



SECURITY ASSESSMENT FOR XXX

Date: 8. Oct 2024



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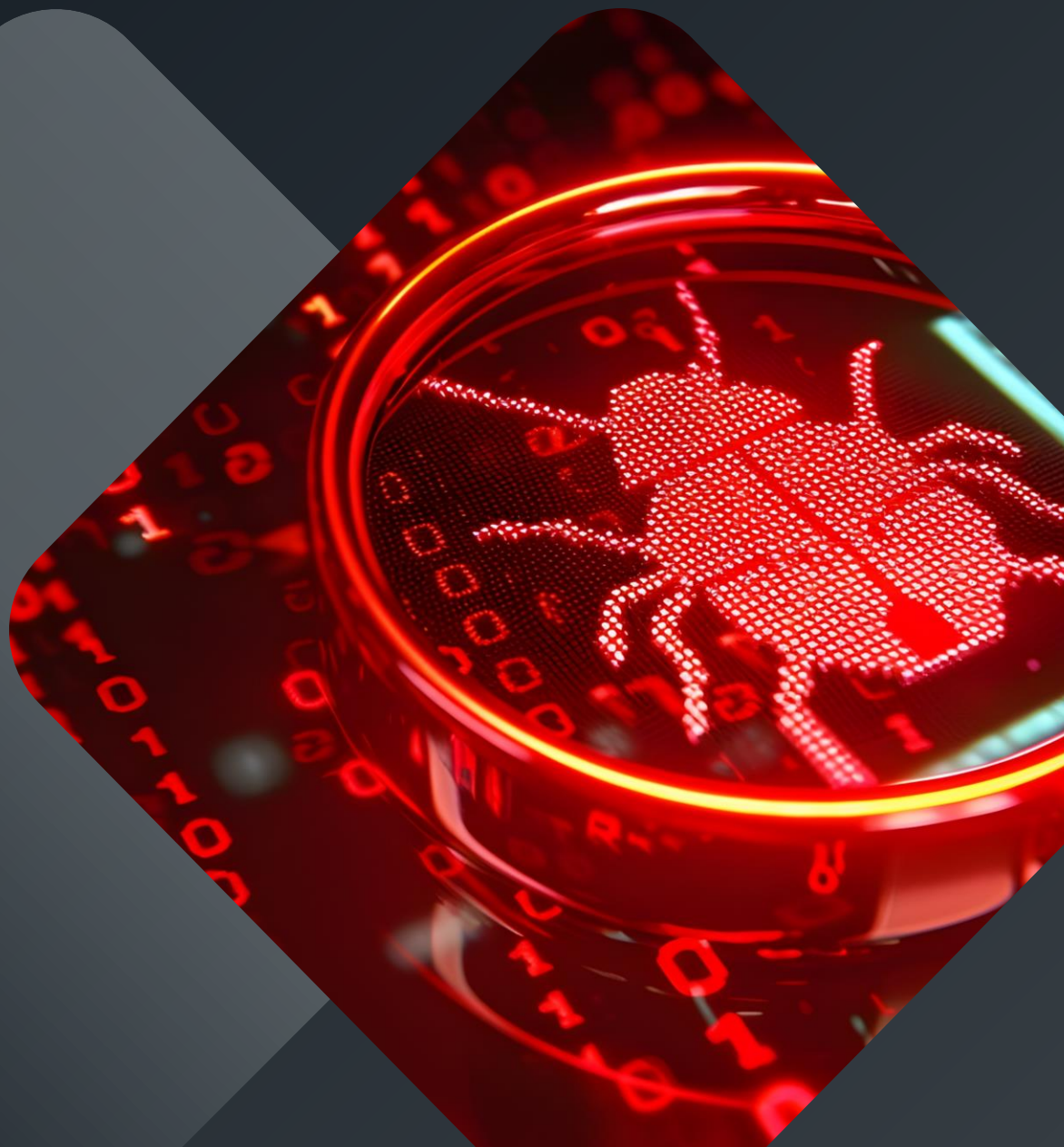
SECTION 10

Appendices

The Infoblox Security Assessment analyzes DNS traffic to deliver comprehensive visibility into potential threats and risks associated with all network assets and communication with malicious domains, high-risk applications and content.



EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

KEY FINDINGS AND RISKS

CRITICAL
40.7K

HIGH-RISK EVENTS

Number of malicious domains accessed



CRITICAL
>300K

HIGH-RISK WEBSITES


Illegal or policy-violating sites associated with potential data theft and other risks



HIGH
1.5k

DGAs


Domain Generation Algorithms



HIGH
387

LOOKALIKE DOMAINS


Hit on Look A Like Domains



288

ZERO DAY DNS


Domains registered and launched within a small window – typically indicative of spearphishing



36k

SUSPICIOUS DOMAINS

Detected domains that are likely to be used in a future malicious campaign



RECOMMENDATIONS TO MITIGATE RISK

- Enable blocking of detected malicious and suspicious domains for proactive protection
- Add custom lookalike domain monitoring and Infoblox Domain Mitigation service to address brand reputation risks if required
- Leverage SOC Insights to reduce the number of security events, surfacing critical and actionable threats



