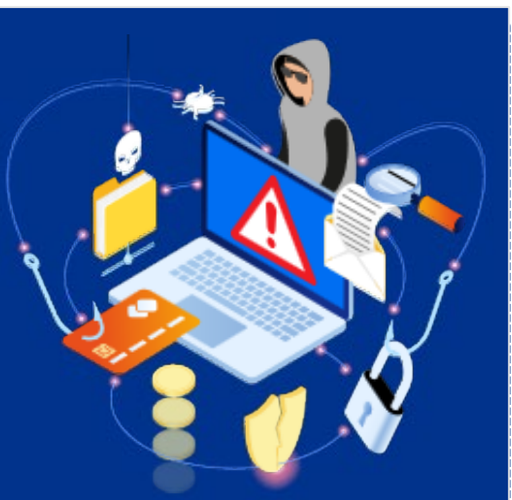
KPMG Cyber Threat Intelligence Platform

Goldoon Botnet – Exploiting Vulnerabilities in D-Link Devices



Goldoon, a newly identified botnet, has been observed exploiting a nearly decade old critical security flaw, CVE-2015-2051, with a CVSS score of 10, targeting D-Link DIR-645 routers. This vulnerability facilitates remote attackers in executing commands via tailored HTTP requests. Goldoon records information about the compromised systems and is used by attackers to conduct DDoS attacks, effectively leveraging the compromised devices for malicious operations.

Attackers exploit CVE-2015-2051 in D-Link devices by sending a crafted HTTP request with embedded commands to the HNAP interface, allowing remote execution of arbitrary commands. The exploited device downloads a dropper script from a remote server. The dropper script executes upon download, adjusts file permissions for subsequent files, and deletes itself after execution to remove traces. The dropper targets various Linux architectures to deploy the main botnet binary "goldoon," which also performs self-cleanup to remain hidden. The downloader decrypts necessary strings with an XOR key, constructs the URI for the final payload, uses a fixed User-Agent, and modifies files to further obscure its presence. Goldoon configures network settings using "WolfSSL" and Google DNS, and establishes persistence by altering boot files, creating a daemon service "goldoon.server," and ensuring execution at logon. Goldoon continuously connects to its C2 server, logs system info, and awaits commands to execute via /bin/bash -c. Goldoon engages in multiple Denial of Service attacks, such as TCP SYN flooding. It collects target information and uses various packets and protocols to execute the attacks.

Goldoon exploiting a decade-old bug highlights the evolving nature of botnets, emphasizing the need for mitigation strategies to protect devices from such persistent threats.

What should you do?

- Monitor Indicators of Compromise (IoCs) in your environment to identify anomalies.
- Ensure your Windows environment is patched to the brim and is protected with multi-factor authentication.
- Conduct a comprehensive, full spectrum, threat assessment exercise to uncover blind spots and improvement areas.

The KPMG Cyber Threat Intelligence Platform is an industry defining, research-based capability for enhanced visibility into cyber threats.

Our machine ingestible feeds and analysis are the result of automated, sensor-based intelligence metrics with dedicated, expert insights of each threat to provide you the appropriate context on a timely basis in industry standard formats such as STIX/TAXII/MISP.

These feeds are additionally co-related with our industry partners and independent research for additional context. The intelligence obtained is then curated from strategic, tactical and operational perspective to give you a wide-ranging view of cyber threats.

We also assist you with our renowned cyber incident response and threat hunting services in case you identify an active threat in your environment.

We offer a wide-range of services, including:
Strategic threat intelligence report
Machine ingestible threat intelligence feeds
Threat intelligence driven pre-emptive threat hunting exercise
Cyber Incident Response Services

Contact us:

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Indicators of Compromise: IP Addresses
94.228.168[.]60

Indicators of Compromise: Hashes
dec08165d1c46622e70d3a15e8bd6029
b85a47d2492497e2bf78608c80978ba9
0cd08a7b8c12b5c0effed00f48a7df9b
65528e0e1492411f5b5c96c9210abd9b
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Indicators of Compromise: Hashes
944a1e45e4994259d886421e220d1a84bc280489
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