

# Supply-Chain Malware at Scale: Mapping BadBox Exposure in Bhutan and South Asia

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## BADBOX starts with consumer devices



Visual generated with Microsoft Copilot. Device categories based on FBI IC3, BitSight and HUMAN Security reporting.

# What is the threat of BADBOX

BadBox is not simply malware. It

is a:

- Supply-chain security issue
- Consumer IoT problem
- ISP abuse issue
- Residential proxy network
- Ad fraud infrastructure
- National cyber resilience challenge

**Public Service Announcement**  
FEDERAL BUREAU OF INVESTIGATION

**Alert Number: I-060525-PSA**  
**June 5, 2025**

**Home Internet Connected Devices Facilitate Criminal Activity**

The Federal Bureau of Investigation (FBI) is issuing this Public Service Announcement to warn the public about cyber criminals exploiting Internet of Things (IoT)<sup>1</sup> devices connected to home networks to conduct criminal activity using the BADBOX 2.0 botnet<sup>2</sup>. Cyber criminals gain unauthorized access to home networks through compromised IoT devices, such as TV streaming devices, digital projectors, aftermarket vehicle infotainment systems, digital picture frames and other products. Most of the infected devices were manufactured in China. Cyber criminals gain unauthorized access to home networks by either configuring the product with malicious software prior to the users purchase or infecting the device as it downloads required applications that contain backdoors, usually during the set-up process.<sup>3</sup> Once these compromised IoT devices are connected to home networks, the infected devices are susceptible to becoming part of the BADBOX 2.0 botnet and residential proxy services<sup>4</sup> known to be used for malicious activity.

**WHAT IS BADBOX 2.0 BOTNET**

BADBOX 2.0 was discovered after the original BADBOX campaign was disrupted in 2024. BADBOX was identified in 2023, and primarily consisted of Android operating system devices that were compromised with backdoor malware prior to purchase. BADBOX 2.0, in addition to compromising devices prior to purchase, can also infect devices by requiring the download of malicious apps from unofficial marketplaces. The BADBOX 2.0 botnet consists of millions of infected devices and maintains numerous backdoors to proxy services that cyber criminal actors exploit by either selling or providing free access to compromised home networks to be used for various criminal activity.

**INDICATORS**

The public is urged to evaluate IoT devices in their home for any indications of

<https://www.ic3.gov/PSA/2025/PSA250605>

# What is the threat of BADBOX

[DNB] [DIGEST] 2026-07-03



DragonNews Bytes <noreply@cymru.com>

To: Warren Finch

Friday, 3 July 2026 at 20:52

[ARREST]

Title: Google Continued Disruption Residential Proxy Networks

Source: Google Cloud

Date Published: July 2, 2026

Excerpt:

"Today, in coordination with the FBI, Lumen, and others, Google took action against the NetNut residential proxy network, also known as Popa. This action builds on our disruption of the IPIDEA proxy network that took place in January 2026, and is a continuation of Google's objective to dismantle malicious residential proxy networks. As part of this disruption, Google disabled Google accounts and associated Google services used by NetNut for malware command and control (C2), which directly violates Google's Terms of Service and Acceptable Use Policy. Google also shared technical intelligence on NetNut software development kits (SDKs) and backend C2 infrastructure with platform providers, law enforcement, and research firms to help drive ecosystem-wide awareness and enforcement. Additionally, Google ensured Google Play Protect, Android's built-in security protection, automatically warned users and disabled applications known to incorporate NetNut SDKs.

... Google believes its coordinated actions have caused significant degradation to NetNut's proxy network and its business operations, reducing the available pool of devices for the proxy operator by millions. Google has high confidence that many popular residential proxy brands are in fact whitelabeling the NetNut botnet. Google Threat Intelligence Group (GTIG) estimates the size of the NetNut network to be at least 2 million devices, distributed across the world. Public reporting, confirmed by Google, illustrates that NetNut populates its botnet by distributing SDKs for devices commonly found in homes, such as smart TVs and streaming boxes. GTIG has also identified NetNut botnet plugin components for large-scale botnets such as **Badbox 2.0**.

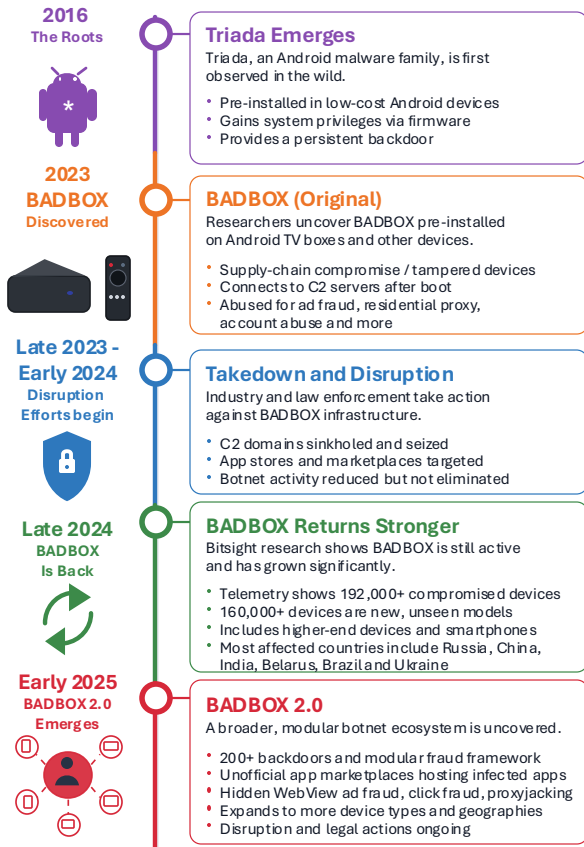
... Residential proxy networks sell the ability to route traffic through IP addresses owned by internet service providers (ISPs), allowing attackers to mask malicious activity by hijacking these IP addresses. Home devices become part of proxy networks either because they are pre-installed with malware before purchase or because users unknowingly download applications containing hidden proxy code. This creates serious risks for unsuspecting device owners, as their home IP addresses can be used by attackers as a launchpad for hacking and other unauthorized activities. In a single week during June 2026, GTIG observed 316 distinct threat clusters using suspected NetNut exit nodes, including cybercriminal and espionage groups. These bad actors can use NetNut to mask their origin IP address when accessing victim environments, accessing their own infrastructure, and conducting password spray attacks. Public reports have documented the use of NetNut to infect devices with variants of Mirai DDoS botnets.

...

Secure should be out of the nation's of the feel as the midk

# THE EVOLUTION OF BADBOX

From Early Android Backdoors to BADBOX 2.0



## Evolution of Badbox

- Original BadBox (2023)
- BadBox 2.0
- Global growth
- Supply-chain compromise model



BADBOX is an evolving supply-chain threat that turns consumer devices into criminal infrastructure at scale.