Domain takedown within 24 hours



50% alert reduction on EDR and NGFW


















Up to 500 SOC Hours Saved



63 days avg Proactive protection

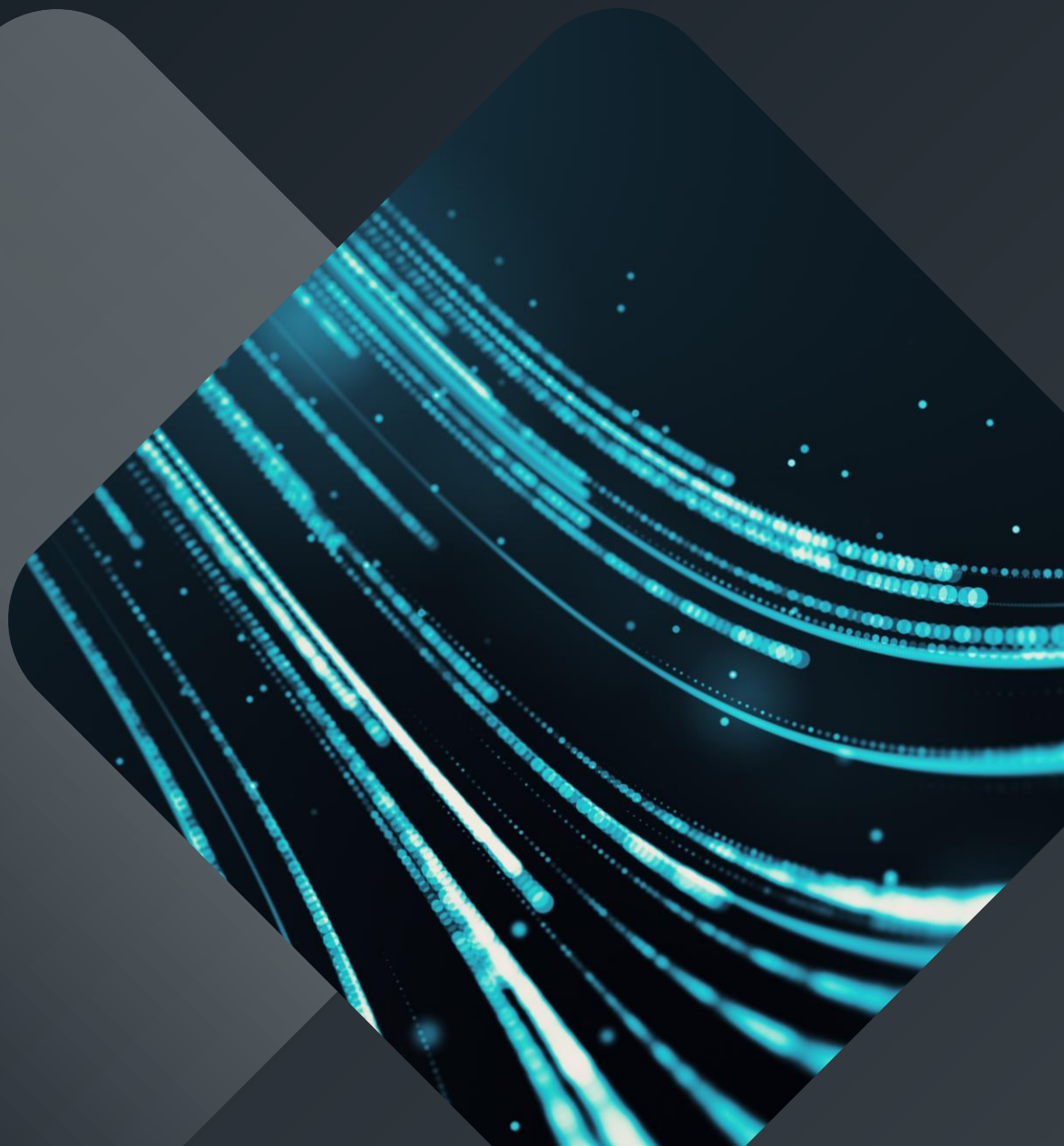
SECURITY INDICATOR SUMMARY

Your DNS traffic has been reviewed over the past 30 days, uncovering the following:

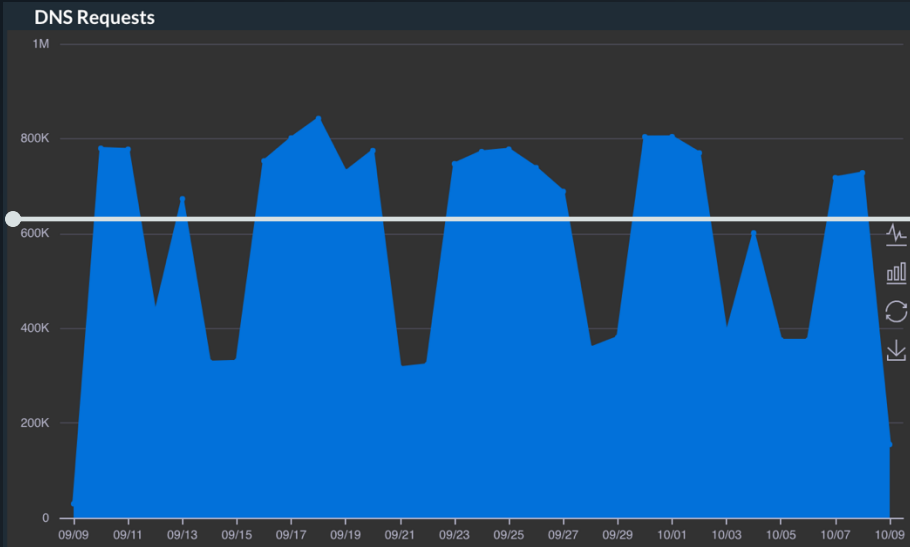
 <p>18.1M DNS Requests</p> <p>Total volume of individual requests/traffic analyzed</p>	 <p>40.7k High-Risk Events</p> <p>Number of high-risk malicious domains accessed</p>	 <p>0 Medium-Risk Events</p> <p>Number of medium-risk malicious domains accessed</p>	 <p>16 Insights</p> <p>Actionable insights based on aggregated and correlated security event data</p>
 <p>6 Custom Lookalike Domains</p> <p>Created to impersonate your brand for malicious purposes</p>	 <p>9k DoH</p> <p>DNS over HTTPS (DoH) is encrypted traffic, which can hide malicious activity</p>	 <p>288 Zero Day DNS</p> <p>Domains registered and launched within a small window – typically indicative of spearphishing</p>	 <p>36k Suspicious Domains</p> <p>Detected domains that are likely to be used in a future malicious campaign</p>
 <p>22.9k Newly Observed Emergent Domains</p> <p>A type of domain that has only recently been observed within customer traffic.</p>	 <p>1.5k Domain Generated Algorithms</p> <p>Indicative that malware exists and is looking to communicate “home”</p>	 <p>0 DNS Tunneling</p> <p>DNS tunneling can be indicative of data exfiltration or C2</p>	 <p>89 Unique Applications</p> <p>Number of applications to verify against sanctioned list</p>
 <p>300k High-Risk Web Categories</p> <p>Illegal or policy-violating sites associated with potential data theft and other risks</p>	 <p>4 Threat Actors</p> <p>Known DNS threat actors detected with activity in your network</p>	<p>1.6k events per day on avg. </p> <p>The number of requests in total (1. Pos) shows the importance of the DNS protocol for the IT infrastructure and the unique vantage point for visibility and security</p>	



TRAFFIC USAGE ANALYSIS



TRAFFIC USAGE ANALYSIS



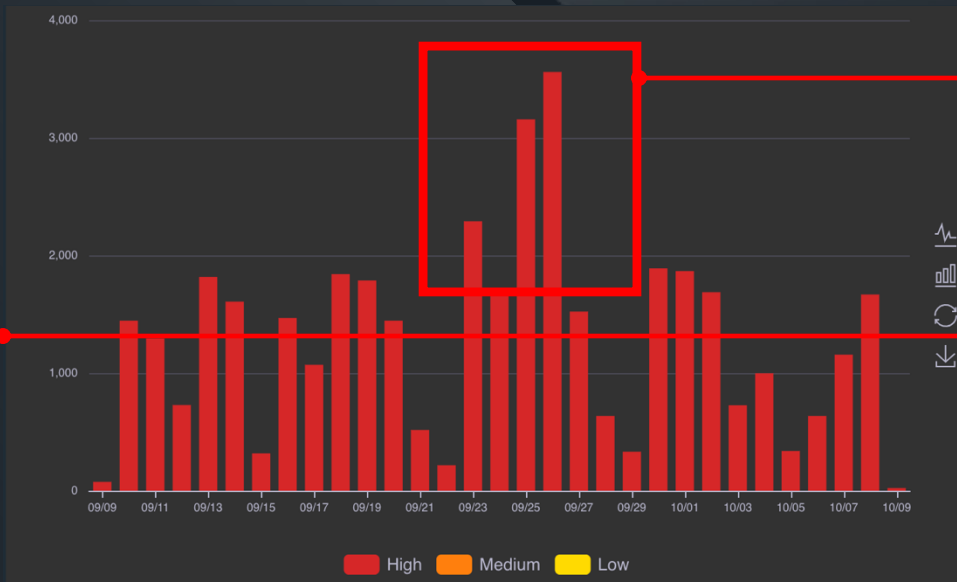
requests/day avg. 603k

The visualization shows an expected drop during the weekends.
> Investigation recommended if unexpected increases are occurring.



The amount of DNS request in total pointing out the core network functionality of the protocol for the organization.

TRAFFIC USAGE ANALYSIS



Increase of High-Risk Events

Avg. 1.3k Firewall Events per day

The average of **1.3k events per day** which got **blocked** over the last month aligns with expected low false positive rate of the threat intelligence service Infoblox offers with no impact on the daily business and easy to manage user experience.





KEY INSIGHTS



KEY INSIGHTS

All security events are aggregated, correlated, analyzed, and extrapolated into actionable, prioritized insights.

