = 'ads-tmglb.click']
Name
claudfront.net
Pattern Type
stix
Pattern
[domain-name:value = 'claudfront.net']
[domain-name:value = 'claudfront.net'] Name

TLP:CLEAR

Pattern Type
stix
Pattern
[hostname:value = 'cbox4.ignorelist.com']
Name
atlas-upd.com
Pattern Type
stix
Pattern
[domain-name:value = 'atlas-upd.com']
Name
hsdps.cc
Pattern Type
stix
Pattern
[domain-name:value = 'hsdps.cc']
Name
maxpatrol.net

TLP:CLEAR

Pattern Type
stix
Pattern
[domain-name:value = 'maxpatrol.net']
Name
allowlisted.net
Pattern Type
stix
Pattern
[domain-name:value = 'allowlisted.net']
Name
ads-tm-glb.click
Pattern Type
stix
Pattern
[domain-name:value = 'ads-tm-glb.click']



Malware

Name			
Pupy			

Attack-Pattern

Name

Dynamic Resolution

ID

T1568

Description

Adversaries may dynamically establish connections to command and control infrastructure to evade common detections and remediations. This may be achieved by using malware that shares a common algorithm with the infrastructure the adversary uses to receive the malware's communications. These calculations can be used to dynamically adjust parameters such as the domain name, IP address, or port number the malware uses for command and control. Adversaries may use dynamic resolution for the purpose of [Fallback Channels](https://attack.mitre.org/techniques/T1008). When contact is lost with the primary command and control server malware may employ dynamic resolution as a means to reestablishing command and control.(Citation: Talos CCleanup 2017)(Citation: FireEye POSHSPY April 2017)(Citation: ESET Sednit 2017 Activity)

Name

Supply Chain Compromise

ID T1195

TLP:CLEAR

Description

Adversaries may manipulate products or product delivery mechanisms prior to receipt by a final consumer for the purpose of data or system compromise. Supply chain compromise can take place at any stage of the supply chain including: * Manipulation of development tools * Manipulation of a development environment * Manipulation of source code repositories (public or private) * Manipulation of source code in open-source dependencies * Manipulation of software update/distribution mechanisms * Compromised/infected system images (multiple cases of removable media infected at the factory)(Citation: IBM Storwize)(Citation: Schneider Electric USB Malware) * Replacement of legitimate software with modified versions * Sales of modified/counterfeit products to legitimate distributors * Shipment interdiction While supply chain compromise can impact any component of hardware or software, adversaries looking to gain execution have often focused on malicious additions to legitimate software in software distribution or update channels.(Citation: Avast CCleaner3 2018)(Citation: Microsoft Dofoil 2018)(Citation: Command Five SK 2011) Targeting may be specific to a desired victim set or malicious software may be distributed to a broad set of consumers but only move on to additional tactics on specific victims.(Citation: Symantec Elderwood Sept 2012)(Citation: Avast CCleaner3 2018)(Citation: Command Five SK 2011) Popular open source projects that are used as dependencies in many applications may also be targeted as a means to add malicious code to users of the dependency.(Citation: Trendmicro NPM Compromise)

Name

Archive Collected Data

ID

T1560

Description

An adversary may compress and/or encrypt data that is collected prior to exfiltration. Compressing the data can help to obfuscate the collected data and minimize the amount of data sent over the network. Encryption can be used to hide information that is being exfiltrated from detection or make exfiltration less conspicuous upon inspection by a defender. Both compression and encryption are done prior to exfiltration, and can be performed using a utility, 3rd party library, or custom method.



Country

Name

Ukraine

Domain-Name

Value
ads-tm-glb.click
ads-tmglb.click
claudfront.net
allowlisted.net
atlas-upd.com
hsdps.cc
maxpatrol.net



Hostname

Value

cbox4.ignorelist.com

External References

• https://otx.alienvault.com/pulse/64c12c7ccbf6b2e988374eda

• https://www.bleepingcomputer.com/news/security/mysterious-decoy-dog-malware-toolkit-still-lurks-in-dns-shadows/