**Network operators, ISPs and CERTs should monitor, detect and respond.**

<https://www.bitsight.com/blog/badbox-botnet-back>

# Infection Vectors

## Vector 1 Preinstalled Supply-Chain Malware



### Compromise before use

Malware or loader capability may be present before the customer receives the device.

Operator framing:

- Customer may not have installed anything.
- Factory reset may not be sufficient.
- Supply chain is part of the risk.

## Vector 2 First-Boot Network Infection



first boot

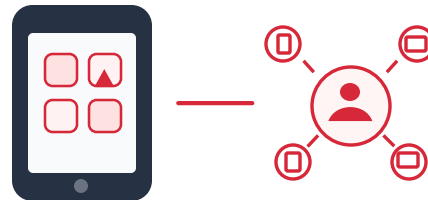
### Compromise during setup

A device may contact setup infrastructure and retrieve a backdoor, loader or unauthorised app.

Operator framing:

- Look for repeated suspicious DNS or HTTP(S).
- Correlate DHCP, NAT and flow records.
- Do not treat one connection as proof.

## Vector 3 Malicious Apps (Third-Party)



### Compromise through apps

Malicious or rebundled applications may be installed from unofficial app marketplaces.

Operator framing:

- Customer education matters.
- Avoid unofficial app marketplaces.
- Use passive enrichment and CERT channels.

Use passive telemetry, customer context, CERT coordination and source-backed indicators before making an assessment.

# Why South Asia Should Care?

## Common conditions

- Large imports of low-cost Android devices
- Informal electronics markets
- Limited certification verification
- Increasing smart-TV adoption

## Potentially affected devices include:

- Android TV boxes
- Streaming devices
- Smart TVs
- Projectors
- Tablets



# Badbox infection (Data from: 1st May 2026 - 1st June 2026)

## -ShadowServer Foundation

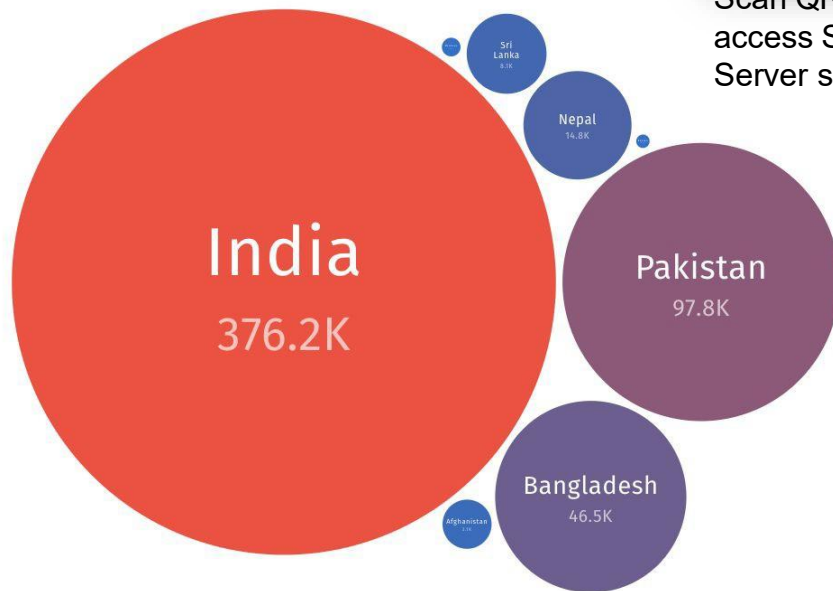


| Country     | Counted IP addresses |
|-------------|----------------------|
| India       | 376,152              |
| Pakistan    | 97,786               |
| Bangladesh  | 46,472               |
| Nepal       | 14,847               |
| Sri Lanka   | 8,095                |
| Afghanistan | 3,052                |
| Maldives    | 441                  |
| Bhutan      | 228                  |

© 2026 The Shadowserver Foundation



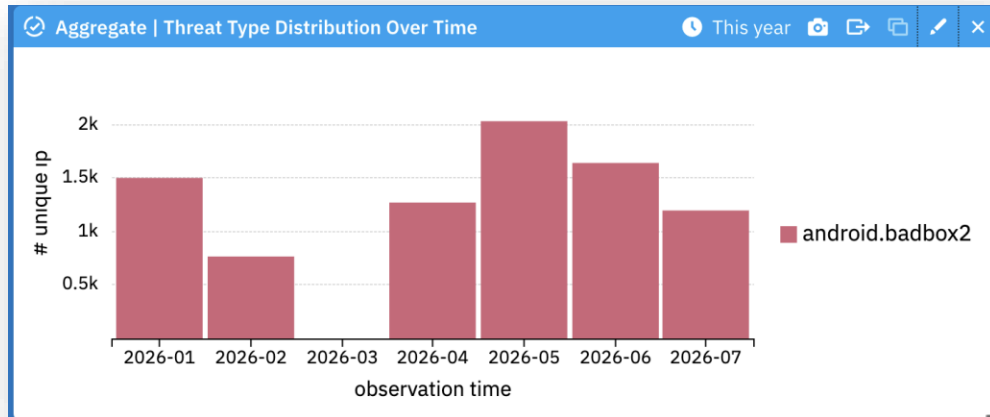
Scan QR Code to  
access Shadow  
Server stats



# Bhutan Case Study

Security monitoring shows that every internet provider in Bhutan has devices affected by the Badbox malware. This affects at least 2% of each provider's network.

**Actions:** Little has been done so far. This is still a work in progress.



# Technical Indicators and TTPs

**C2 Infrastructure:** Known command-and-

control domain names include `coslogdyd[.]in`,

`yydsmr[.]com`, `logcer.com`

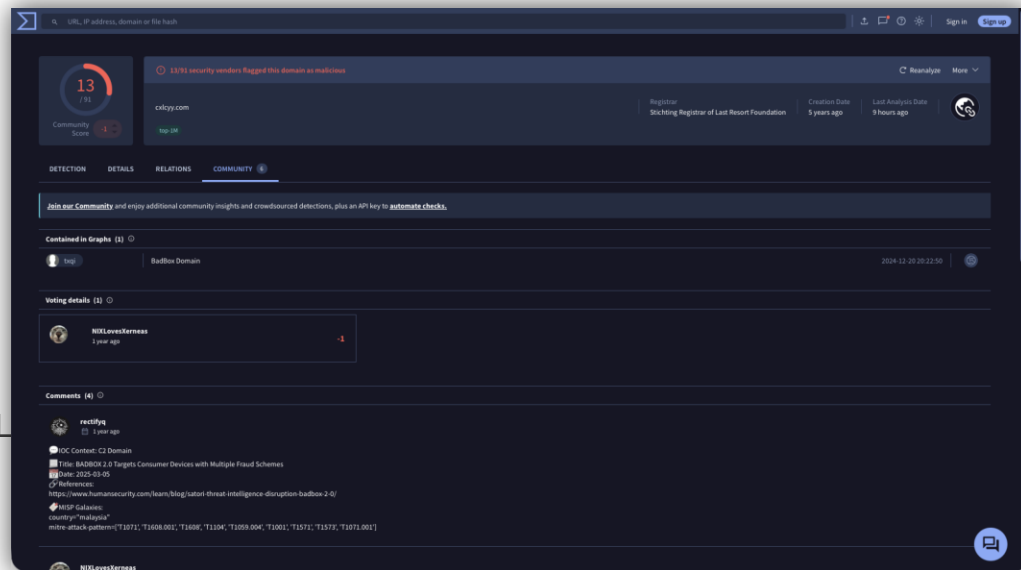
Bitsight's analysis found dozens of related domains (e.g.