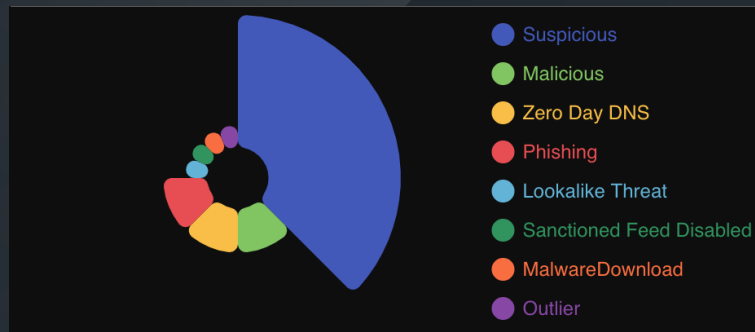


SUMMARY

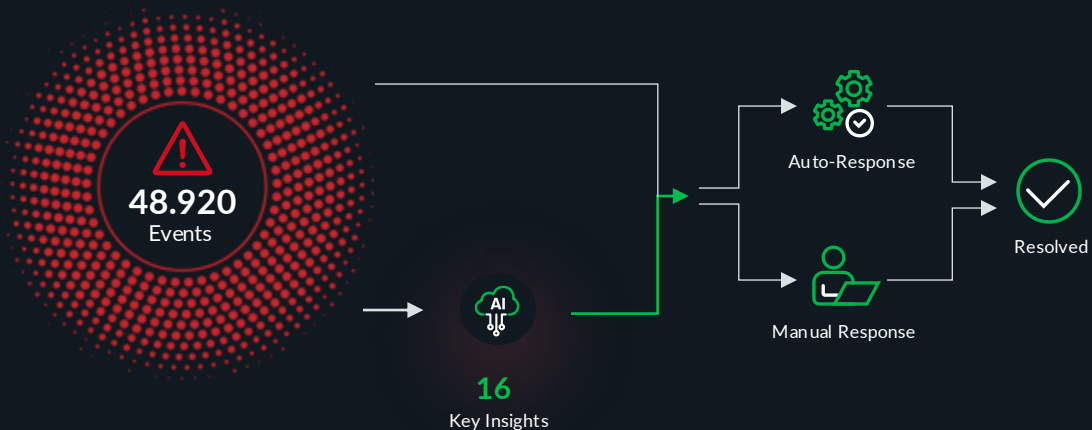
INSIGHT SEVERITY



INSIGHT DISTRIBUTION BY THREAT TYPE



EVENT TO INSIGHT AGGREGATION



MALICIOUS INSIGHT DETAILS

Active Period

Insight Creation Date: 08-07-2024, 02:00:00 PM CEST
62 days
Last Observed: 10-07-2024, 11:35:10 AM CEST

What was observed in your environment?

Malicious	
Class	Family
Malicious	TDS

Associated with 1 Threat Actors

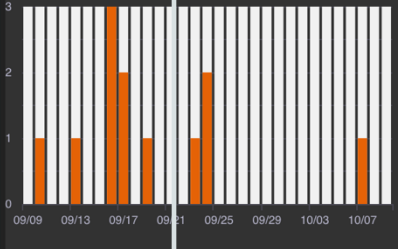
This insight has detected that 1 indicators are directly related to a malicious threat actor. More details about the threat actor(s) can be found below.

[View All Threat Actors \(1\)](#)

Assets

4 Total Assets
[View All Assets](#)

All Impacted Assets (4)

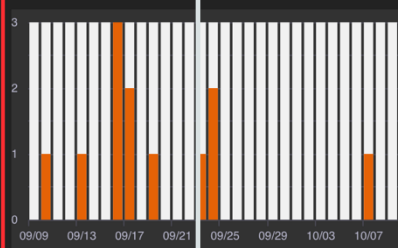


Persistent Threat

</> Indicators / Events
1 Total Indicator
[View All Indicators](#)

0 Not blocked
1 Blocked

Indicators (1) Events (102)



Impacted endpoint

Event aggregation

Details about actor

Indicator polyfill.io / Blocked	Indicator has been added To a Threat Feed and blocked.	4 Assets	High Infoblox Threat Level	High Confidence	Last Observation: 10-07-2024, 11:00:00 AM CEST First Observation: 9-10-2024, 03:00:00 PM CEST
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SOC Insights supports a guided threat investigation process to quickly answer the imported key asks.

Other included features in the Bloxone Threat Defense product suite supports further the investigation process. (TIDE & Dossier – s. next page)



DOSSIER

An integrated threat research portal to look up Indicators of Compromise (IoC). Can also be used for example to look up IoCs of other infrastructure/security systems.

If an IoC is linked to an Advanced Persistent Threat (APT) or Threat Actor the available information are easy to access to get more information about the Tactics, Techniques, and Procedures (TTPs).

Shows frequency of access attempts in your environment and allow to pull a direct report about impacted devices

Major brand registered Look A Like Domain found

TIDE

An integrated threat intelligence exchange database. Allow look ups, uploads and can be used to utilize the listed iocs to be shared across the it security stack.

The screenshot shows the TIDE interface with a table of indicators and a filter sidebar. The table has columns: INDICATOR, DATA TYPE, THREAT CLASS, THREAT PROPERTY, DETECTED, DATA PROVIDER, and THREAT. The filter sidebar includes sections for Data Type, Threat Class/Property, and Data Provider. A red box highlights the 'Data Provider' filter, showing 'AISCComm' (11,192) and 'Infoblox' (24,622,784) selected.

INDICATOR	DATA TYPE	THREAT CLASS	THREAT PROPERTY	DETECTED	DATA PROVIDER	THREAT
webcolortool.com	HOST	UncategorizedThreat	UncategorizedThreat_Gen...	2024-09-27T10:06:10.02...	AISCOMM	80
nivelaservicos.com.br	HOST	UncategorizedThreat	UncategorizedThreat_Gen...	2024-10-04T11:53:10.02...	AISCOMM	80
lifechangerscare.com	HOST	UncategorizedThreat	UncategorizedThreat_Gen...	2024-09-25T10:06:10.01...	AISCOMM	80
brentohd.com	HOST	UncategorizedThreat	UncategorizedThreat_Gen...	2024-09-26T10:06:10.02...	AISCOMM	80
recovery-thirty.com	HOST	UncategorizedThreat	UncategorizedThreat_Gen...	2024-09-26T10:06:10.02...	AISCOMM	80
godgym.co.in	HOST	UncategorizedThreat	UncategorizedThreat_Gen...	2024-09-26T10:06:10.02...	AISCOMM	80
application-style.pages.dev	HOST	UncategorizedThreat	UncategorizedThreat_Gen...	2024-10-03T15:53:10.02...	AISCOMM	80
www.iel4u.com	HOST	UncategorizedThreat	UncategorizedThreat_Gen...	2024-10-02T15:23:10.01...	AISCOMM	80
ics.eicar.network	HOST	ICS	ICS_Generic	2017-07-24T17:26:10.80...	AISCOMM	100
awaratrendz.com	HOST	UncategorizedThreat	UncategorizedThreat_Gen...	2024-09-25T10:06:10.01...	AISCOMM	80

24.6 Million active indicators next to the dynamic detection features for tunneling, zero day dns and Domain Generation Alg. (DGAs)

The screenshot shows the 'Generate API Request' dialog box. A red box highlights the 'Generate API Request' button in the top right. Another red box highlights the generated API request text: `curl -X GET -H "Authorization: Token token=<API_KEY>" "https://csp.infoblox.com/tide/api/data/threats?type=host&type=ip&type=url&type=email&type=hash"`. An 'OK' button is also visible.

Easy filtering and API call generation

The TIDE DB or Dossier information allows to parse source code for unwanted IoCs. In example to support the identification of compromised GIT projects or libraries.



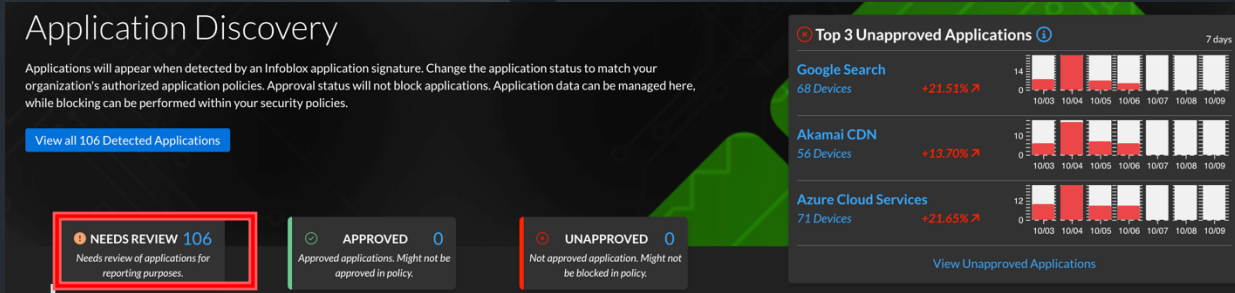


APPLICATION DETECTION



APPLICATION DETECTION

All application traffic is categorized, providing full visibility into authorized and potential unauthorized usage. Unauthorized usage increases risk and exposure.



