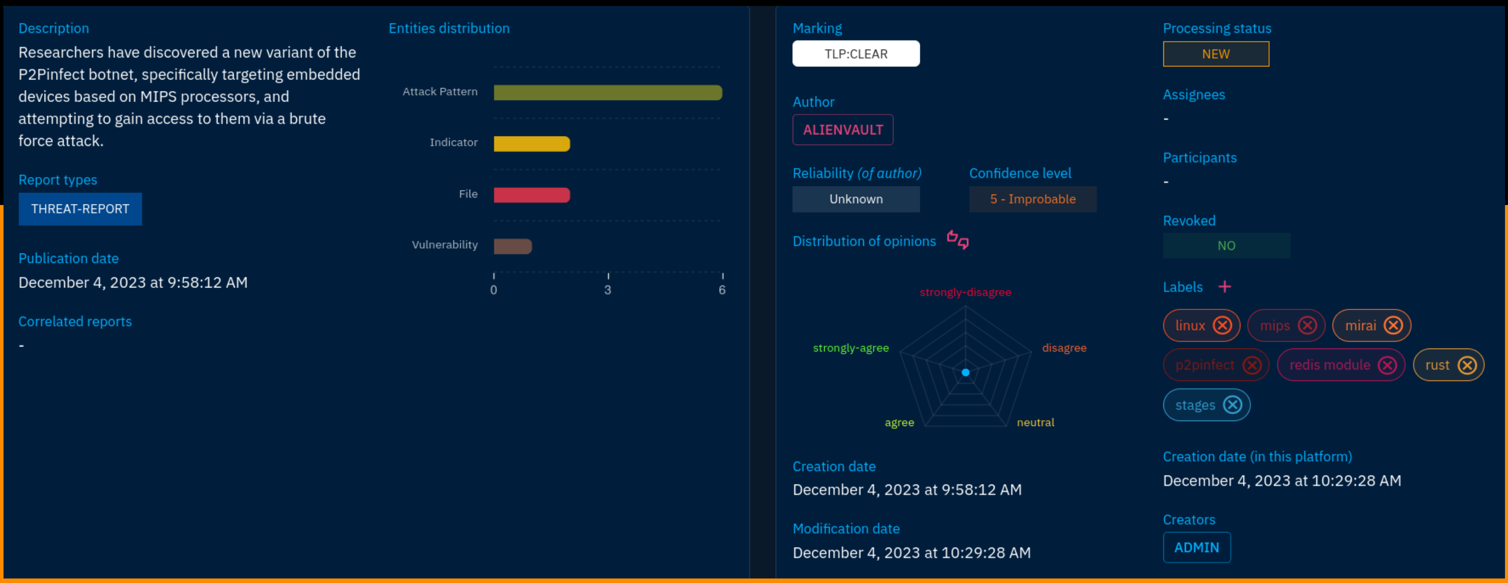
Dec 05 2023

NETMANAGEIT

Intelligence Report

P2Pinfect - New Variant Targets MIPS Devices



Description

Researchers have discovered a new variant of the P2Pinfect botnet, specifically targeting embedded devices based on MIPS processors, and attempting to gain access to them via a brute force attack.

Report types

THREAT-REPORT

Publication date

December 4, 2023 at 9:58:12 AM

Correlated reports

-

Entities distribution

Marking

TLP:CLEAR

Author

ALIENVAULT

Reliability *(of author)*

Unknown

Confidence level

5 - Improbable

Distribution of opinions

Creation date

December 4, 2023 at 9:58:12 AM

Modification date

December 4, 2023 at 10:29:28 AM

Processing status

NEW

Assignees

-

Participants

-

Revoked

NO

Labels +

linux ⊗ mips ⊗ mirai ⊗ p2pinfect ⊗ redis module ⊗ rust ⊗ stages ⊗

Creation date (in this platform)

December 4, 2023 at 10:29:28 AM

Creators

ADMIN

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Overview

Description

Researchers have discovered a new variant of the P2Pinfect botnet, specifically targeting embedded devices based on MIPS processors, and attempting to gain access to them via a brute force attack.