`cxlcyy.com`,

`goo logger.com`, `yydsmr[.]com`, etc.) that share naming patterns or SSL certificates

These domains often serve backdoor payloads (e.g. `/uploads/apk/...`) or respond with encrypted commands

Monitoring DNS queries for these domains (or their SSL fingerprints) is a key technical control.



<https://www.virustotal.com/gui/domain/cxlcyy.com>

# Technical Indicators and TTPs

```
warren@ubuntu:~/badbox$ ./badbox_cloudflare_check_v3.sh cloudflare-radar_top-1000000-domains_20260719-20260726.csv
[2026-07-26T07:20:31Z] Local CSV mode selected. Cloudflare API authentication will be skipped.
[2026-07-26T07:20:31Z] Preparing BADBOX domain list.
[2026-07-26T07:20:31Z] Using existing Cloudflare CSV: cloudflare-radar_top-1000000-domains_20260719-20260726.csv
[2026-07-26T07:20:31Z] Parsed 1000695 unique Cloudflare domains.

BADBOX and Cloudflare Radar comparison complete
Cloudflare domains parsed: 1000695
BADBOX indicators checked: 189
Exact matches: 49
Related matches: 49
Report: ./badbox-cloudflare-results/match-report.csv

Matches found:
100ulife.com exact 100ulife.com
99soya.shop exact 99soya.shop
ad3g.com exact ad3g.com
ads-goal.com exact ads-goal.com
ai-goal.com exact ai-goal.com
app-goal.com exact app-goal.com
appclicking.com exact appclicking.com
bitemores.com exact bitemores.com
catmore88.com exact catmore88.com
cbphe.com exact cbphe.com
cbpheback.com exact cbpheback.com
clickby.net exact clickby.net
clicksyn.com exact clicksyn.com
dc16888888.com exact dc16888888.com
dcylog.com exact dcylog.com
dqmop.com exact dqmop.com
duoduodev.com exact duoduodev.com
finemob.com exact finemob.com
flyermobi.com exact flyermobi.com
glee.com exact glee.com
heygames.club exact heygames.club
huuw.com exact huuw.com
ipmoyu.com exact ipmoyu.com
jolted.vip exact jolted.vip
jutux.work exact jutux.work
logcer.com exact logcer.com
long.tv exact long.tv
meiboot.com exact meiboot.com
moyu88.xyz exact moyu88.xyz
msohu.shop exact msohu.shop
mtcpuoou.com exact mtcpuoou.com
mymoyu.shop exact mymoyu.shop
navnow.xyz exact navnow.xyz
qazwsxedc.xyz exact qazwsxedc.xyz
qocoll.com exact qocoll.com
randomhow.com exact randomhow.com
sustat.com exact sustat.com
ttyunos.com exact ttyunos.com
tuding.xyz exact tuding.xyz
vividweb.work exact vividweb.work
wildpettykiwi.com exact wildpettykiwi.com
wildpettykiwi.info exact wildpettykiwi.info
wotads.com exact wotads.com
ycxrl.com exact ycxrl.com
ycxrldow.com exact ycxrldow.com
yydsma.com exact yydsma.com
yydsmb.com exact yydsmb.com
yydsmr.com exact yydsmr.com
ziyemy.shop exact ziyemy.shop
warren@ubuntu:~/badbox$
```

## badbox\_cloudflare\_check\_v3.sh

Compares the current Cloudflare Radar Top 1 Million domain dataset against the list of known BADBOX 2.0 domains.

The script can either:

- download the latest Cloudflare dataset using the Radar API, or
- analyse an existing CSV that has already been downloaded.
- No DNS lookups are performed and no Internet scanning occurs.

[https://github.com/waz-here/notes/tree/main/malware\\_research/badbox](https://github.com/waz-here/notes/tree/main/malware_research/badbox)  
<https://github.com/PeterDaveHello/top-1m-domains>

# Technical Indicators and TTPs

## BADBOX Domain Enrichment Report

Generated: 2026-07-26T14:12:03.607478Z

Provider names are heuristic inferences based on RDAP organisation and network names. They are not authoritative attribution.

### Summary

| Domain       | A / AAAA                                                                    | ASN                      | Country                   | Provider Inference | VT malicious | URLhaus    | ThreatFox | CT records |
|--------------|-----------------------------------------------------------------------------|--------------------------|---------------------------|--------------------|--------------|------------|-----------|------------|
| 100ulife.com | 178.162.202.96,<br>178.162.202.97,<br>46.165.199.7,<br>46.165.199.9,<br>... | 28753,<br>60781,<br>6939 | 64.62.128.0/17,<br>DE, NL | Leaseweb           | 11           | no_results | no_result | 43         |
| 99soya.shop  | 178.162.202.96,<br>178.162.202.97,<br>46.165.199.7,<br>46.165.199.9,<br>... | 28753,<br>60781,<br>6939 | 64.62.128.0/17,<br>DE, NL | Leaseweb           | 15           | no_results | no_result |            |
| ad3g.com     | 178.162.202.96,<br>178.162.202.97,<br>46.165.199.7,<br>46.165.199.9,<br>... | 28753,<br>60781          | DE, NL                    | Leaseweb           | 10           | no_results | no_result |            |
| ads-goal.com | 178.162.202.96,<br>178.162.202.97,<br>46.165.199.7,<br>46.165.199.9,<br>... | 28753,<br>60781,<br>6939 | 64.62.128.0/17,<br>DE, NL | Leaseweb           | 10           | no_results | no_result |            |