Often also known as shadow IT. With regard to 106 applications used in the environment, the questions arise:

- Are these applications managed by the IT department?
- What about licensing?
- What about protection against data loss?
- What about infection risks?

The screenshot shows a filtered application list. On the left, the 'Application Category' filter is expanded and highlighted with a red box, showing categories like AI Chatbots, Business App, Business App Suite, Cloud Backup and Storage, Communication, Consumer Services, Content Delivery Network (CDN), Email, Endpoint Protection, Information Technology, Other, Platform as a Service (PaaS), Remote Connectivity, Search Engines, Security, Social Networking, Software Development, Video Conferencing, and VPNs & Proxies. The main table lists applications with columns for NAME, CATEGORY, and REQUESTS.

NAME	CATEGORY	REQUESTS
Microsoft Outlook	Email	290130
iCloud	Cloud Backup and Storage	87885
Microsoft Substrate	Cloud Backup and Storage	36298
Microsoft Exchange	Email	18074
Dropbox	Cloud Backup and Storage	5061
Microsoft OneDrive	Cloud Backup and Storage	4628
Google Gmail	Email	4599
GitHub	Cloud Backup and Storage	1522
Yahoo Mail	Email	1413
Google Drive	Cloud Backup and Storage	970
TeamViewer	Remote Connectivity	596
Google Photos	Cloud Backup and Storage	536
Filestack	Cloud Backup and Storage	15
pCloud	Cloud Backup and Storage	4

Examples of data loss and infection risks: Unmanaged or open-access storage platforms are often not under the control of the IT department, e.g. for malware scans and data protection policy checks.



WEB CONTENT DISCOVERY



WEB CONTENT DISCOVERY

All web traffic is categorized, highlighting illegal or policy-violating content, such as hacking, gambling, pornography, etc. browsing questionable content increases exposure to credential/data stealing and other threats.

Quick Filters

High-Risk Sub-Categories	SUB-CATEGORY	CATEGORY	REQUESTS
<input checked="" type="checkbox"/> Only high-risk sub-categories (15)	Uncategorized	Uncategorized	291959
<input type="checkbox"/> Adult (2,193)	Anonymizer	Dynamic	23358
<input type="checkbox"/> Aggressive (64)	Parked & For Sale Domains	Miscellaneous	8205
<input type="checkbox"/> Arts (1,301)	Gambling	Adult	2030
<input type="checkbox"/> Automotive (12,537)	Piracy & Copyright Theft	Criminal Activities	971
<input type="checkbox"/> Business (1,187,068)	Phishing/Fraud	Malicious	813
<input type="checkbox"/> Careers (7,450)	Gay	Adult	368
<input type="checkbox"/> Criminal Activities (1,043)	Pornography	Adult	134
<input type="checkbox"/> Dynamic (412,723)	Malware Distribution Point	Malicious	116
<input type="checkbox"/> Education (28,221)	Lingerie	Adult	70
<input type="checkbox"/> Entertainment (149,658)	Criminal Skills	Criminal Activities	31
<input type="checkbox"/> Family & Parenting (607)	Marijuana	Criminal Activities	30
+ Show more	Tobacco	Adult	29
	Peer-to-Peer	Technology	16
	School Cheating	Criminal Activities	11

Known malicious Web Cats should be blocked

Create filters to support corporate policy handling

Torrent repos and VPN service are often appearing in this category.

surfshark.com.	Ext. - Network - DC	Peer-to-Peer
surfshark.com.	Ext. - Network - DC	Peer-to-Peer
blokada.org.	ZTP_ClientLAN_OPH1_...	Peer-to-Peer
blokada.org.	Ext. - Network - HQ	Peer-to-Peer



LOOKALIKE DOMAINS






LOOKALIKE DOMAINS

Active monitoring for lookalike domains of major brands, including common typosquats. Custom monitoring for lookalikes impersonating your brand for malicious purposes.

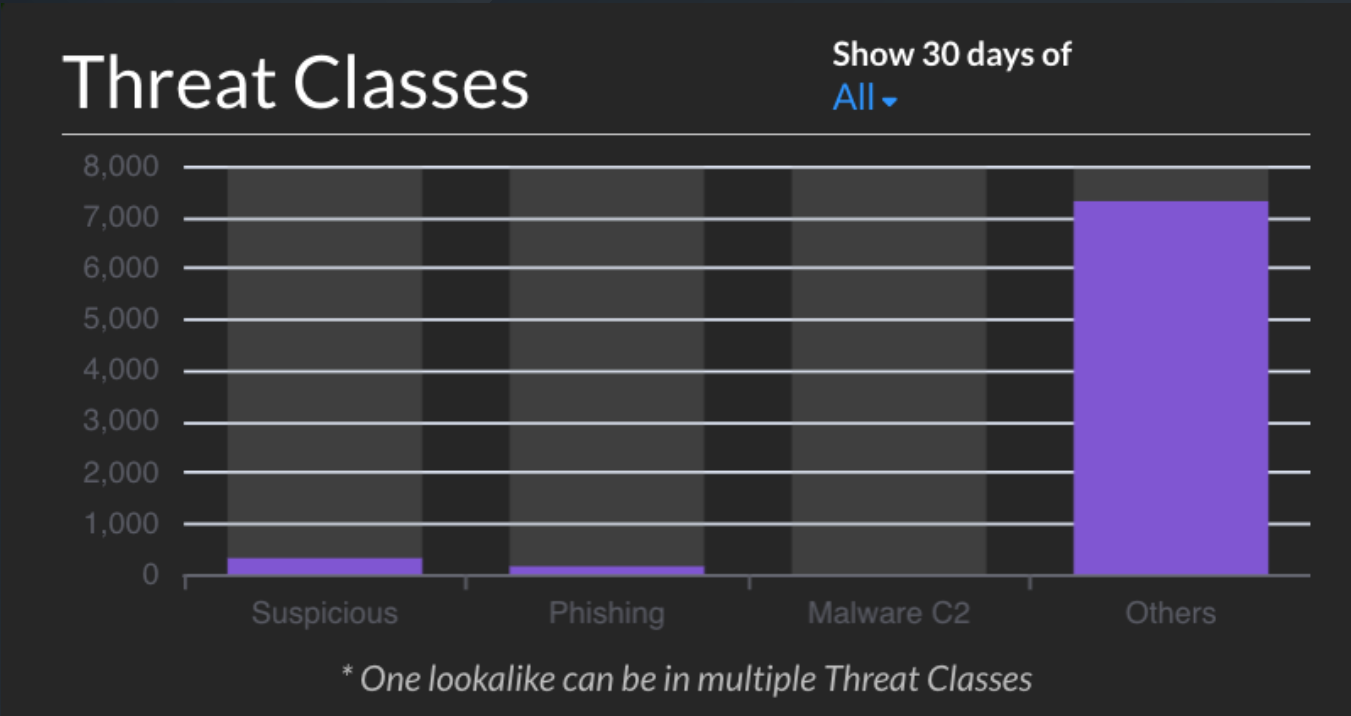
SUMMARY

Last 7 days

2.7K  116.5% Total Lookalikes	2  0.0% Total Lookalikes from Custom Watched Domains	0  0.0% Threats from Custom Watched Domains
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[Export](#)

LOOKALIKES BY THREAT TYPES



LOOKALIKE DOMAINS ANALYSIS



Review and request a domain take-down (professional service offer) if the organization's reputation is at risk.

