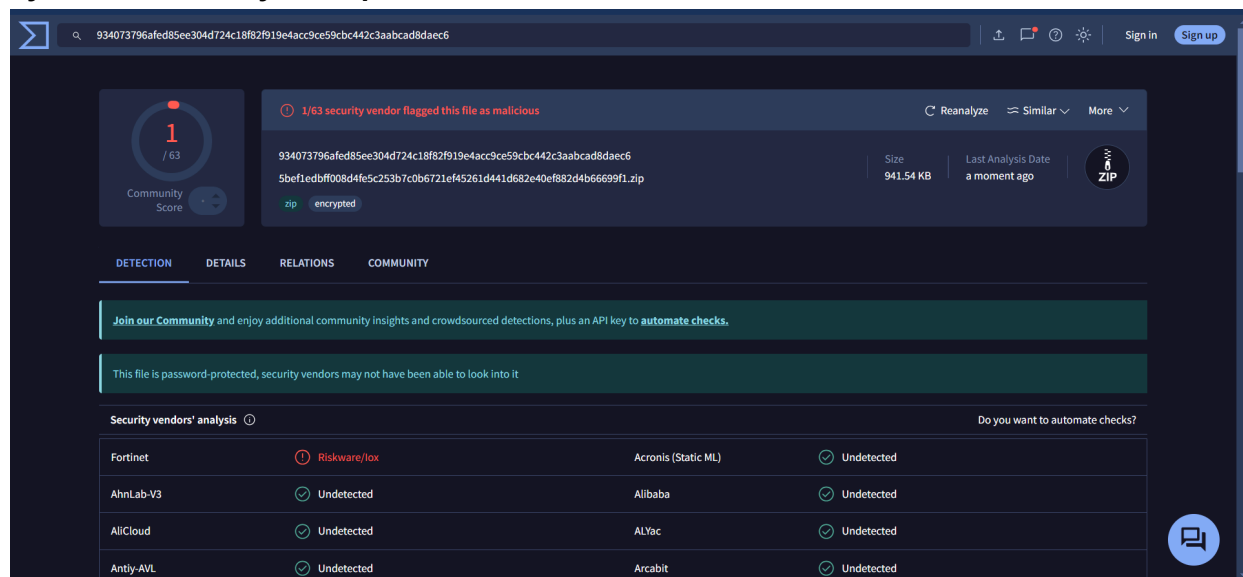


Cyber Threat Analysis Report



1. File Overview

- **File Hash:**
934073796afed85ee304d724c18f82f919e4acc9ce59cbc442c3aabcd8daec6
- **File Type:** ZIP (Password-Protected)
- **File Size:** 941.54 KB
- **Encryption:** Yes (VirusTotal indicates that security vendors may not have been able to analyze contents)

2. Detection Results

- **1/63 Security Vendors Detected the File as Malicious**
- **Vendor:** Fortinet
- **Detection:** Riskware/lox
- **Other Vendors:** Marked as "Undetected"

3. Behavioral Indicators

- The file is password-protected, making it harder for automated scanners to inspect the contents.
- "Riskware/lox" by Fortinet suggests it could contain potentially unwanted programs (PUPs) or software that may have security concerns.
- Since only 1 out of 63 vendors flagged the file, this could be a false positive, but manual analysis is needed.

4. Potential Impact

- If the file contains malware, it could execute harmful actions such as:

- **Data Theft:** If it includes spyware or keyloggers.
- **System Compromise:** If it contains trojans or backdoors.
- **Persistence Mechanisms:** If it modifies registry keys or system startup behavior.

5. Recommended Actions

- **Further Analysis:** Use a sandbox (e.g., Any.Run, Hybrid Analysis) to execute the file safely.
- **Manual Inspection:** Extract contents in a controlled environment.
- **Monitor Behavior:** Look for unusual system activity post-execution.
- **Check False Positives:** Since only one vendor flagged it, submit to Fortinet for further review.

APT29 - SolarWinds Attack

APT29 (also known as Cozy Bear) is linked to Russia's **SVR intelligence agency** and has conducted cyber espionage against government agencies, think tanks, and private companies. The **SolarWinds attack** was one of the most sophisticated cyber-espionage campaigns in history.