Confidence

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

15 / 100

Content

N/A

Attack-Pattern

Name
Brute Force
ID
T1110
Description
Adversaries may use brute force techniques to gain access to accounts when passwords are unknown or when password hashes are obtained. Without knowledge of the password for an account or set of accounts, an adversary may systematically guess the password using a repetitive or iterative mechanism. Brute forcing passwords can take place via interaction with a service that will check the validity of those credentials or offline against previously acquired credential data, such as password hashes. Brute forcing credentials may take place at various points during a breach. For example, adversaries may attempt to brute force access to [Valid Accounts](https://attack.mitre.org/techniques/T1078) within a victim environment leveraging knowledge gathered from other post-compromise behaviors such as [OS Credential Dumping](https://attack.mitre.org/techniques/T1003), [Account Discovery](https://attack.mitre.org/techniques/T1087), or [Password Policy Discovery](https://attack.mitre.org/techniques/T1201). Adversaries may also combine brute forcing activity with behaviors such as [External Remote Services](https://attack.mitre.org/techniques/T1133) as part of Initial Access.
Name
Proxy

ID

T1090

Description

Adversaries may use a connection proxy to direct network traffic between systems or act as an intermediary for network communications to a command and control server to avoid direct connections to their infrastructure. Many tools exist that enable traffic redirection through proxies or port redirection, including [HTRAN](https://attack.mitre.org/software/S0040), ZXProxy, and ZXPortMap. (Citation: Trend Micro APT Attack Tools) Adversaries use these types of proxies to manage command and control communications, reduce the number of simultaneous outbound network connections, provide resiliency in the face of connection loss, or to ride over existing trusted communications paths between victims to avoid suspicion. Adversaries may chain together multiple proxies to further disguise the source of malicious traffic. Adversaries can also take advantage of routing schemes in Content Delivery Networks (CDNs) to proxy command and control traffic.

Name

Impair Defenses

ID

T1562

Description

Adversaries may maliciously modify components of a victim environment in order to hinder or disable defensive mechanisms. This not only involves impairing preventative defenses, such as firewalls and anti-virus, but also detection capabilities that defenders can use to audit activity and identify malicious behavior. This may also span both native defenses as well as supplemental capabilities installed by users and administrators. Adversaries may also impair routine operations that contribute to defensive hygiene, such as blocking users from logging out of a computer or stopping it from being shut down. These restrictions can further enable malicious operations as well as the continued propagation of incidents.(Citation: Emotet shutdown) Adversaries could also target event aggregation and analysis mechanisms, or otherwise disrupt these procedures by altering other system components.

Name

Hijack Execution Flow

ID

T1574

Description

Adversaries may execute their own malicious payloads by hijacking the way operating systems run programs. Hijacking execution flow can be for the purposes of persistence, since this hijacked execution may reoccur over time. Adversaries may also use these mechanisms to elevate privileges or evade defenses, such as application control or other restrictions on execution. There are many ways an adversary may hijack the flow of execution, including by manipulating how the operating system locates programs to be executed. How the operating system locates libraries to be used by a program can also be intercepted. Locations where the operating system looks for programs/resources, such as file directories and in the case of Windows the Registry, could also be poisoned to include malicious payloads.

