

HiveForce Labs

# THREAT ADVISORY

 **ATTACK REPORT**

## **Bandook a 2007 Legacy Still Thriving in the Threat Landscape**

Date of Publication

December 22, 2023

Admiralty Code

A1

TA Number

TA2023519

# Summary

**Active since:** 2007

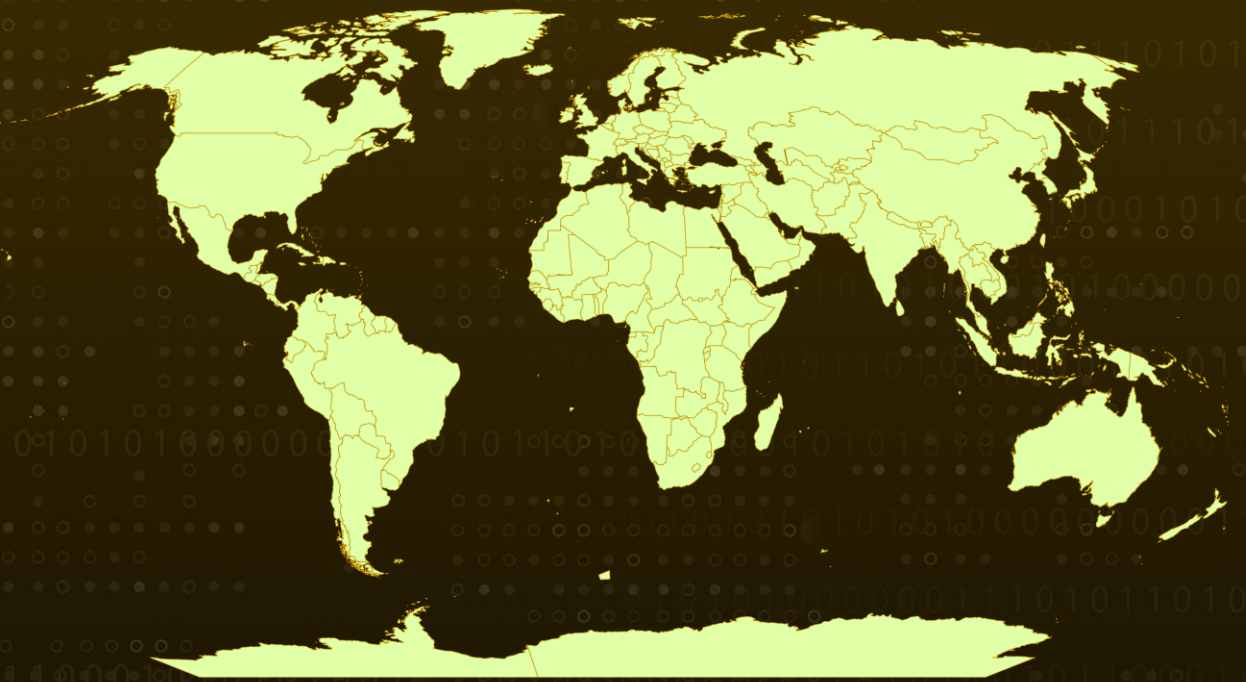
**Malware:** Bandook RAT (aka Bandok)

**Attack Region:** Worldwide

**Affected Platform:** Microsoft Windows

**Attack:** The Bandook malware is a persistent remote access trojan (RAT) that surfaced in 2007. Programmed in Delphi and C++, it has evolved through various iterations over the years and has historical associations with Dark Caracal. It featured prominently in a campaign dubbed 'Operation Manul'.

## Attack Regions



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# Attack Details

## #1

The Bandook malware also referred to as Bandok, is a remote access trojan (RAT) that first emerged in 2007, sustaining its malicious activities over numerous years. Programmed in both Delphi and C++, it originated as a commercial RAT created by PrinceAli, a Lebanese developer. As time progressed, various iterations of the Bandook malware surfaced online, resulting in its widespread availability for public download.

## #2

In a recent campaign observed around October, a new variant of Bandook was distributed via a PDF file. The PDF document contained a shortened URL, guiding users to download a password-protected .7z file. Upon deployment, Bandook establishes a registry key embedded with control code, enabling the persistence of its payload and governing its behavioral functions. The injector component decrypts the payload, seamlessly integrating it into msinfo32.exe.

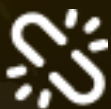
## #3

A variant documented in 2021 required four control codes, producing four explorer.exe processes injected in a single execution. Initially, Bandook transmits victim information to its command-and-control (C2) server, followed by activities such as file manipulation, registry adjustments, downloads, information exfiltration, file execution, invocation of functions in DLLs from the C2, control over the victim's computer, process termination, and the uninstallation of the malware. Bandook has historical associations with Dark Caracal and featured prominently in a separate campaign known as "Operation Manul."

# Recommendations



**Email Security:** Implement robust email filtering solutions to reduce the likelihood of spam and phishing emails reaching users' inboxes, thereby helping to filter out potentially harmful content.