amazon.com
Common Watched Domain

Lookalikes: 7772
Threat lookalikes: 473 (Phishing, Suspicious)

Content Category: Online Shopping
Registration Date: Nov 01 1994

Threat Classes

Jul 14 2024	openaiebooks.online	Personal Pages & Blogs	
Aug 29 2024	5zpx55.shop	Uncategorized	
Sep 04 2024	t4saks.shop	Uncategorized	▲ Suspicious
Aug 29 2024	yam72w.shop	Uncategorized	▲ Suspicious
Sep 04 2024	aj3jz7.shop	Uncategorized	▲ Suspicious
Sep 04 2024	8n9w3c.shop	Uncategorized	▲ Suspicious
Sep 04 2024	qcg3k7.shop	Uncategorized	▲ Suspicious
Sep 04 2024	gcy6xz.shop	Uncategorized	▲ Suspicious

aj3jz7.shop
First Seen 09/05/2024 Last Active Threat Detection: 10/09/2024 (Active)

- Summary
- Impacted Devices
- Current DNS
- Related Domains**
- Related URLs
- Related IPs
- Related File Samples
- Related Contacts
- Metadata

Related Domains will show

DOMAIN
amazon.aj3jz7.shop
amazon.aj3jz7.shop
www.aj3jz7.shop
amazon.aj3jz7.shop

Example of a major brand



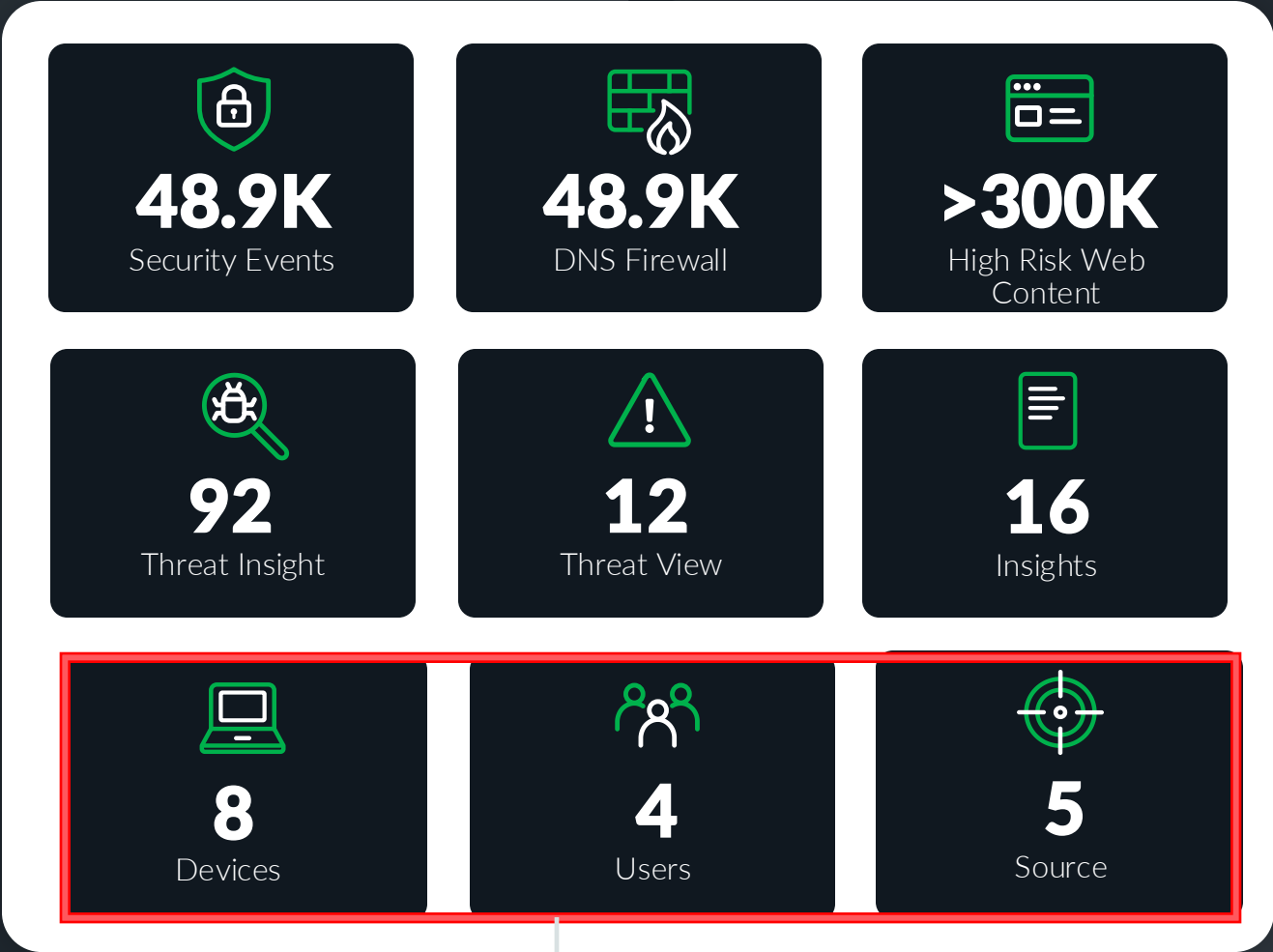
SECURITY ACTIVITIES



SECURITY ACTIVITIES

All DNS queries are logged, categorized, and attributed by severity to surface security-related events requiring further forensic analysis.

SUMMARY



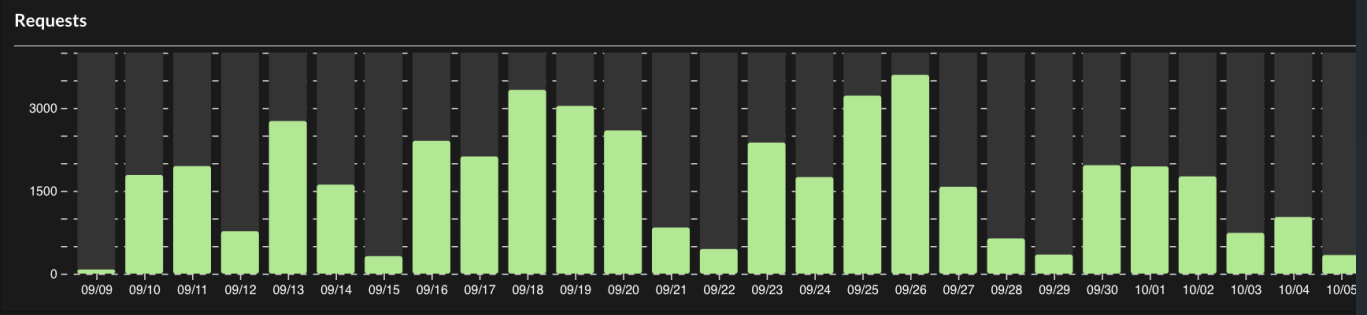
Depends on deployment options (s. APPENDICES)

SECURITY ACTIVITIES ANALYSIS

Security Events 48.9K DNS Firewall 48.9K Web Content 0 Threat Insight 92 Threat View 12 Source 5 Devices 8 Users 4 Insights

Search for events Search ⓘ

Action Any Confidence Any Feed Any Class Any Level Any Policy Any Source Any Show 1 month



Export

DETECTED	THREAT LEVEL	QUERY	CLASS	PROPERTY	INDICATOR	POLICY	ACTION
09-30-2024 09:00:03 ...	High	ipggrievazh.ru.	Malicious	Generic	ipggrievaz...	DNS Assessm...	Block
09-30-2024 09:00:03 ...	High	ipggrievazh.ru.	Malicious	Generic	ipggrievaz...	DNS Assessm...	Block
09-30-2024 09:00:03 ...	High	a.ipggrievazh.ru.	Malicious	Generic	ipggrievaz...	DNS Assessm...	Block
09-30-2024 09:00:03 ...	High	a.ipggrievazh.ru.	Malicious	Generic	ipggrievaz...	DNS Assessm...	Block
09-30-2024 09:03:09 ...	High	123movies4net.co.	Suspicious	Generic	123movies...	DNS Assessm...	Block

10-01-2024 08:08:42 ...	High	bestmarket.s.click.	MalwareC2	Generic	Showing 478 of 478
09-25-2024 11:59:01 ...	High	info.hongyi.top.	MalwareDownload	Showing 1257 of 1257	
10-06-2024 12:49:03 ...	High	yuh-kein.com.	Zero Day DNS	Showing 219 of 219	

Class Any Level Any Clear

Search...

