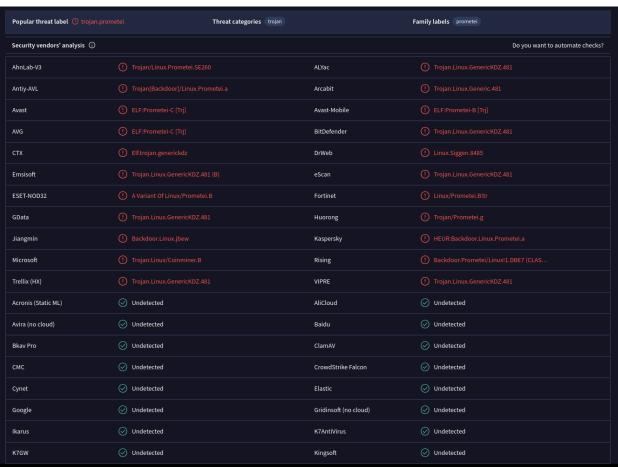
# Identify and Analyze Cyber Threats

# Malware Analysis

# Sample Link

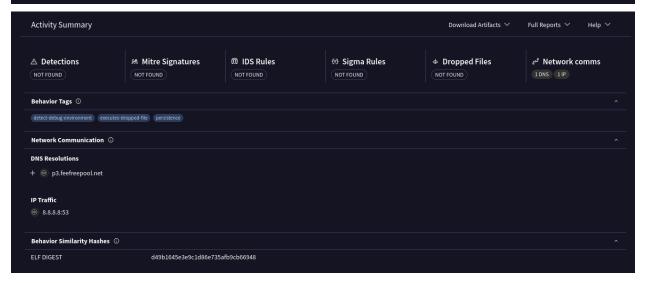
**Analysis Link** 





Basic properties ①	
MD5	99ba8fd508563a946e811d80be35002e
SHA-1	e3938ac112daa883ba5dc72a2fa114b1acb77fd2
SHA-256	76aad0a8f0aaffe57f8ced5ad25e0a3133000f93aa5fff45153e4730d048efe8
Vhash	b3a5fcda1befb53a724715687a591d0b
SSDEEP	12288:qb14350q+8eX51/f2Wc3slC3yjTjMv+9X5JhBXEsV3b9gh4J8zMSv7MzOup8Mplb:qmShf4OTjMgXSJhBXEsVrmz9MOup1Khk
TLSH	T144155B653700EF5EF39DE27108F287E046D125F31AD24296A278C71C6EE161D28AFDE9
File type	ELF executable linux elf
Magic	ELF 32-bit MSB executable, MIPS, MIPS32 rel2 version 1 (SYSV), statically linked, for GNU/Linux 3.2.0, BuildID[sha1]=bc565f9f2dafc5618defa8eccf705f85712c87da, stripped
TrID	ELF Executable and Linkable format (generic) (100%)
DetectItEasy	ELF32   Operation system: Unix [EXEC MIPS-32]   Compiler: gcc ((Ubuntu 7.5.0-3ubuntu1~18.04) 7.5.0) [EXEC MIPS-32]
Magika	ELF
File size	898.99 KB (920568 bytes)
History ①	
First Seen In The Wild	2025-01-20 15:01:32 UTC
First Submission	2025-01-20 14:44:45 UTC
Last Submission	2025-01-20 14:44:45 UTC
Last Analysis	2025-01-20 14:44:45 UTC
<u> </u>	

Contacted Domains (1) ①				
Domain	Detections	Created	Registrar	
p3.feefreepool.net	11 / 94	2017-05-10	Internet Domain Service BS Corp	
Contacted IP addre	sses (2) ①			
IP	Detections	Autonomous System	Country	
	Detections 0 / 94	Autonomous System	<b>Country</b> US	





Detection Rate: 34% (22 out of 63 vendors have identified this)

<u>Malware Family</u>: Trojan <u>File Information</u>: ELF, exe

Network Indicators: p3.feefreepool.net

IP Traffic: 8.8.8.8:53

<u>Behavior Indicators / Indicators of Compromise:</u> Detects debug environments; executes

dropped files; persistence

System Impact/ Potential Damage Assessment: Opens, writes, and delete files;

Unleashes a series of commands;

#### **Phishing Template Creation**

# Select from the menu:

- 1) Social-Engineering Attacks
- Penetration Testing (Fast-Track)
- 3) Third Party Modules
- 4) Update the Social-Engineer Toolkit
- 5) Update SET configuration
- 6) Help, Credits, and About
- 99) Exit the Social-Engineer Toolkit

#### <u>set</u>> 1

#### Select from the menu:

- 1) Spear-Phishing Attack Vectors
- 2) Website Attack Vectors
- Infectious Media Generator
- 4) Create a Payload and Listener
- 5) Mass Mailer Attack
- 6) Arduino-Based Attack Vector
- 7) Wireless Access Point Attack Vector
- 8) ORCode Generator Attack Vector
- 9) Powershell Attack Vectors
- 10) Third Party Modules
- 99) Return back to the main menu.