## run\_badbox\_enrichment.sh

```
warren@ubuntu:~/badbox/badbox_domain_enrichment_toolkit$ ls
badbox-enrichment-results  readme.md          run_badbox_enrichment.sh
enrich_badbox_domains.py   requirements.txt
warren@ubuntu:~/badbox/badbox_domain_enrichment_toolkit$ ./run_badbox_enrichment.sh ../badbox-cloudflare-results/exact-matches.txt --limit 4 --workers 1
[2026-07-26T14:09:10Z] Installing or updating Python dependencies.
[2026-07-26T14:09:11Z] Starting BADBOX domain enrichment.
Loaded 4 domains from ../badbox-cloudflare-results/exact-matches.txt
[1/4] 100ulife.com: A=10 AAAA=0 VT=found URLhaus=queried ThreatFox=queried
[2/4] 99soya.shop: A=10 AAAA=0 VT=found URLhaus=queried ThreatFox=queried
[3/4] ad3g.com: A=10 AAAA=0 VT=found URLhaus=queried ThreatFox=queried
[4/4] ads-goal.com: A=10 AAAA=0 VT=found URLhaus=queried ThreatFox=queried

Results written to: badbox-enrichment-results
CSV:      badbox-enrichment-results/enriched_domains.csv
JSON:     badbox-enrichment-results/enriched_domains.json
Markdown: badbox-enrichment-results/enriched_domains.md
warren@ubuntu:~/badbox/badbox_domain_enrichment_toolkit$ tree
-bash: tree: command not found
warren@ubuntu:~/badbox/badbox_domain_enrichment_toolkit$ tree
.
├── badbox-enrichment-results
│   ├── enriched_domains.csv
│   ├── enriched_domains.json
│   ├── enriched_domains.md
│   └── errors.log
├── raw
│   ├── 100ulife.com.json
│   ├── 99soya.shop.json
│   ├── ad3g.com.json
│   ├── ads-goal.com.json
│   └── run_metadata.json
├── enrich_badbox_domains.py
├── readme.md
├── requirements.txt
└── run_badbox_enrichment.sh

3 directories, 13 files
warren@ubuntu:~/badbox/badbox_domain_enrichment_toolkit$
```

[https://github.com/waz-here/notes/tree/main/malware\\_research/badbox](https://github.com/waz-here/notes/tree/main/malware_research/badbox)

# Technical Indicators and TTPs

```
warren@ubuntu:~/ccTLD-domain-analysis/scripts$ ls
badbox-domains.txt  calculate-ipv6-stats.sh  extract-ctld.sh  generate-report.sh  resolve-domains-parallel.sh  team-cymru-asn.sh
badbox-resolved.csv  discover-subdomains.sh  extract-unique-ips.sh  readme.md  resolve-domains.sh  top-asns.sh
warren@ubuntu:~/ccTLD-domain-analysis/scripts$ ./resolve-domains.sh badbox-domains.txt
```

```
Creating: badbox-resolved.csv
[109/109] zxcvbnmasdfghjkl1.xyz
Finished.
DNS records collected: 1015
Output: badbox-resolved.csv
warren@ubuntu:~/ccTLD-domain-analysis/scripts$ ./calculate-ipv6-stats.sh badbox-resolved.csv
IPv6 Summary
=====
```

Input file: badbox-resolved.csv

Domains analysed: 109  
Domains with IPv4: 109  
Domains with IPv6: 1  
IPv6 adoption rate: 0.92%

IPv4 records observed: 1014  
IPv6 records observed: 1

Output written to: badbox-ipv6-summary.txt  
warren@ubuntu:~/ccTLD-domain-analysis/scripts\$ ./extract-unique-ips.sh badbox-resolved.csv  
Input file: badbox-resolved.csv  
Output file: badbox-ips.txt

Unique IP addresses: 23  
IPv4 addresses: 23  
IPv6 addresses: 0

```
warren@ubuntu:~/ccTLD-domain-analysis/scripts$ ./team-cymru-asn.sh badbox-ips.txt
Input file: badbox-ips.txt
Unique IP addresses: 23
Querying Team Cymru bulk IP-to-ASN service...
```

Output written to: badbox-asn.txt

First few results:

```
Bulk mode; whois.cymru.com [2026-07-26 16:25:04 +0000]
13335 | 104.21.19.212 | 104.21.16.0/20 | US | arin | 2014-03-28 | CLOUDFLARENET - Cloudflare, Inc., US
13335 | 104.21.26.221 | 104.21.16.0/20 | US | arin | 2014-03-28 | CLOUDFLARENET - Cloudflare, Inc., US
134963 | 170.33.12.185 | 170.33.12.0/24 | SG | apnic | 1994-02-03 | ASEPL-AS-AP - Alibaba Cloud (Singapore) Private Limited, SG
63949 | 172.236.104.157 | 172.236.96.0/19 | US | arin | 2013-03-15 | AKAMAI-LINODE-AP - Akamai Connected Cloud, SG
63949 | 172.236.104.43 | 172.236.96.0/19 | US | arin | 2013-03-15 | AKAMAI-LINODE-AP - Akamai Connected Cloud, SG
63949 | 172.238.172.122 | 172.238.160.0/19 | US | arin | 2013-03-15 | AKAMAI-LINODE-AP - Akamai Connected Cloud, SG
13335 | 172.67.139.118 | 172.67.128.0/20 | US | arin | 2015-02-25 | CLOUDFLARENET - Cloudflare, Inc., US
13335 | 172.67.190.55 | 172.67.176.0/20 | US | arin | 2015-02-25 | CLOUDFLARENET - Cloudflare, Inc., US
28753 | 178.162.202.96 | 178.162.192.0/18 | DE | ripencc | 2010-02-05 | LEASEWEB-DE-FRA-10 - Leaseweb Deutschland GmbH, DE
warren@ubuntu:~/ccTLD-domain-analysis/scripts$
```

```
warren@ubuntu:~/ccTLD-domain-analysis/scripts$ ./top-asns.sh badbox-asn.txt
Top ASN report written to: badbox-top-asns.txt
```

Top 20 ASNs:

| Count | ASN                                     | Organisation                                            |
|-------|-----------------------------------------|---------------------------------------------------------|
| 4     | AS13335                                 | CLOUDFLARENET - Cloudflare                              |
| 4     | AS28753                                 | LEASEWEB-DE-FRA-10 - Leaseweb Deutschland GmbH          |
| 4     | AS60781                                 | LEASEWEB-NL-AMS-01 - LeaseWeb Netherlands B.V.          |
| 3     | AS63949                                 | AKAMAI-LINODE-AP - Akamai Connected Cloud               |
| 2     | AS6939                                  | HURRICANE - Hurricane Electric LLC                      |
| 1     | AS134963                                | ASEPL-AS-AP - Alibaba Cloud (Singapore) Private Limited |
| 1     | AS174                                   | COGENT-174 - Cogent Communications                      |
| 1     | AS30058                                 | FDCSERVERS - FDCservers.net                             |
| 1     | AS396982                                | GOOGLE-CLOUD-PLATFORM - Google LLC                      |
| 1     | AS6724                                  | STRATO - Strato GmbH                                    |
| 1     | ASError: no ASN or IP match on line 25. |                                                         |

```
warren@ubuntu:~/ccTLD-domain-analysis/scripts$
```

<https://github.com/waz-here/ccTLD-domain-analysis/tree/main>

# Technical Indicators and TTPs

## ThreatFox IOC Database

You are browsing the Indicator Of Compromise (IOC) database of ThreatFox. If you would like to contribute IOCs to the corpuse, you can do so through either the [web form](#) or the [API](#).

