

HiveForce Labs

# THREAT ADVISORY

 **ATTACK REPORT**

## **DEV#POPPER the North Korean Cyber Threat Hiding in Job Offers**

Date of Publication

August 2, 2024

Admiralty Code

A1

TA Number

TA2024291

# Summary

**Campaign:** DEV#POPPER

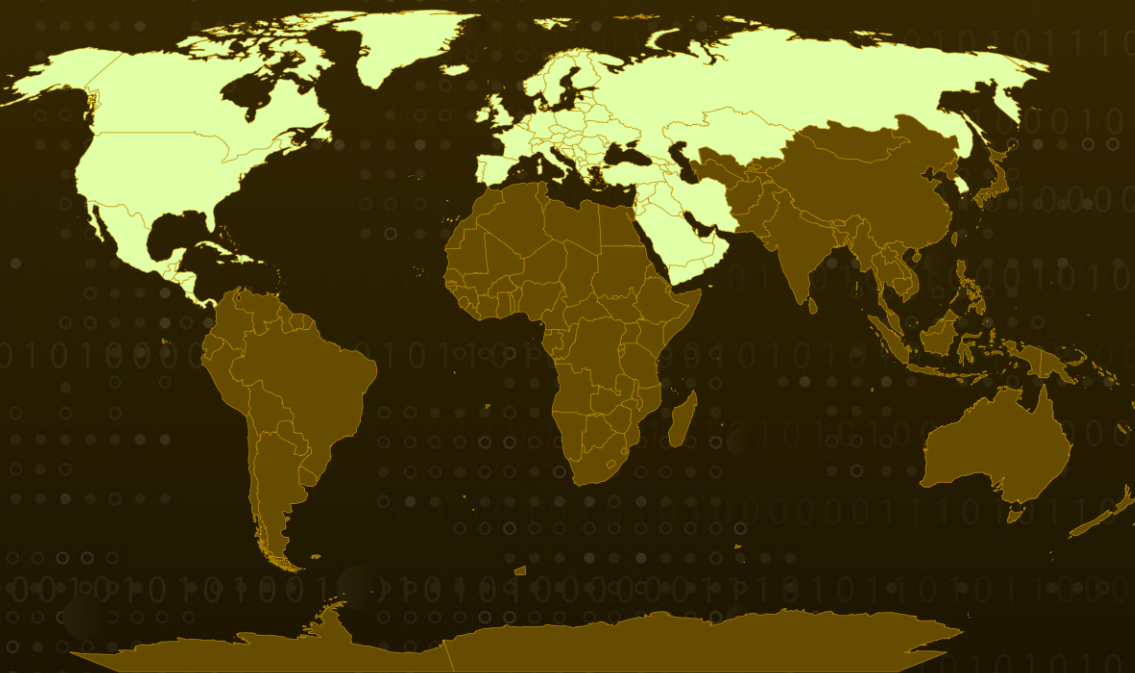
**Malware:** BeaverTail, InvisibleFerret Backdoor

**Affected OS:** Linux, Windows, and macOS

**Targeted Regions:** South Korea, North America, Europe, and the Middle East

**Attack:** The DEV#POPPER campaign, targeting software developers, has been identified with malware variants associated with North Korean threat actors. These actors employ advanced and covert malicious code execution techniques with significantly enhanced capabilities. The extent to which the threat actors go to execute their social engineering scheme in this attack is remarkably audacious.

## Attack Regions



Powered by Bing  
© Australian Bureau of Statistics, GeoNames, Microsoft, Navinfo, OpenStreetMap, TomTom

# Attack Details

## #1

An ongoing malware campaign targeting software developers, dubbed the DEV#POPPER campaign, has been identified with malware variants linked to North Korean threat actors. These actors employ stealthy malicious code execution tactics with significantly enhanced capabilities.

## #2

The victims are primarily located in South Korea, North America, Europe, and the Middle East, demonstrating the widespread impact of the attack. The threat actors have expanded their target pool by incorporating support for Windows, Linux, and macOS.

## #3

The threat actors disguise themselves as interviewers for developer positions and provide candidates with a ZIP file package containing an updated version of malware called BeaverTail, presented as part of a practical interview task. When the candidate extracts and executes the contents, a well-hidden line of JavaScript code is triggered, initiating the infection chain.

