



NETMANAGEIT

Intelligence Report

Unmasking GUI-Vil: Financially Motivated Cloud Threat Actor

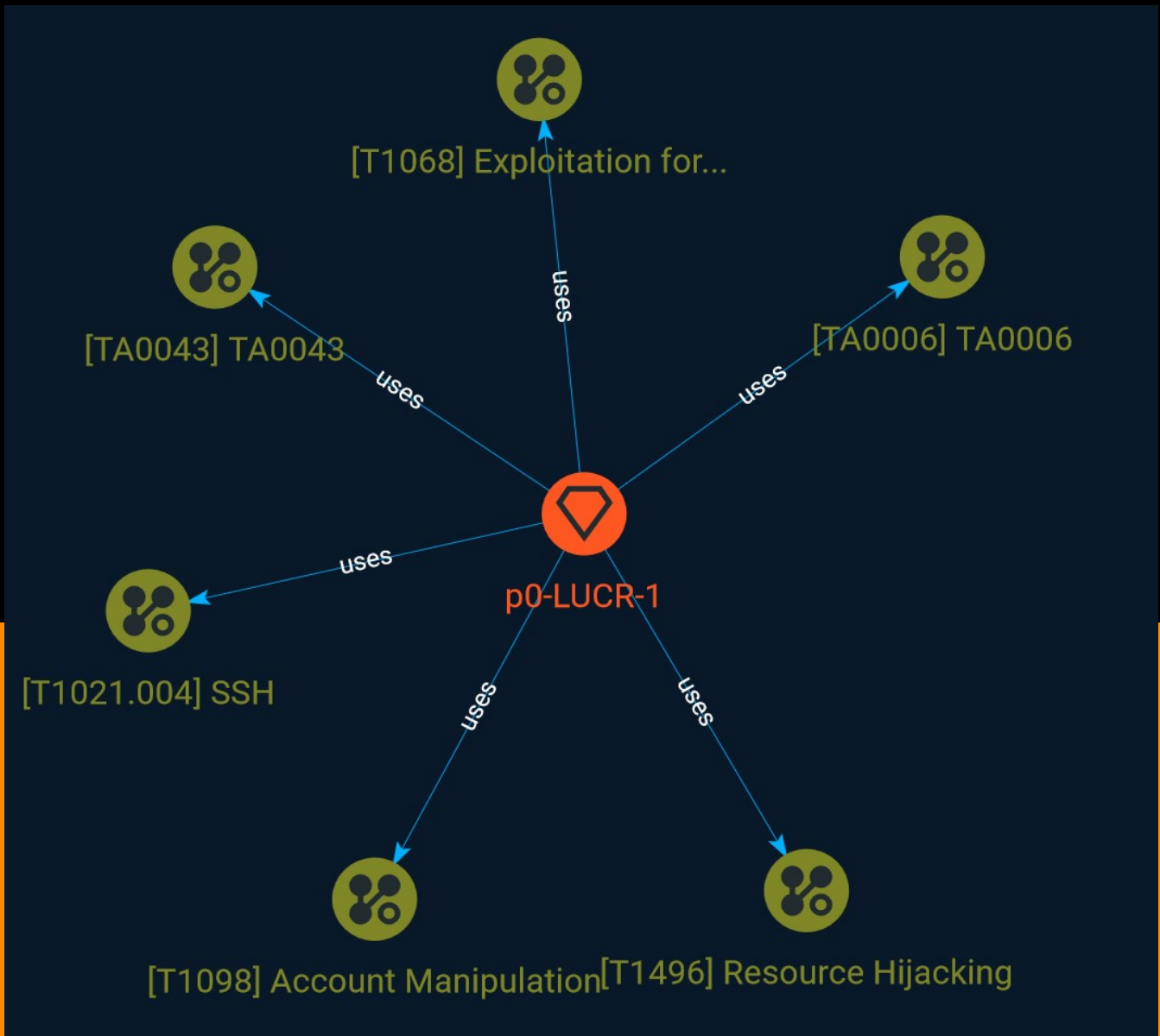


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Overview

Description

Permiso's p0 Labs has been tracking a threat actor for the last 18 months. In this article Permiso's p0 Labs will describe the attack lifecycle and detection opportunities for the cloud-focused, financially motivated threat actor we have dubbed as p0-LUCR-1, aka GUI-vil (Goo-ee-vil).