  
1'792  
IOCs shared (past 24 hours)

  
[ClearFake](#)  
Most seen malware family (past 24 hours)

  
1'717'817  
IOCs in corpus

Using the form below, you can search for malware samples by a hash (MD5, SHA256, SHA1), imphash, tish hash, ClamAV signature, tag or malware family.

### Browse Database

Show  entries

Search:

| Date (UTC)       | IOC                                   | Malware                | Tags                                                               | Reporter                  |
|------------------|---------------------------------------|------------------------|--------------------------------------------------------------------|---------------------------|
| 2026-07-12 07:30 | <a href="#">a1.ishano456.sbs</a>      | <a href="#">BADBOX</a> | <a href="#">moyu</a> <a href="#">tigerty</a> <a href="#">zhima</a> | <a href="#">deepfield</a> |
| 2026-07-12 07:30 | <a href="#">t1.ishano456.sbs</a>      | <a href="#">BADBOX</a> | <a href="#">moyu</a> <a href="#">tigerty</a> <a href="#">zhima</a> | <a href="#">deepfield</a> |
| 2026-07-12 07:30 | <a href="#">a1.xshaont123.sbs</a>     | <a href="#">BADBOX</a> | <a href="#">moyu</a> <a href="#">tigerty</a> <a href="#">zhima</a> | <a href="#">deepfield</a> |
| 2026-07-12 07:30 | <a href="#">t1.xmsae.sbs</a>          | <a href="#">BADBOX</a> | <a href="#">moyu</a> <a href="#">tigerty</a> <a href="#">zhima</a> | <a href="#">deepfield</a> |
| 2026-07-12 07:30 | <a href="#">a1.xmsae.sbs</a>          | <a href="#">BADBOX</a> | <a href="#">moyu</a> <a href="#">tigerty</a> <a href="#">zhima</a> | <a href="#">deepfield</a> |
| 2026-07-12 07:30 | <a href="#">172.96.114.6-80</a>       | <a href="#">BADBOX</a> | <a href="#">moyu</a> <a href="#">tigerty</a> <a href="#">zhima</a> | <a href="#">deepfield</a> |
| 2026-07-12 07:30 | <a href="#">t1.xshaont123.sbs</a>     | <a href="#">BADBOX</a> | <a href="#">moyu</a> <a href="#">tigerty</a> <a href="#">zhima</a> | <a href="#">deepfield</a> |
| 2026-07-12 07:30 | <a href="#">165.154.202.29-9999</a>   | <a href="#">BADBOX</a> | <a href="#">moyu</a> <a href="#">tigerty</a> <a href="#">zhima</a> | <a href="#">deepfield</a> |
| 2026-07-12 07:30 | <a href="#">98.98.71.20-80</a>        | <a href="#">BADBOX</a> | <a href="#">moyu</a> <a href="#">tigerty</a> <a href="#">zhima</a> | <a href="#">deepfield</a> |
| 2026-07-12 07:30 | <a href="#">98.98.71.19-80</a>        | <a href="#">BADBOX</a> | <a href="#">moyu</a> <a href="#">tigerty</a> <a href="#">zhima</a> | <a href="#">deepfield</a> |
| 2026-07-12 07:30 | <a href="#">144.217.243.201-80</a>    | <a href="#">BADBOX</a> | <a href="#">moyu</a> <a href="#">tigerty</a> <a href="#">zhima</a> | <a href="#">deepfield</a> |
| 2026-01-05 07:39 | <a href="#">us-a.gsonx.com</a>        | <a href="#">BADBOX</a> | <a href="#">BADBOX</a>                                             | <a href="#">abuse_ch</a>  |
| 2026-01-05 07:39 | <a href="#">us-a.keepgo123.com</a>    | <a href="#">BADBOX</a> | <a href="#">BADBOX</a>                                             | <a href="#">abuse_ch</a>  |
| 2026-01-05 07:39 | <a href="#">api.echoyesterday.com</a> | <a href="#">BADBOX</a> | <a href="#">BADBOX</a>                                             | <a href="#">abuse_ch</a>  |

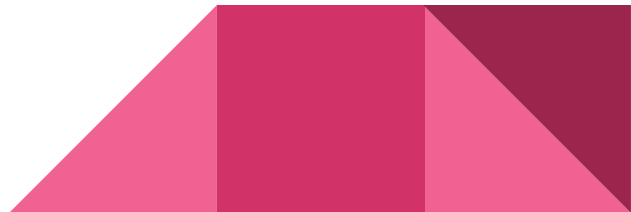
<https://threatfox.abuse.ch/browse.php?search=malware%3Abadbox>

# Technical Indicators and TTPs (cont)

**Malicious APKs:** The botnet uses specially crafted Android apps. Malwarebytes identified app packages (e.g. com.yandex[.]tv[.]home, com[.]instwall[.]launch , etc.) linked to BadBox .

Google/Trend Micro discovered “decoy twin” apps: benign app listings in Play versus identical malware outside

Malicious publishers include “Seekiny Studio” and others . Signature-based defenses can block known bad APKs.



# Technical Indicators and TTPs (cont)

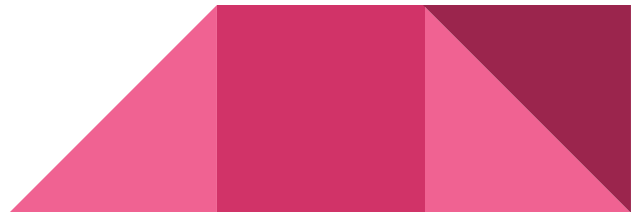
**Traffic Patterns:** Infected devices frequently make hidden HTTP(S) requests.

Researchers note

“hidden WebViews” loading hundreds of ad-heavy HTML5 game sites C2 check-ins use unique URI paths (e.g. /terminal/client/ , /ota/api/tasks/v2 with device-specific query parameters)

Large spikes of DNS resolution (millions for ydysmr[.]com) indicate botnet scale Network

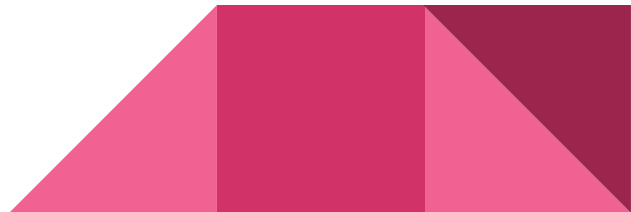
defenses can flag such abnormal volumes.