**Behavioral Analysis and Anomaly Detection:** Incorporate behavioral analysis and anomaly detection tools to identify and stop processes initiated by the malware. Monitor for unusual system behavior, such as termination of specific processes or connections to unfamiliar websites.



**Network Traffic Monitoring:** Implement network traffic monitoring to detect unusual patterns or connections, especially those related to downloader URLs. Continuously monitor and analyze network activities for potential signs of a security threat.

# 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>TA0006</u></b> Credential Access	<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>T1059</u></b> Command and Scripting Interpreter	<b><u>T1005</u></b> Data from Local System	<b><u>T1140</u></b> Deobfuscate/Decode Files or Information
<b><u>T1083</u></b> File and Directory Discovery	<b><u>T1070</u></b> Indicator Removal	<b><u>T1070.004</u></b> File Deletion	<b><u>T1105</u></b> Ingress Tool Transfer
<b><u>T1056</u></b> Input Capture	<b><u>T1027</u></b> Obfuscated Files or Information	<b><u>T1566</u></b> Phishing	<b><u>T1055</u></b> Process Injection
<b><u>T1113</u></b> Screen Capture	<b><u>T1082</u></b> System Information Discovery	<b><u>T1016</u></b> System Network Configuration Discovery	<b><u>T1041</u></b> Exfiltration Over C2 Channel
<b><u>T1204</u></b> User Execution			

## Indicators of Compromise (IOCs)

TYPE	VALUE
<b>IPv4</b>	77[.]91[.]100[.]237, 45[.]67[.]34[.]219
<b>SHA256</b>	8904ce99827280e447cb19cf226f814b24b0b4eec18dd758e7fb93476b7bf8b8, d3e7b5be903eb9a596b9b2b78e5dd28390c6aadb8bdd4ea1ba3d896d99fa0057, 3169171e671315e18949b2ff334db83f81a3962b8389253561c813f01974670b,

TYPE	VALUE
SHA256	e87c338d926cc32c966fce2e968cf6a20c088dc6aedf0467224725ce36c9a525, 2e7998a8df9491dad978dee76c63cb1493945b9cf198d856a395ba0fae5c265a, 430b9e91a0936978757eb8c493d06cbd2869f4e332ae00be0b759f2f229ca8ce, cd78f0f4869d986cf129a6c108264a3517dbcf16ecfc7c88ff3654a6c9be2bca

## References

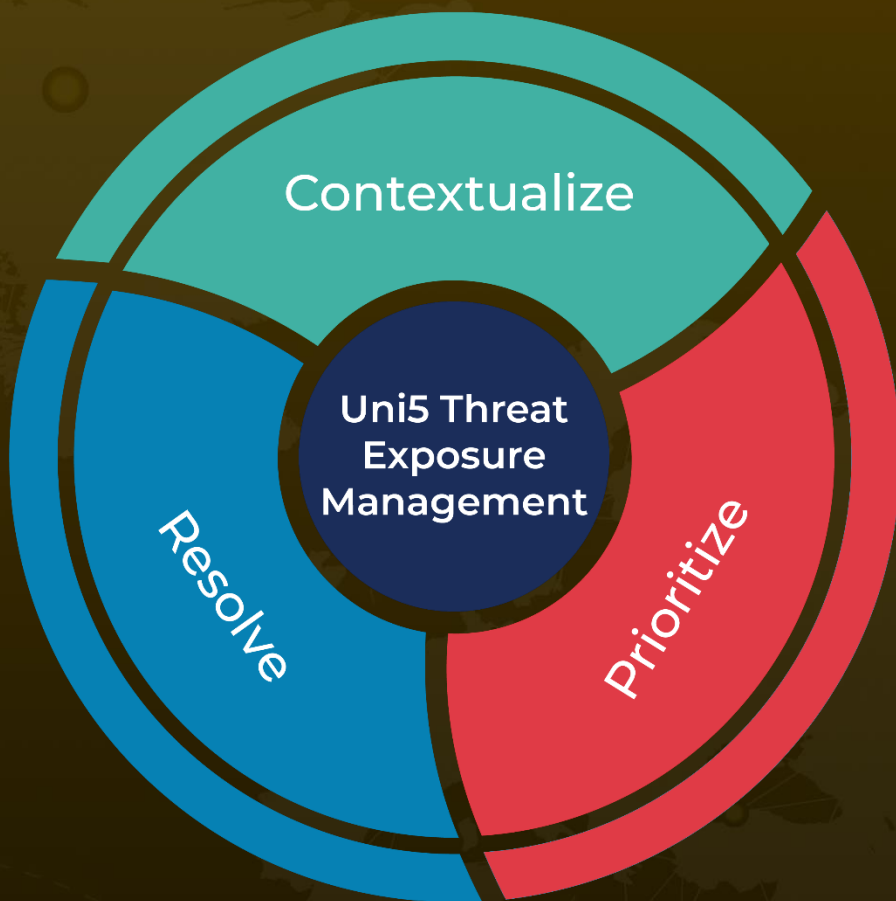
<https://www.fortinet.com/blog/threat-research/bandook-persistent-threat-that-keeps-evolving>

<https://attack.mitre.org/software/S0234/>

# 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.

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