Confidence

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

15 / 100

Attack-Pattern

Name

SSH

ID

T1021.004

Description

Adversaries may use [Valid Accounts](<https://attack.mitre.org/techniques/T1078>) to log into remote machines using Secure Shell (SSH). The adversary may then perform actions as the logged-on user. SSH is a protocol that allows authorized users to open remote shells on other computers. Many Linux and macOS versions come with SSH installed by default, although typically disabled until the user enables it. The SSH server can be configured to use standard password authentication or public-private keypairs in lieu of or in addition to a password. In this authentication scenario, the user's public key must be in a special file on the computer running the server that lists which keypairs are allowed to login as that user.

Name

Exploitation for Privilege Escalation

ID

T1068

Description

Adversaries may exploit software vulnerabilities in an attempt to elevate privileges. Exploitation of a software vulnerability occurs when an adversary takes advantage of a programming error in a program, service, or within the operating system software or kernel itself to execute adversary-controlled code. Security constructs such as permission levels will often hinder access to information and use of certain techniques, so adversaries will likely need to perform privilege escalation to include use of software exploitation to circumvent those restrictions. When initially gaining access to a system, an adversary may be operating within a lower privileged process which will prevent them from accessing certain resources on the system. Vulnerabilities may exist, usually in operating system components and software commonly running at higher permissions, that can be exploited to gain higher levels of access on the system. This could enable someone to move from unprivileged or user level permissions to SYSTEM or root permissions depending on the component that is vulnerable. This could also enable an adversary to move from a virtualized environment, such as within a virtual machine or container, onto the underlying host. This may be a necessary step for an adversary compromising an endpoint system that has been properly configured and limits other privilege escalation methods. Adversaries may bring a signed vulnerable driver onto a compromised machine so that they can exploit the vulnerability to execute code in kernel mode. This process is sometimes referred to as Bring Your Own Vulnerable Driver (BYOVD). (Citation: ESET InvisiMole June 2020) (Citation: Unit42 AcidBox June 2020) Adversaries may include the vulnerable driver with files delivered during Initial Access or download it to a compromised system via [Ingress Tool Transfer](<https://attack.mitre.org/techniques/T1105>) or [Lateral Tool Transfer](<https://attack.mitre.org/techniques/T1570>).

Name

Resource Hijacking

ID

T1496

Description

Adversaries may leverage the resources of co-opted systems in order to solve resource intensive problems, which may impact system and/or hosted service availability. One common purpose for Resource Hijacking is to validate transactions of cryptocurrency networks and earn virtual currency. Adversaries may consume enough system resources to

negatively impact and/or cause affected machines to become unresponsive.(Citation: Kaspersky Lazarus Under The Hood Blog 2017) Servers and cloud-based systems are common targets because of the high potential for available resources, but user endpoint systems may also be compromised and used for Resource Hijacking and cryptocurrency mining.(Citation: CloudSploit - Unused AWS Regions) Containerized environments may also be targeted due to the ease of deployment via exposed APIs and the potential for scaling mining activities by deploying or compromising multiple containers within an environment or cluster.(Citation: Unit 42 Hildegard Malware)(Citation: Trend Micro Exposed Docker APIs) Additionally, some cryptocurrency mining malware identify then kill off processes for competing malware to ensure it's not competing for resources.(Citation: Trend Micro War of Crypto Miners) Adversaries may also use malware that leverages a system's network bandwidth as part of a botnet in order to facilitate [Network Denial of Service](<https://attack.mitre.org/techniques/T1498>) campaigns and/or to seed malicious torrents.(Citation: GoBotKR)

Name

TA0043

ID

TA0043

Name

TA0006

ID

TA0006

Name

Account Manipulation

ID

T1098

Description

Adversaries may manipulate accounts to maintain access to victim systems. Account manipulation may consist of any action that preserves adversary access to a compromised account, such as modifying credentials or permission groups. These actions could also include account activity designed to subvert security policies, such as performing iterative password updates to bypass password duration policies and preserve the life of compromised credentials. In order to create or manipulate accounts, the adversary must already have sufficient permissions on systems or the domain. However, account manipulation may also lead to privilege escalation where modifications grant access to additional roles, permissions, or higher-privileged [Valid Accounts](<https://attack.mitre.org/techniques/T1078>).

Intrusion-Set

Name
p0-LUCR-1

External References

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- <https://otx.alienvault.com/pulse/646ccb4ca09cbc1b60f22b01>
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- <https://permiso.io/blog/s/unmasking-guivil-new-cloud-threat-actor/>