# Technical Indicators and TTPs (cont)

**Device Indicators:** The FBI bulletin lists user-facing signs requiring Play Protect be disabled, use of unrecognized apps or marketplaces, sudden ad pop-ups, and unexplained network traffic .

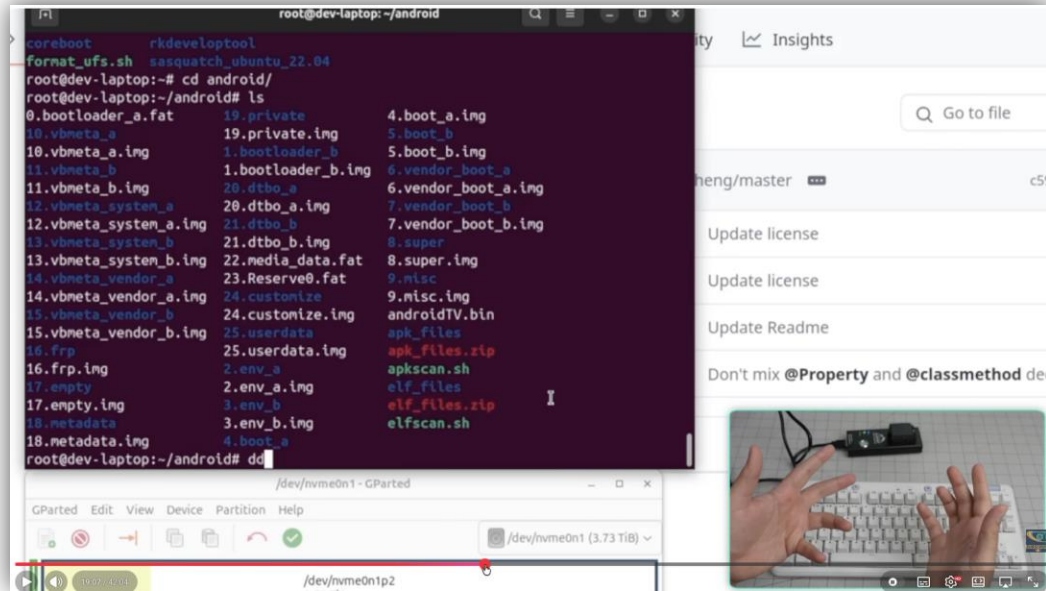
Forensics on a suspect device may reveal hidden Android processes or unauthorized device admin apps.



# Finding Malware in an Android TV Box



Matt Brown



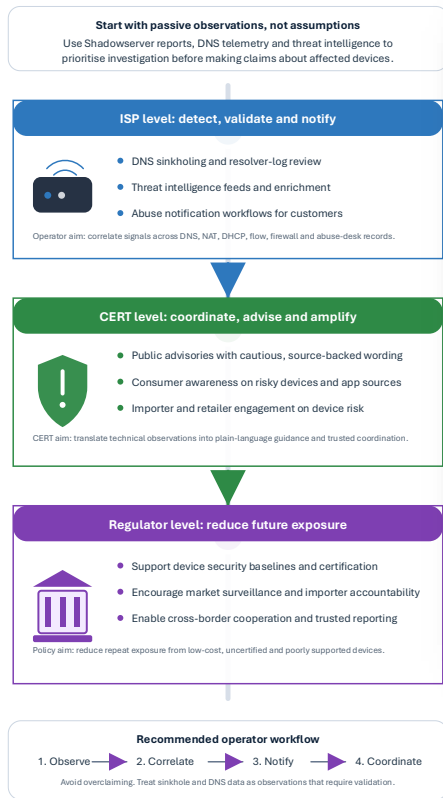
Technically unsure

<https://youtu.be/vluT7rJgc8w>



[https://www.youtube.com/results?search\\_query=badbox+2.0+malware+investigation](https://www.youtube.com/results?search_query=badbox+2.0+malware+investigation)

# Detection Framework for Operators



|                        |                     |             |
|------------------------|---------------------|-------------|
| wobfan fix readme      | f1d94c3 · last year | 🕒 3 Commits |
| README.md              | fix readme          | last year   |
| badbox2_dns_checker.py | initial commit      | last year   |

## README

## BadBox2 DNS Log Check

A simple Python script to search NextDNS logs for

## Getting Your DNS Log

- Go to [my.nextdns.io](https://my.nextdns.io)
- Navigate to **Settings**
- Click on **Export Logs**
- Download your log file (CSV format)

## Usage

- Place your NextDNS log file ( XXXXXX.csv ) in t

leuthier / badbox-2\_0-pihole-blocklist.txt

Last active 10 months ago · Report abuse

Code ↗ Revisions 2

Embed <script src="https://> 📄 📄

BAD BOX 2.0 – Pi-hole Blocklist This blocklist is based on the BAD BOX 2.0 threat intelligence framework by Human Security, designed to protect networks from malicious domains, adware, spyware, and potentially harmful or suspicious online services.

badbox-2\_0-pihole-blocklist.txt

Raw

```
1 # Title: List of C2 + Games Domains - BAD BOX 2.0
2 # Last modified: 13 Sep 2025 06:35 UTC
3 # Version: 2509130635
4 # Description: Domains classified as malware, phishing or adware running on infected Android TV Box
5 # Use this list to enhance Pi-hole's default filtering capabilities and block known threats, trackers, and unwanted domains.
6 # Author: https://www.humansecurity.com/
7 # License: GNU General Public License v3.0
8 # Source: https://www.humansecurity.com/learn/blog/satori-threat-intelligence-disruption-badbox-2-0/#models
9 # Blocked domains: 1063
10 #
11 #=====
12 #
13 --- Group block ---
14 # [C2 Domains]
15 100ulife.com
16 1ztop.work
17 99soya.shop
18 ad3g.com
19 admoyu.com
20 ads-goal.com
21 ai-goal.com
22
```