- InternetInfrastructure
- Malicious
- MalwareC2
- MalwareDownload
- Phishing
- Policy
- Suspicious
- Zero Day DNS

SECURITY ACTIVITIES ANALYSIS

Top Detected Properties

THREAT	HITS
EmergentDomain	22.4K
Generic	13.7K
Lookalike	1.4K
DGA	1.4K
Spam	236
Behavior	220
Threat Insight - Zero Day DNS	219
Malvertising	173
TDS	102
Nameserver	15

By clicking on the security dashboard report of Top Detected Properties (Sub Classes) the security activities open and the filter automatically is getting applied.

property="DGA" and feed!="Public_DOH" and feed!="public-doh" and Search ⓘ

Action Any Confidence Any Feed Any Class Any Level 2 of 1 selected Policy Any Source Any Show 1 month

09-10-2024 12:59:20 ...	High	Idjk.info.	Suspicious	DGA	Idjk.info	DNS Assessm...	Block
09-10-2024 02:12:39 ...	High	smzk.info.	Suspicious	DGA	smzk.info	DNS Assessm...	Block

Showing 1378 of 1378



THREAT ACTORS



THREAT ACTORS

Specific active threat actors discovered in the assessment environment, including their activity timeline, correlated indicators, and a synopsis of their targets and techniques.

polyfill

Chinese actor who purchased the polyfill.io domain for the commonly used Polyfill service. This service has since been associated with malware injections in websites worldwide.

Total Domain Count: 355 (1) Domains in Your Network, (354) Domains Not in Your Network

Active Threat Domains Discovered by Infoblox

Sample Domains discovered by Infoblox: Associated with polyfill, **rzhku.cn**

Timeline: Discovered 1 days ahead (02/23/24) → Domain Last seen in DNS Traffic (10/07/24). Protected 226 days.

unnamed_actor_tgpoctcnpb

Registered DGA (RDGA) domains that were observed in clusters through registration, DNS queries, or other source data. They satisfy a specific criteria to group them as part of a single DNS actor infrastructure.

Total Domain Count: 33 (4) Domains in Your Network, (29) Domains Not in Your Network

Active Threat Domains Discovered by Infoblox

Sample Domains discovered by Infoblox: Associated with unnamed_actor_tgpoctcnpb, **yend.info**

Timeline: Discovered 8 days ahead (08/13/24) → Domain Last seen in DNS Traffic (10/07/24). Protected 55 days.

unnamed_actor_m5y4oust9i

Registered DGA (RDGA) domains that were observed in clusters through registration, DNS queries, or other source data. They satisfy a specific criteria to group them as part of a single DNS actor infrastructure.

Total Domain Count: 28 (2) Domains in Your Network, (26) Domains Not in Your Network

Active Threat Domains Discovered by Infoblox

Sample Domains discovered by Infoblox: Associated with unnamed_actor_m5y4oust9i, **oryh.info**

Timeline: Discovered 500 days ahead (02/12/23) → Domain Last seen in DNS Traffic (10/07/24). Protected 602 days.

unnamed_actor_b6msinivp4

Registered DGA (RDGA) domains that were observed in clusters through registration, DNS queries, or other source data. They satisfy a specific criteria to group them as part of a single DNS actor infrastructure.

Total Domain Count: 33 (6) Domains in Your Network, (34) Domains Not in Your Network

Active Threat Domains Discovered by Infoblox

Sample Domains discovered by Infoblox: Associated with unnamed_actor_b6msinivp4, **zcnm.info**

Timeline: Discovered (05/12/24) → Domain Last seen in DNS Traffic (10/07/24). Protected 147 days. Only discovered by Infoblox. Not found in other vendors.

Early prevention capabilities relate to a DNS-based threat intelligence service

DGAs are often hard-coded into malware



RECOMMENDATIONS & NEXT STEPS



RECOMMENDATIONS

Based on the key findings listed below, we're proposing the following set of recommendations.

KEY FINDINGS



Seen Potentials:

Client Misconfiguration
 Mobile Devices At Risk
 Potential Unwanted SaaS Applications
 Data Loss Risk
 Evasion/ Security Bypass Risk
 Malware Infection Risk
 Unwanted User Behaviour
 Potential Infected Clients



Specific DNS Risks:

- DoH (8.8k Hits)
- Suspicious **LookALike** (431 Hits)
- Suspicious Domains (12k Hits)
- Suspicious NOED (22.3k Hits)
- DGA (1.3k Hits)
- Zero Day DNS (219 Hits)
- Threat Actor DNS Clusters (12 IoCs)

RECOMMENDATIONS

- Enhance visibility by combining deployment options
- Employee Awareness Training
- Make use of the threat intelligence feeds to inspect your source code
- Keep Alive DNS Request and Response Logging for investigation demands
- Employee Threat Investigation & Response Training
- Keep-Alive DNS Threat Analytics
- Keep-Alive DNSDR
- Keep-Alive Event Aggregation Engine
- Start Application approval and filtering



FOR MORE INFORMATION CONTACT:

NAME

TITEL

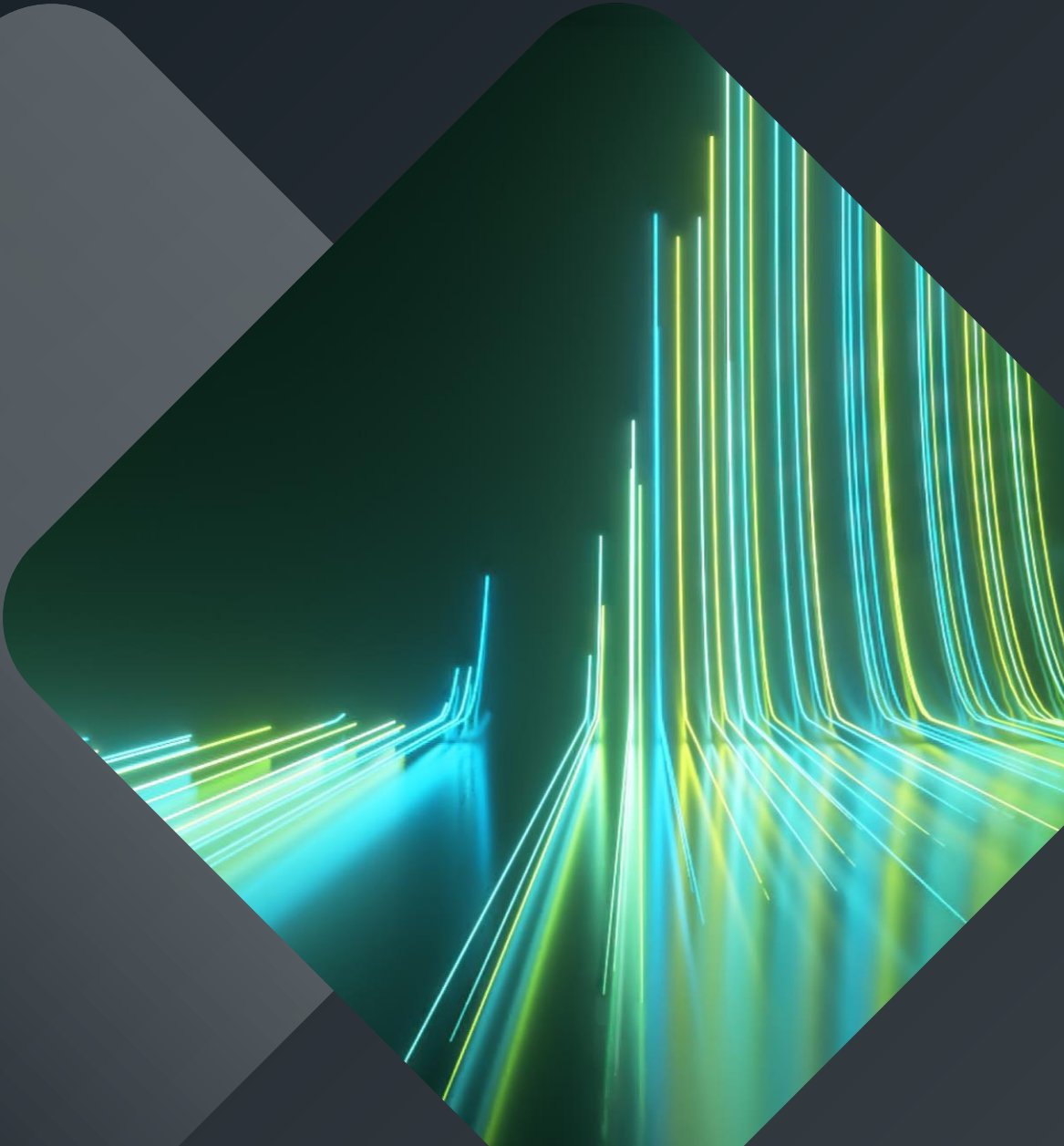
EMAIL:

PHONE NUMBER:

This Infoblox Security Assessment report is based on information provided to Infoblox and our own observations during the assessment period. We have conducted the assessment in accordance with generally accepted cybersecurity auditing standards. However, our assessment has limitations, and we cannot guarantee that all vulnerabilities and security issues have been identified. This report is provided for informational purposes only and should not be relied upon as a complete representation of the security of the organization's information systems. We do not accept responsibility for any losses or damages that may arise from the use of this report or any reliance on the findings contained herein. It is important to note that cybersecurity threats are constantly evolving, and the organization's security posture may change at any time. Our findings are accurate as of the date of the assessment and may not reflect the current state of the organization's security posture.



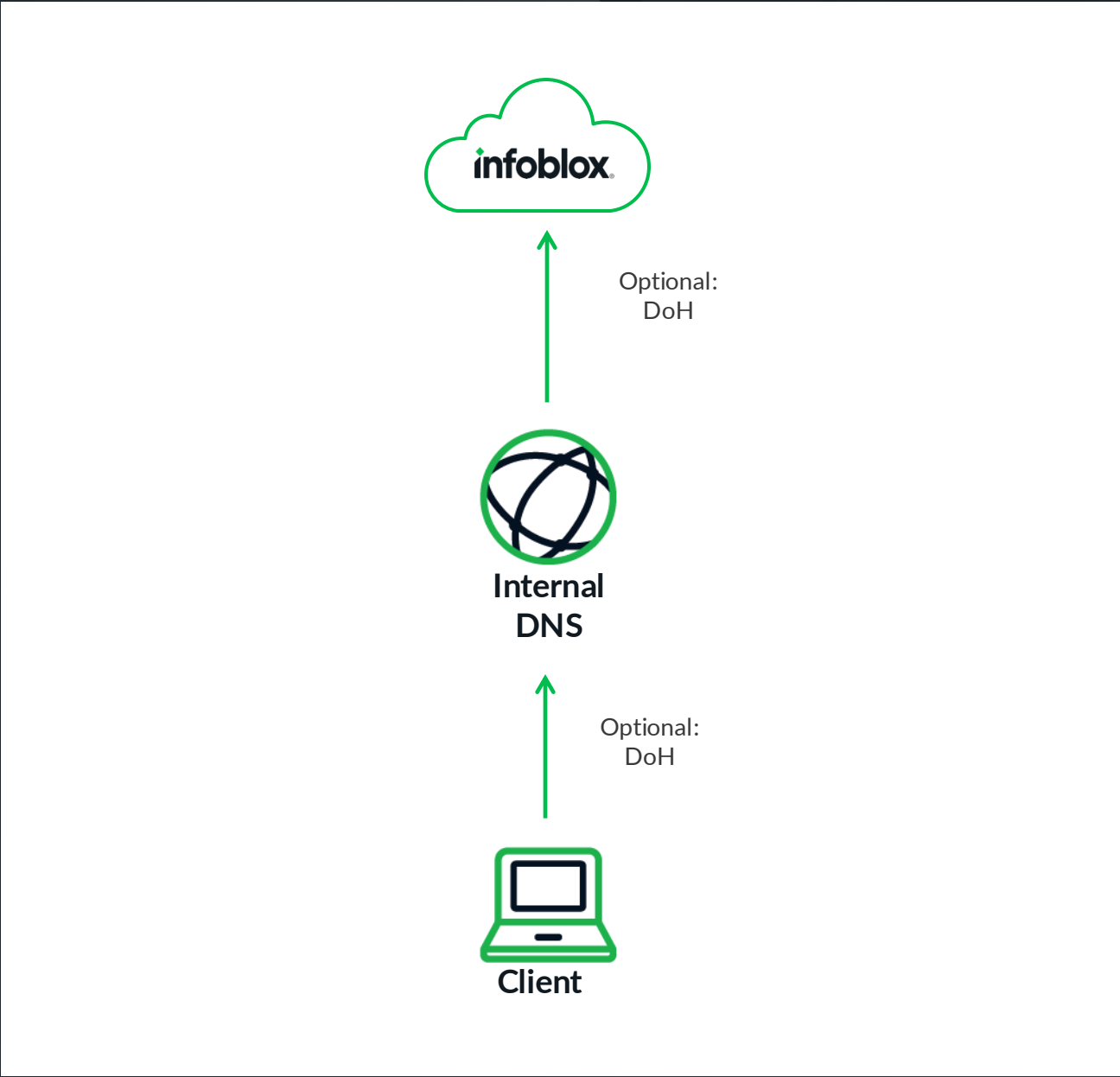
APPENDICES



ASSESSMENT METHODOLOGY

We used the following methodology to perform the assessment:

