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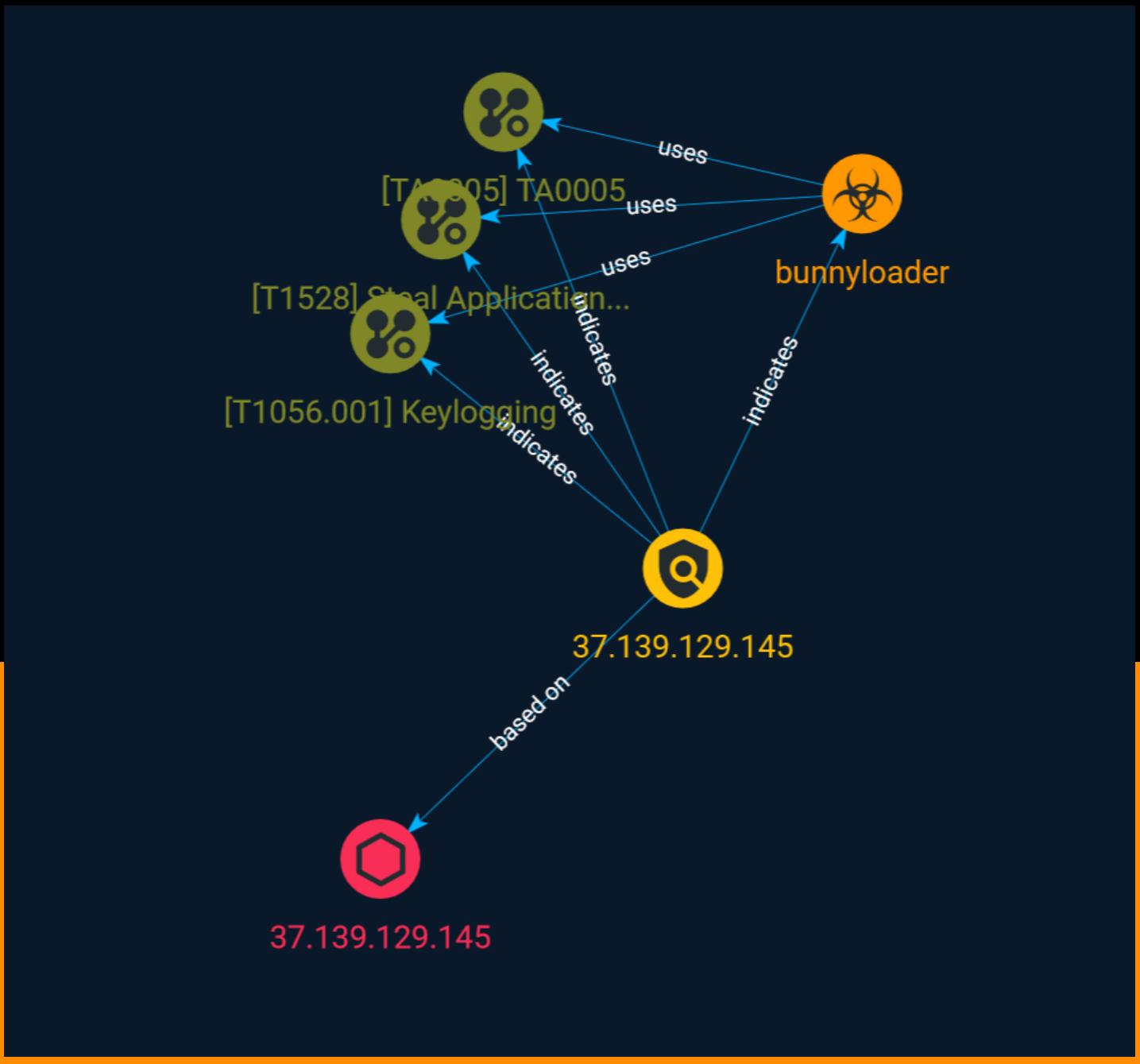
NETMANAGEIT

Intelligence Report

BunnyLoader, the newest Malware-as-a-Service



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Overview

Description

BunnyLoader is a new MaaS threat continuously evolving its tactics and adding new features to carry out successful campaigns against its targets. BunnyLoader features rapid iterations, anti-sandbox tactics, second-stage payload executions, keylogging, stealing capabilities, and remote execution.