# Recommendation for South Asia

## Share

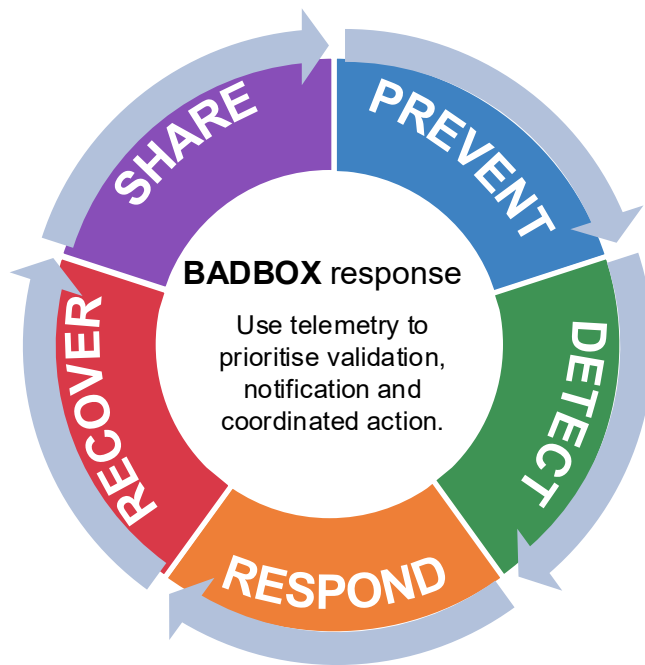
1. CERT coordination
2. Indicators of compromise
3. NOG collaboration

## Recover

1. Remove insecure devices
2. Validate remediation
3. Track lessons learned

## Respond

1. Customer notification
2. Abuse handling
3. CERT escalation



## Prevent

1. Certified devices
2. Trusted suppliers
3. Approved app stores

## Detect

1. DNS monitoring
2. Threat intelligence
3. Shadow Server reports

# Recommendation for South Asia

## Technical Measures:

- Enforce Device Certification
- Harden App store
- Network Level Detection
- Firmware Integrity Checks
- IoT network Segmentations
- Regional threat-intelligence sharing



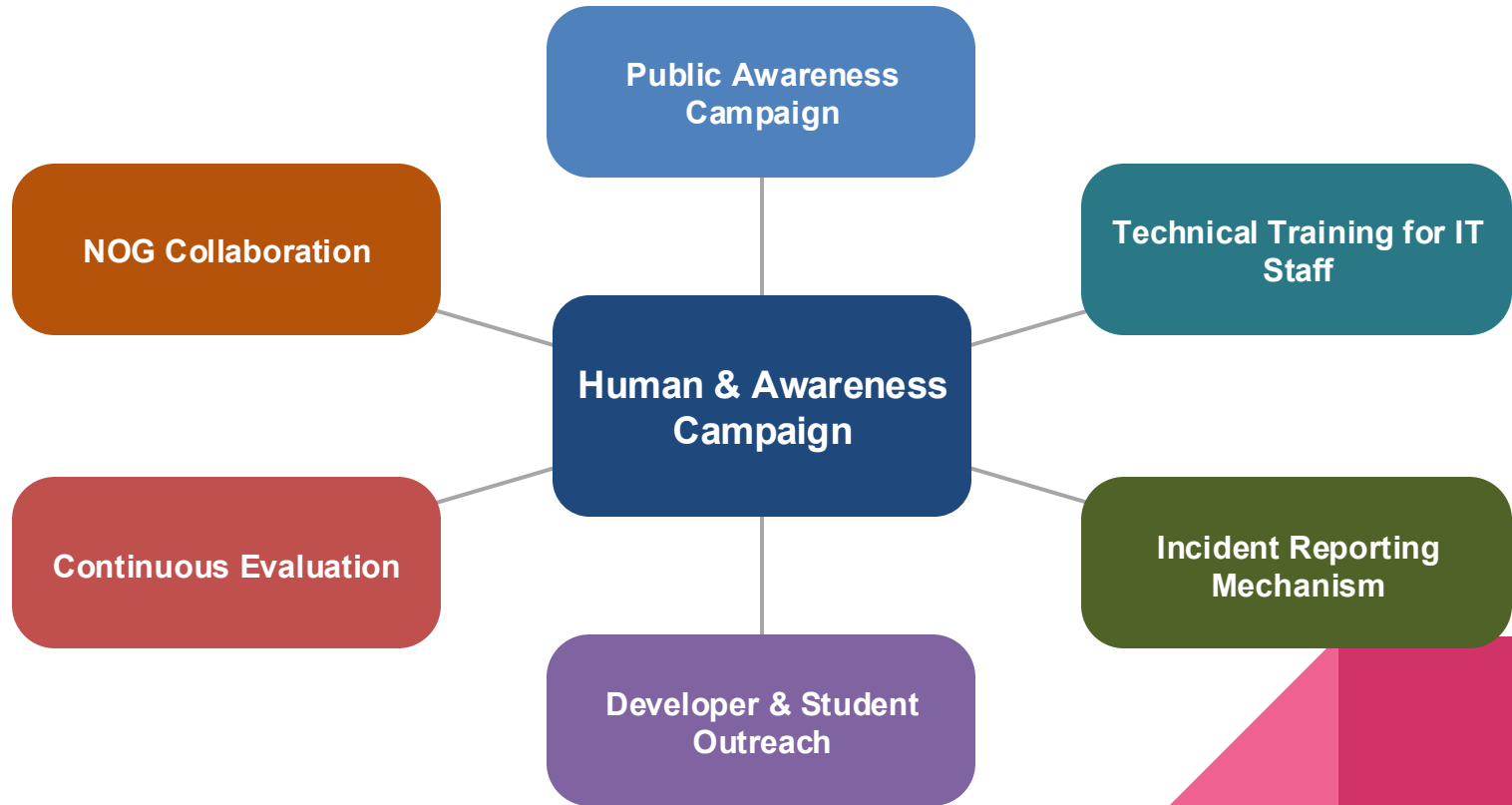
# Recommendation for South Asia

## Policy Recommendation:

- IoT/Device Security Standards (IoT security baselines)
- Market Surveillance and Certification
- Market place accountability
- Cross-border Cyber Cooperation
- Legal Enforcement