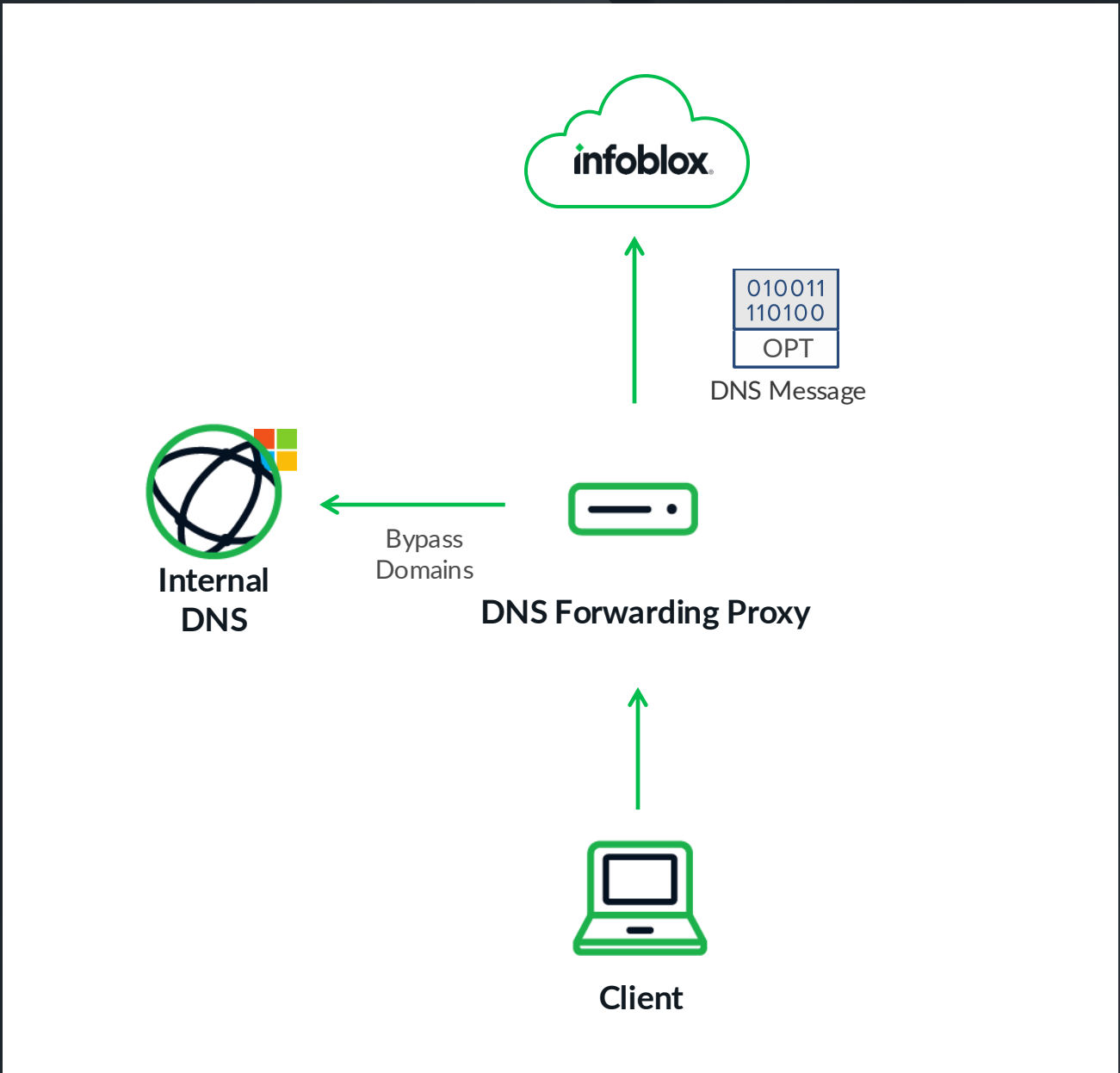
DIRECT FORWARDING



ASSESSMENT METHODOLOGY

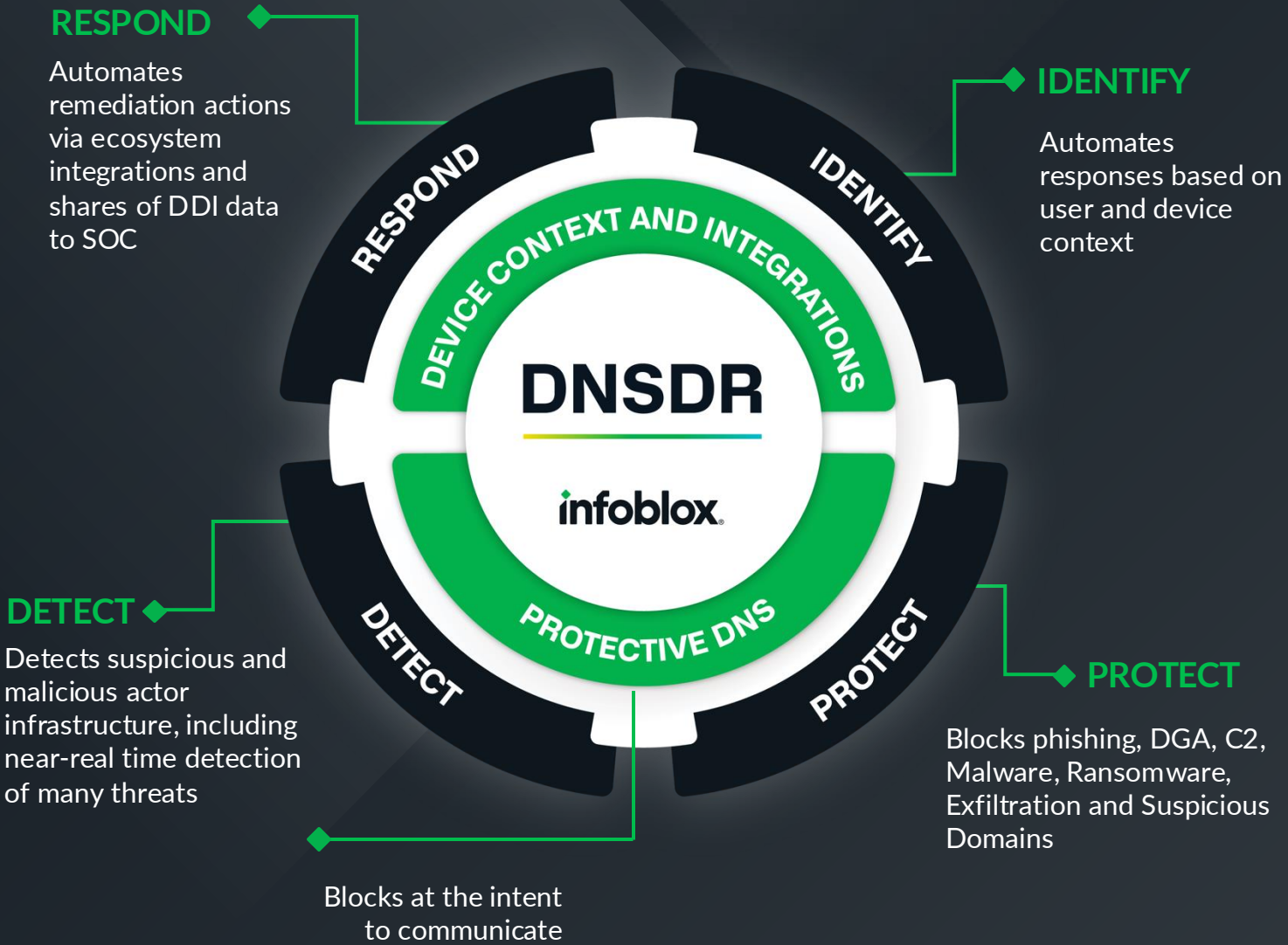
We used partly the following methodology to perform the assessment:

DNS FORWARDING PROXY



SECURITY SOLUTIONS

DNS DETECTION AND RESPONSE



“ DNS is the unsung hero in cybersecurity, transforming threat detection and intelligence with every query. **Infoblox elevates DNS from a basic network function to a cornerstone of cybersecurity strategy**”. – Christopher Kissel, Research Vice President, Security and Trust at IDC

SECURITY SOLUTIONS

INFOBLOX THREAT DEFENSE



Protective DNS

Block phishing, ransomware, malware C2
Block suspicious domains



Threat Insight

Real-time streaming analytics to detect/block data exfiltration, DGAs, and Zero Day DNS
Examines all DNS records (e.g., A, AAAA, CNAME, MX, NS, SOA, TXT, etc.)



Lookalike Domain Monitoring

Monitor and alert on lookalike domains used for phishing, spear phishing, and brand damage



SOC Insights

Leverage AI to turn vast event, network, ecosystem, and unique DNS intelligence data into a manageable set of actionable insights



Dossier

Context on threat indicators (e.g., hostnames, URLs, IPs)
Easy view of impacted devices



Infoblox Ecosystem

Automate security event response via API-based integrations
Share contextual data (IPAM/DHCP) for prioritization
Ingest custom/third-party threat intel feeds for broader distribution

ABOUT INFOBLOX

Uniting networking and security to deliver unmatched performance and protection.



TOP 25

Cybersecurity Companies in 2020 (#6)

63

Patents Granted.
25 Pending



13000+
Customers



154
Countries



1140+
partners

**92 Fortune
100 List**

(up from 82
in 2016)



540 employees
supporting
Engineering &
Product development



93.3 Customer
Satisfaction



DDI market
share is **48.7%**
per IDC's 2021

47.7
NPS Score