#### <u>set</u>> 2

- 1) Java Applet Attack Method
- 2) Metasploit Browser Exploit Method
- 3) Credential Harvester Attack Method
- 4) Tabnabbing Attack Method
- 5) Web Jacking Attack Method
- 6) Multi-Attack Web Method
- 7) HTA Attack Method
- 99) Return to Main Menu

#### <u>set:webattack</u>>3

- 1) Web Templates
- Site Cloner
- 3) Custom Import
- 99) Return to Webattack Menu

set:webattack>1

- 1. Java Required
- 2. Google
- 3. Twitter

set:webattack> Select a template: 2

set:webattack> IP address for the POST back in Harvester/Tabnabbing [10.0.2.1
5]: clear

```
[*] Cloning the website: http://www.google.com
[*] This could take a little bit...

The best way to use this attack is if username and password form fields are a vailable. Regardless, this captures all PDSTs on a website.
[*] The Social-Engineer Toolkit Credential Harvester Attack
[*] Credential Harvester is running on port 80
[*] Information will be displayed to you as it arrives below:
10.0.2.15 - - [20/Jan/2025 20:29:09] "GET / HTTP/1.1" 200 -
[*] WE GOT A HIT! Printing the output:

PARAM: GALX=SJLCkfgaqoM
PARAM: continue=https://accounts.google.com/o/oauth2/auth?zt=ChRsWFBwd2JmV1hI
cDhtUFdldzBENhIfVWsxSTdNLW9MdThibW1TMFQzVUZFc1BBaURuWmlRSQ%E2%88%99APsBz4gAAA
AAUy4_qD7Hbfz38w8kxnaNouLcRiD3YTjX
PARAM: service=lso
PARAM: dsh=-7381887106725792428
PARAM: _utf8=â
PARAM: _utf8=â
PARAM: dnConn=
PARAM: checkedDomains=youtube
POSSIBLE USERNAME FIELD FOUND: Email=hello@gmail.com
PDSSIBLE USERNAME FIELD FOUND: Passwd=hellohello!
PARAM: signIn=Sign+in
PARAM: PersistentCookie=yes
```

#### Potential Impact:

- Credential leaks
- Changed passwords/credentials
- Loss of access
- Fraud/Unauthorized use

#### **Prevention Methods:**

- 2FA/ MFA
- Log-in attempts emailed
- Changing passwords frequently
- Use password manager

#### **APT Campaign Analysis**

APT28

#### Campaign Overview

Name: APT28 (Fancy Bear)

Target: Europe, United States, Nato allies

Industry Focus: Government, military, media

Active Date: Minimum since 2007

Primary Goals: Espionage, influence operations, data exfiltration

Tools: X-Agent, Sofacy, Zebrocy, Mimikatz

#### MITRE ATT&Ck Mapping

#### **Initial Access**

#### T1190 - Exploit Public-Facing Application

Exploited vulnerabilities in web applications to gain initial access, such as using vulnerabilities in Microsoft Exchange or web servers

#### T1566.001 - Spear Phishing Attachment

Delivered malicious email attachments to target individuals as part of phishing campaigns.

#### **Execution Method**

#### T1203 - Exploitation for Client Execution

Leveraged vulnerabilities in Microsoft Office documents with macros or embedded scripts to execute payloads

#### T1059.003 - Command and Scripting Interpreter: Windows Command Shell

Utilized Windows commands for initial payload execution and post-compromise activity

#### Persistence Mechanisms

#### T1547.001 - Boot or Logon Autostart Execution: Registry Run Keys/Startup Folder

Modifies registry keys to maintain persistence on compromised systems

#### T1053.005 - Scheduled Task/Job

Used scheduled tasks to execute malware at regular intervals

#### Command and Control

#### T1068 - Exploitation for Privilege Escalation

Exploited known vulnerabilities to escalate privileges on target systems, such as CVE-2017-0263

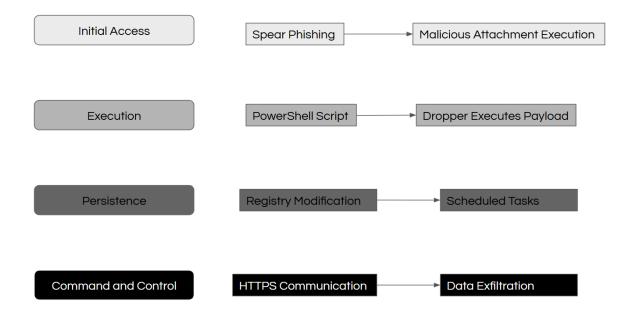
#### T1027 - Obfuscated Files or Information

Used obfuscation techniques in scripts and malware to evade detection

#### T1070.004 - Indicator Removal on Host: File Deletion

Deleted artifacts from infected systems to avoid forensic analysis

#### **Attack Flow Diagram**



#### **Impact Analysis**

# **Operational Impact**

- Disruption of government communications.
- Theft of classified data.

# **Reputational Impact**

• Compromised trust in targeted organizations.

#### **Economic Impact**

• Cost of incident response and remediation.

# **Geopolitical Impact**

• Influence on elections and political decisions.

# Apply Vulnerability Assessment Techniques