Name

Command and Scripting Interpreter

ID

T1059

Description

Adversaries may abuse command and script interpreters to execute commands, scripts, or binaries. These interfaces and languages provide ways of interacting with computer systems and are a common feature across many different platforms. Most systems come with some built-in command-line interface and scripting capabilities, for example, macOS and Linux distributions include some flavor of [Unix Shell](https://attack.mitre.org/techniques/T1059/004) while Windows installations include the [Windows Command Shell](https://attack.mitre.org/techniques/T1059/003) and [PowerShell](https://attack.mitre.org/techniques/T1059/001). There are also cross-platform interpreters such as [Python](https://attack.mitre.org/techniques/T1059/006), as well as those commonly associated with client applications such as [JavaScript](https://attack.mitre.org/techniques/T1059/007) and [Visual Basic](https://attack.mitre.org/techniques/T1059/005). Adversaries may abuse these technologies in various ways as a means of executing arbitrary commands. Commands and scripts can be embedded in [Initial Access](https://attack.mitre.org/tactics/TA0001) payloads delivered to victims as lure documents or as secondary payloads downloaded from an existing C2. Adversaries may also execute commands through interactive terminals/shells, as well as utilize various [Remote Services](https://attack.mitre.org/techniques/T1021) in order to achieve remote Execution.(Citation: Powershell Remote Commands)(Citation: Cisco IOS Software Integrity Assurance - Command History)(Citation: Remote Shell Execution in Python)

Name

Remote Services

ID

T1021

Description

Adversaries may use [Valid Accounts](https://attack.mitre.org/techniques/T1078) to log into a service that accepts remote connections, such as telnet, SSH, and VNC. The adversary may then perform actions as the logged-on user. In an enterprise environment, servers and workstations can be organized into domains. Domains provide centralized identity management, allowing users to login using one set of credentials across the entire network. If an adversary is able to obtain a set of valid domain credentials, they could login to many different machines using remote access protocols such as secure shell (SSH) or remote desktop protocol (RDP).(Citation: SSH Secure Shell)(Citation: TechNet Remote Desktop Services) They could also login to accessible SaaS or IaaS services, such as those that federate their identities to the domain. Legitimate applications (such as [Software Deployment Tools](https://attack.mitre.org/techniques/T1072) and other administrative programs) may utilize [Remote Services](https://attack.mitre.org/techniques/T1021) to access remote hosts. For example, Apple Remote Desktop (ARD) on macOS is native software used for remote management. ARD leverages a blend of protocols, including [VNC](https://attack.mitre.org/techniques/T1021/005) to send the screen and control buffers and [SSH](https://attack.mitre.org/techniques/T1021/004) for secure file transfer.(Citation: Remote Management MDM macOS)(Citation: Kickstart Apple Remote Desktop commands)(Citation: Apple Remote Desktop Admin Guide 3.3) Adversaries can abuse applications such as ARD to gain remote code execution and perform lateral movement. In versions of macOS prior to 10.14, an adversary can escalate an SSH session to an ARD session which enables an adversary to accept TCC (Transparency, Consent, and Control) prompts without user interaction and gain access to data.(Citation: FireEye 2019 Apple Remote Desktop)(Citation: Lockboxx ARD 2019)(Citation: Kickstart Apple Remote Desktop commands)

Indicator

Name

8b704d6334e59475a578d627ae4bcb9c1d6987635089790350c92eafc28f5a6c

Pattern Type

stix

Pattern

[file:hashes.'SHA-256' = '8b704d6334e59475a578d627ae4bcb9c1d6987635089790350c92eafc28f5a6c']

Name

d75d2c560126080f138b9c78ac1038ff2e7147d156d1728541501bc801b6662f

Pattern Type

stix

Pattern

[file:hashes.'SHA-256' = 'd75d2c560126080f138b9c78ac1038ff2e7147d156d1728541501bc801b6662f']

Vulnerability

Name
CVE-2022-0543

Description
Redis is prone to a (Debian-specific) Lua sandbox escape, which could result in remote code execution.

StixFile

Value
d75d2c560126080f138b9c78ac1038ff2e7147d156d1728541501bc801b6662f
8b704d6334e59475a578d627ae4bcb9c1d6987635089790350c92eafc28f5a6c

External References

- https://otx.alienvault.com/pulse/656de905fbaae54097494837
- https://www.cadosecurity.com/p2pinfect-new-variant-targets-mips-devices/