Confidence

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

15 / 100

Content

N/A

Attack-Pattern

Name

Steal Application Access Token

ID

T1528

Description

Adversaries can steal application access tokens as a means of acquiring credentials to access remote systems and resources. Application access tokens are used to make authorized API requests on behalf of a user or service and are commonly used as a way to access resources in cloud and container-based applications and software-as-a-service (SaaS).(Citation: Auth0 - Why You Should Always Use Access Tokens to Secure APIs Sept 2019) OAuth is one commonly implemented framework that issues tokens to users for access to systems. Adversaries who steal account API tokens in cloud and containerized environments may be able to access data and perform actions with the permissions of these accounts, which can lead to privilege escalation and further compromise of the environment. In Kubernetes environments, processes running inside a container communicate with the Kubernetes API server using service account tokens. If a container is compromised, an attacker may be able to steal the container’s token and thereby gain access to Kubernetes API commands.(Citation: Kubernetes Service Accounts) Token theft can also occur through social engineering, in which case user action may be required to grant access. An application desiring access to cloud-based services or protected APIs can gain entry using OAuth 2.0 through a variety of authorization protocols. An example commonly-used sequence is Microsoft's Authorization Code Grant flow.(Citation: Microsoft Identity Platform Protocols May 2019)(Citation: Microsoft - OAuth Code Authorization flow - June 2019) An OAuth access token enables a third-party application to interact with resources containing user data in the ways requested by the application without obtaining user credentials. Adversaries can leverage OAuth authorization by constructing a malicious

application designed to be granted access to resources with the target user's OAuth token. (Citation: Amnesty OAuth Phishing Attacks, August 2019)(Citation: Trend Micro Pawn Storm OAuth 2017) The adversary will need to complete registration of their application with the authorization server, for example Microsoft Identity Platform using Azure Portal, the Visual Studio IDE, the command-line interface, PowerShell, or REST API calls.(Citation: Microsoft - Azure AD App Registration - May 2019) Then, they can send a [Spearphishing Link](https://attack.mitre.org/techniques/T1566/002) to the target user to entice them to grant access to the application. Once the OAuth access token is granted, the application can gain potentially long-term access to features of the user account through [Application Access Token](https://attack.mitre.org/techniques/T1550/001).(Citation: Microsoft - Azure AD Identity Tokens - Aug 2019) Application access tokens may function within a limited lifetime, limiting how long an adversary can utilize the stolen token. However, in some cases, adversaries can also steal application refresh tokens(Citation: Auth0 Understanding Refresh Tokens), allowing them to obtain new access tokens without prompting the user.

Name

Keylogging

ID

T1056.001

Description

Adversaries may log user keystrokes to intercept credentials as the user types them. Keylogging is likely to be used to acquire credentials for new access opportunities when [OS Credential Dumping](https://attack.mitre.org/techniques/T1003) efforts are not effective, and may require an adversary to intercept keystrokes on a system for a substantial period of time before credentials can be successfully captured. Keylogging is the most prevalent type of input capture, with many different ways of intercepting keystrokes.(Citation: Adventures of a Keystroke) Some methods include: * Hooking API callbacks used for processing keystrokes. Unlike [Credential API Hooking](https://attack.mitre.org/techniques/T1056/004), this focuses solely on API functions intended for processing keystroke data. * Reading raw keystroke data from the hardware buffer. * Windows Registry modifications. * Custom drivers. * [Modify System Image](https://attack.mitre.org/techniques/T1601) may provide adversaries with hooks into the operating system of network devices to read raw keystrokes for login sessions.(Citation: Cisco Blog Legacy Device Attacks)

Name
TA0005
ID
TA0005

Indicator

Name
37.139.129.145
Description
Malicious SSL connections
Pattern Type
stix
Pattern
[ipv4-addr:value = '37.139.129.145']

Malware

Name
bunnyloader

IPv4-Addr

Value
37.139.129.145

External References

- https://otx.alienvault.com/pulse/651aebaafa95ac2600fba719
- https://www.zscaler.com/blogs/security-research/bunnyloader-newest-malware-service