## #4

The ZIP file contains numerous legitimate files, making it challenging to detect any foul play. The malicious code is concealed in a seemingly innocuous JavaScript file, heavily obfuscated, and utilizing multiple techniques to mask its true functionality, primarily designed for handling server connections. It starts by identifying the platform, constructing paths and variables, and then calling appropriate extraction functions based on the detected OS.

## #5

Other functions manage sending stolen data to the command and control (C2) server, collecting system and geolocation information, and assigning unique identifiers to each compromised host. Additional functions handle downloading next-stage payloads and performing directory traversal, including filters to exclude specific files and directories from extraction. Post-exploitation scripts, such as a Python backdoor known as InvisibleFerret, are deployed to steal browser-stored passwords and credit card information, significantly enhancing the malware's data-harvesting capabilities.

# Recommendations



**Remain Alert During Job Interviews:** Job interviews can be intense and stressful, but it is essential to maintain a vigilant, security-oriented mindset. Exercise caution with any requests or tasks that seem atypical or out of the ordinary. If something appears suspicious, it is prudent to err on the side of caution and decline to comply.



**Implement Anti-Virus Solutions:** Utilize Anti-Virus solutions to monitor and respond to suspicious activities on endpoints, providing real-time detection and automated responses to potential threats.



**Utilize Application Control and Whitelisting:** Implement application whitelisting to allow only approved applications to run on endpoints. Use application control solutions to monitor and block unauthorized or suspicious applications.

## Potential MITRE ATT&CK TTPs

<b><u>TA0001</u></b> Initial Access	<b><u>TA0002</u></b> Execution	<b><u>TA0003</u></b> Persistence	<b><u>TA0005</u></b> Defense Evasion
<b><u>TA0007</u></b> Discovery	<b><u>TA0009</u></b> Collection	<b><u>TA0011</u></b> Command and Control	<b><u>TA0010</u></b> Exfiltration
<b><u>T1560</u></b> Archive Collected Data	<b><u>T1132</u></b> Data Encoding	<b><u>T1027</u></b> Obfuscated Files or Information	<b><u>T1027.010</u></b> Command Obfuscation
<b><u>T1070</u></b> Indicator Removal	<b><u>T1070.004</u></b> File Deletion	<b><u>T1033</u></b> System Owner/User Discovery	<b><u>T1082</u></b> System Information Discovery
<b><u>T1059</u></b> Command and Scripting Interpreter	<b><u>T1059.001</u></b> PowerShell	<b><u>T1059.003</u></b> Windows Command Shell	<b><u>T1059.006</u></b> Python
<b><u>T1041</u></b> Exfiltration Over C2 Channel	<b><u>T1036</u></b> Masquerading	<b><u>T1056</u></b> Input Capture	<b><u>T1005</u></b> Data from Local System
<b><u>T1555.003</u></b> Credentials from Web Browsers	<b><u>T1555</u></b> Credentials from Password Stores	<b><u>T1539</u></b> Steal Web Session Cookie	<b><u>T1059.007</u></b> JavaScript
<b><u>T1056.001</u></b> Keylogging	<b><u>T1115</u></b> Clipboard Data		

# 🔗 Indicators of Compromise (IOCs)

TYPE	VALUE
IPv4	67[.]203[.]7[.]171, 77[.]37[.]37[.]81, 147[.]124[.]214[.]131, 173[.]211[.]106[.]101
URL	hxxp[:]//de[.]ztec[.]store[:]8000
File Name	onlinestoreforhirog.zip, printfulRoute.js
SHA256	6263b94884726751bf4de6f1a4dc309fb19f29b53cce0d5ec521a6c0f511 9264, bc4a082e2b999d18ef2d7de1948b2bfd9758072f5945e08798f47827686 621f2, 0639d8eaad9df842d6f358831b0d4c654ec4d9ebec037ab5defa2400609 56925, 63238b8d083553a8341bf6599d3d601fbf06708792642ad513b5e03d5e 770e9b, eff2a9fca46425063dca080466427353dc52ac225d9df7c1ef0ec8ba4910 9b71, 2d10b48454537a8977affde99f6edcb7cd6016d3683f9c28a4ec01b127f 64d8, 7e5828382c9ef9cd7a643bc329154a37fe046346fd2cf4698da2b91050c9 fe12, eff2a9fca46425063dca080466427353dc52ac225d9df7c1ef0ec8ba4910 9b71, B31f5bde1bdb2df453b91bab2e9be0bec555ee6edd70744c77f2ad1 5d18c, 33617f0ac01a0f7fa5f64bd8edef737f678c44e677e4a2fb23c6b8a3bcd39 fa2, f9ca12321fb91157cce8513e935810d1c2005ab0739322b474f0cb4af260 5d16, 977a9024962102b02128d391c0543c63328d3f26701eca1a5d282af4d49 3dc2e