# Recommendation for South Asia



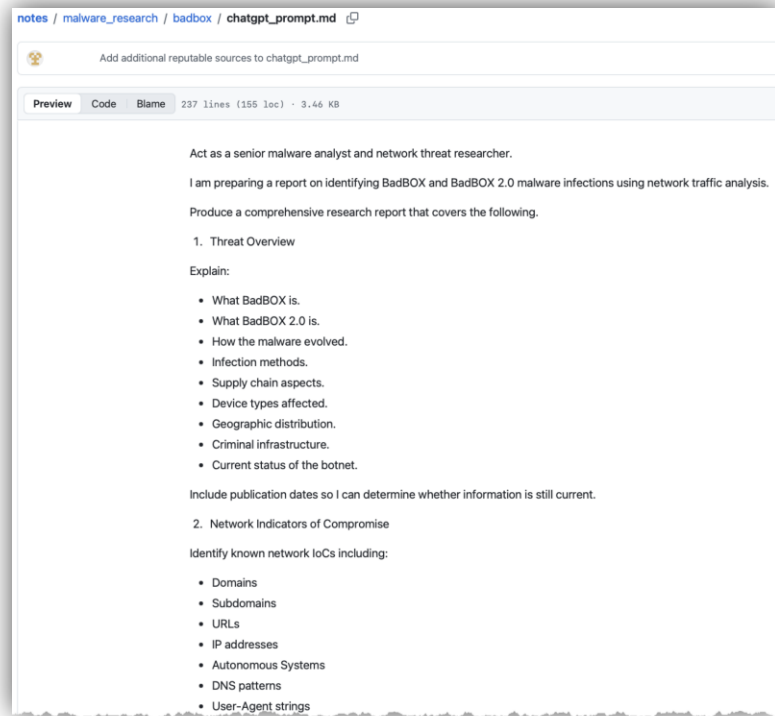
# References

| Title                                                   | Date        | URL                                                                                                                                                                                                                                                               | Description                      |
|---------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| HUMAN Satori Threat Intelligence Disruption: BADBOX 2.0 | 5 Mar 2025  | <a href="https://www.humansecurity.com/learn/blog/satori-threat-intelligence-disruption-badbox-2-0/">https://www.humansecurity.com/learn/blog/satori-threat-intelligence-disruption-badbox-2-0/</a>                                                               | Primary technical investigation  |
| FBI PSA I-060525-PSA                                    | 5 Jun 2025  | <a href="https://www.fbi.gov/investigate/cyber/alerts/2025/home-internet-connected-devices-facilitate-criminal-activity">https://www.fbi.gov/investigate/cyber/alerts/2025/home-internet-connected-devices-facilitate-criminal-activity</a>                       | Official public warning          |
| Google Legal Action Against BadBox 2.0                  | 17 Jul 2025 | <a href="https://blog.google/innovation-and-ai/technology/safety-security/google-taking-legal-action-against-the-badbox-20-botnet/">https://blog.google/innovation-and-ai/technology/safety-security/google-taking-legal-action-against-the-badbox-20-botnet/</a> | Google response and scale update |
| BADBOX 2.0 Case Study                                   | 19 Jul 2025 | <a href="https://research.cgu.edu/icdc/2025/07/19/badbox-2-0-case-study/">https://research.cgu.edu/icdc/2025/07/19/badbox-2-0-case-study/</a>                                                                                                                     | Legal and operational analysis   |
| Censys Unpacking the BADBOX Botnet                      | 4 Feb 2025  | <a href="https://www.censys.com/blog/unpacking-the-badbox-botnet">https://www.censys.com/blog/unpacking-the-badbox-botnet</a>                                                                                                                                     | TLS and infrastructure analysis  |
| Malwarebytes BadBOX Largely Disrupted                   | 6 Mar 2025  | <a href="https://www.malwarebytes.com/blog/news/2025/03/android-botnet-badbox-largely-disrupted">https://www.malwarebytes.com/blog/news/2025/03/android-botnet-badbox-largely-disrupted</a>                                                                       | Follow-on analysis               |
| HUMAN Reverse Engineering BADBOX 2.0                    | 5 Mar 2025  | <a href="https://www.humansecurity.com/learn/blog/satori-reverse-engineering-badbox-2/">https://www.humansecurity.com/learn/blog/satori-reverse-engineering-badbox-2/</a>                                                                                         | Malware internals                |
| The Hacker News BADBOX 2.0                              | 18 Mar 2025 | <a href="https://thehackernews.com/2025/03/badbox-20-botnet-infects-1-million.html">https://thehackernews.com/2025/03/badbox-20-botnet-infects-1-million.html</a>                                                                                                 | Industry summary                 |

# References

| Title                                | Date        | URL                                                                                                                                                                                                                         | Description                        |
|--------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| FBI IC3 PSA (I-060525-PSA)           | 5 Jun 2025  | <a href="https://www.ic3.gov/PSA/2025/PSA250605">https://www.ic3.gov/PSA/2025/PSA250605</a>                                                                                                                                 | Official public warning            |
| Bitsight BADBOX Botnet Is Back       | 17 Dec 2024 | <a href="https://www.bitsight.com/blog/badbox-botnet-back">https://www.bitsight.com/blog/badbox-botnet-back</a>                                                                                                             | Botnet resurgence and scale        |
| StealthMole Chen Daihai Case         | 4 Feb 2026  | <a href="https://stealthmole-intelligence-hub.blogspot.com/2026/02/tracing-identity-exposure-around-badbox.html">https://stealthmole-intelligence-hub.blogspot.com/2026/02/tracing-identity-exposure-around-badbox.html</a> | Identity attribution investigation |
| BADBOX 2.0 Pi-hole Blocklist         | 13 Sep 2025 | <a href="https://gist.github.com/leuthier/62fbfd86b003ca5888235e1c2e4e100d">https://gist.github.com/leuthier/62fbfd86b003ca5888235e1c2e4e100d</a>                                                                           | Community C2 domain blocklist      |
| BadBox2 DNS Log Checker              | 2024        | <a href="https://github.com/wobfan/badbox2_dns_log_checker">https://github.com/wobfan/badbox2_dns_log_checker</a>                                                                                                           | DNS log detection tool             |
| Hak5 Threat Wire: BADBOX             | 15 Jul 2026 | <a href="https://youtu.be/j_rKXznEMvE?t=65">https://youtu.be/j_rKXznEMvE?t=65</a>                                                                                                                                           | News video segment                 |
| BADBOX 2.0 Impacting Millions (talk) | 22 Oct 2025 | <a href="https://youtu.be/73jRP1hiVxQ">https://youtu.be/73jRP1hiVxQ</a>                                                                                                                                                     | Conference presentation            |
| BADBOX 2.0 Explainer Video           | —           | <a href="https://youtu.be/Epp-8n-_CWA">https://youtu.be/Epp-8n-_CWA</a>                                                                                                                                                     | Video overview                     |

# Bonus – AI prompt



```
notes / malware_research / badbox / chatgpt_prompt.md
Add additional reputable sources to chatgpt_prompt.md

Preview Code Blame 237 lines (155 loc) · 3.46 KB

Act as a senior malware analyst and network threat researcher.

I am preparing a report on identifying BadBOX and BadBOX 2.0 malware infections using network traffic analysis.

Produce a comprehensive research report that covers the following.

1. Threat Overview

Explain:



- What BadBOX is.
- What BadBOX 2.0 is.
- How the malware evolved.
- Infection methods.
- Supply chain aspects.
- Device types affected.
- Geographic distribution.
- Criminal infrastructure.
- Current status of the botnet.



Include publication dates so I can determine whether information is still current.

2. Network Indicators of Compromise

Identify known network IoCs including:



- Domains
- Subdomains
- URLs
- IP addresses
- Autonomous Systems
- DNS patterns
- User-Agent strings

```

Act as a senior malware analyst and network threat researcher. I am preparing a report on identifying BadBOX and BadBOX 2.0 malware infections using network traffic analysis.

Produce a comprehensive research report that covers the following.

## 1. Threat Overview

Explain:

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