MITRE ATT&CK Mapping of the SolarWinds Attack:

Phase	Tactic (MITRE ATT&CK)	Technique Used
Initial Access	T1195.002 - Supply Chain Compromise	APT29 injected malicious code into SolarWinds Orion updates.
Execution	T1059 - Command and Scripting Interpreter	Used PowerShell scripts to execute payloads.
Persistence	T1546.008 - Registry Run Keys	Created persistence via registry modifications.
Privilege Escalation	T1078 - Valid Accounts	Stole legitimate credentials for privilege escalation.
Defense Evasion	T1027 - Obfuscated Files or Information	Used encoded PowerShell scripts to avoid detection.
	T1070.004 - File Deletion	Deleted logs and traces to cover tracks.
Credential Access	T1555 - Credentials from Password Stores	Harvested credentials from LSASS memory dumps.
Discovery	T1018 - Remote System Discovery	Identified additional networked systems to laterally move.

Lateral Movement	T1021 - Remote Services	Used Remote Desktop Protocol (RDP) and WinRM for movement.
Collection	T1114 - Email Collection	Exfiltrated Microsoft 365 and Exchange emails from victims.
Exfiltration	T1041 - Exfiltration Over C2 Channel	Sent stolen data via encrypted HTTPS connections .
Impact	T1562.001 - Disable Security Tools	Disabled endpoint detection and response (EDR) solutions.

Key Takeaways:

1. **Supply Chain Attack:** Instead of targeting victims directly, APT29 compromised **SolarWinds**, a trusted IT provider, and infected **thousands of organizations** via software updates.
2. **Highly Stealthy Approach:** Used legitimate accounts and obfuscated scripts to avoid detection for months.
3. **Targeted High-Profile Entities:** Victims included **U.S. government agencies**, Microsoft, and cybersecurity firms.

```
Shell No. 1
File Actions Edit View Help

[---] valid The Social-Engineer Toolkit (SET) [---]
[---] Created by: David Kennedy (Rel1k) 1500 00 [---] codel state UP group default qlen 1000
link ether 00:00:00:00:00:00 Version: 8.0.3 link 10:10:10:10:10:10
inet 10.10.10.10 Codename: 'Maverick' no global dynamic noprefixroute eth0
[---] valid Follow us on Twitter: @TrustedSec [---]
[---] etc 10 Follow me on Twitter: @HackingDave eth1 to [---]: dynamic
[---] valid Homepage: https://www.trustedsec.com [---]
inet Welcome to the Social-Engineer Toolkit (SET). mic multiipaddr noprefixroute
The one stop shop for all of your SE needs.
inet 10.10.10.10 link 10:10:10:10:10:10 link noprefixroute
The Social-Engineer Toolkit is a product of TrustedSec.

[---] Visit: https://www.trustedsec.com
[---]
It's easy to update using the PenTesters Framework! (PTF)
Visit https://github.com/trustedsec/ptf to update all your tools!

Select from the menu:

1) Spear-Phishing Attack Vectors
2) Website Attack Vectors
3) 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) QRCode Generator Attack Vector
9) Powershell Attack Vectors
10) Third Party Modules

99) Return back to the main menu.

set> 2

The Web Attack module is a unique way of utilizing multiple web-based attacks in order to compromise the intended victim.

The Java Applet Attack method will spoof a Java Certificate and deliver a Metasploit-based payload. Uses a customized java applet created by Thomas Werth to deliver the payload.

The Metasploit Browser Exploit method will utilize select Metasploit browser exploits through an iframe and deliver a Metasploit payload.
```

File Actions Edit View Help

be standard forms and use the "IMPORT" feature. Additionally, really important:

If you are using an EXTERNAL IP ADDRESS, you need to place the EXTERNAL IP address below, not your NAT address. Additionally, if you don't know basic networking concepts, and you have a private IP address, you will need to do port forwarding to your NAT IP address from your external IP address. A browser doesn't know how to communicate with a private IP address, so if you don't specify an external IP address if you are using this from an external perspective, it will not work. This isn't a SET issue this is how networking works.

set:webattack> IP address for the POST back in Harvester/Tabnabbing [10.0.2.15]: 127.0.0.1

**** Important Information ****

For templates, when a POST is initiated to harvest credentials, you will need a site for it to redirect.

You can configure this option under:

/etc/setoolkit/set.config

Edit this file, and change HARVESTER_REDIRECT and HARVESTER_URL to the sites you want to redirect to after it is posted. If you do not set these, then it will not redirect properly. This only goes for templates.

-
1. Java Required
 2. Google
 3. Twitter

set:webattack> Select a template: 2

[*] 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 available. Regardless, this captures all POSTs 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:

127.0.0.1 - - [24/Feb/2025 17:51:05] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [24/Feb/2025 17:51:06] "GET /favicon.ico HTTP/1.1" 404 -