## 🔗 References

<https://www.securonix.com/blog/research-update-threat-actors-behind-the-devpopper-campaign-have-retooled-and-are-continuing-to-target-software-developers-via-social-engineering>

<https://www.securonix.com/blog/analysis-of-devpopper-new-attack-campaign-targeting-software-developers-likely-associated-with-north-korean-threat-actors/>

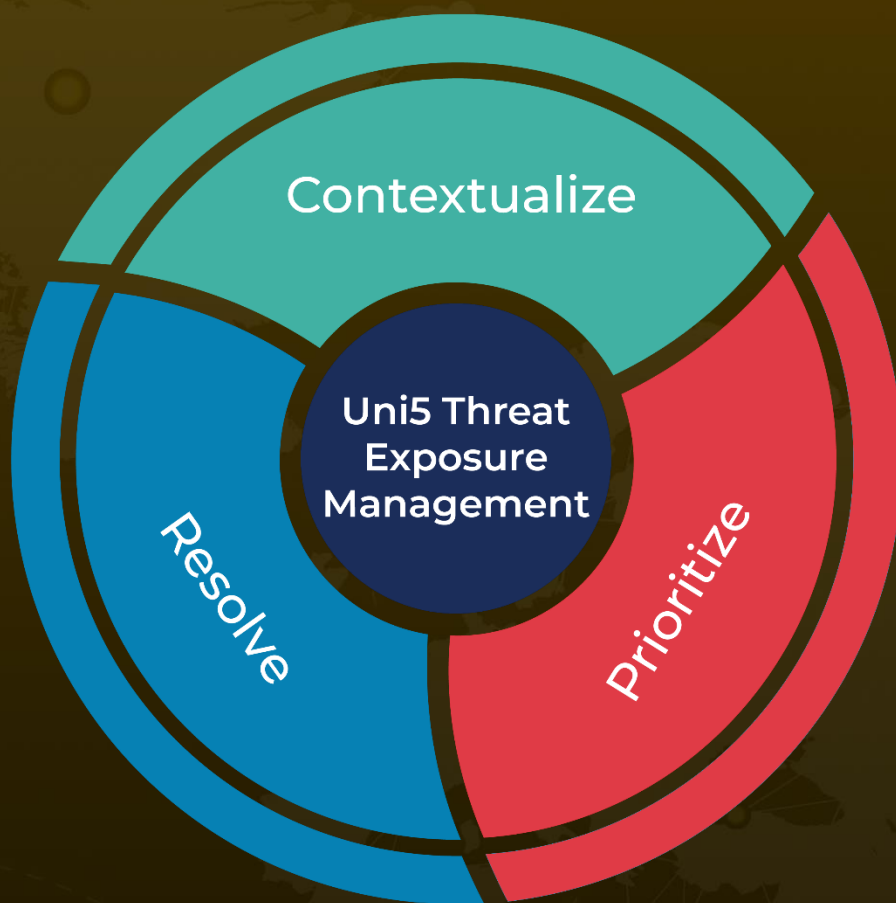
<https://unit42.paloaltonetworks.com/two-campaigns-by-north-korea-bad-actors-target-job-hunters/>



# What Next?

At **Hive Pro**, it is our mission to detect the most likely threats to your organization and to help you prevent them from happening.

Book a free demo with **HivePro Uni5**: Threat Exposure Management Platform.



REPORT GENERATED ON

**August 2, 2024 • 7:00 AM**

© 2024 All Rights are Reserved by Hive Pro



More at [www.hivepro.com](http://www.hivepro.com)