Enabling SOAR and Automated Incident Response Using Comprehensive Ecosystem Integrations

Victor Danevich, CTO, System Engineering

Cybercrime Growing in Complexity and Scale

- $2.7 billion monetary losses in 2018 per FBI[1]

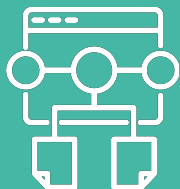- Breach victims often hire expensive forensic firms, law firms

- Notable public breaches have resulted in millions of records stolen

- Breach victim's future business jeopardized

1. FBI Internet Crime Report 2018

But Security Teams Cannot Respond to Incidents Fast Enough

- 196 days on average between infection and detection

- Not all organizations have necessary tools/automation to correlate data from multiple systems

Customer A

Had a lot of data to analyze and decided to outsource SOC operations because they couldn't analyze it themselves

Customer B

Didn't know all the places in the network where they were using threat intel and failed to operationalize on it

|

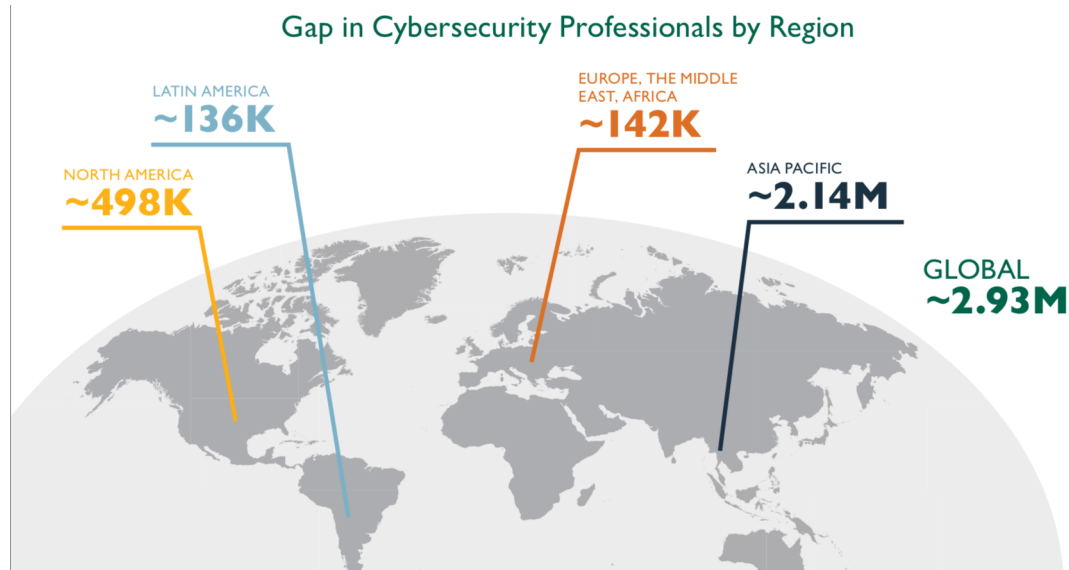# And Throwing More People at the Problem is Not Possible

92% of companies get more than 500 alerts per day; a single cyber analyst can handle only 10
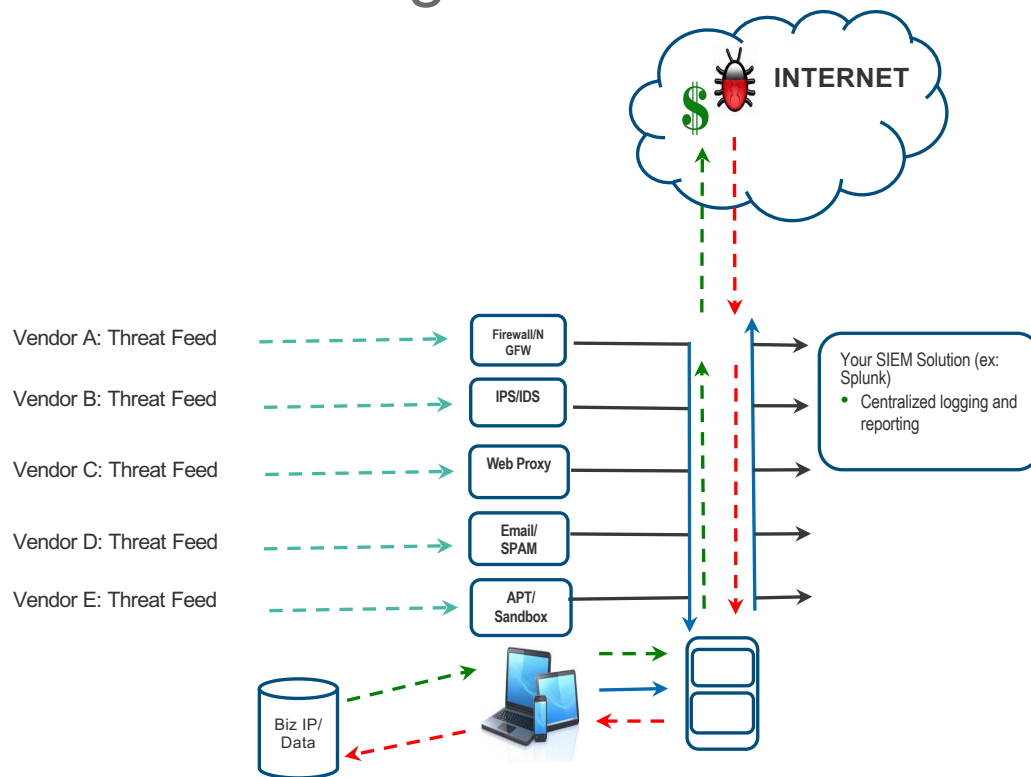
4% of alerts, only, are investigated; not enough humans to keep organizations safe

30+ security tools in operation, with staff and expertise to manage 12

Gap in Cybersecurity Professionals by Region

LATIN AMERICA
~136K

EUROPE, THE MIDDLE EAST, AFRICA
~142K

ASIA PACIFIC
~2.14M

NORTH AMERICA
~498K

GLOBAL
~2.93M

ISC2 Cybersecurity Workforce Study, 2018

Bolted on Security Architecture Leads to Siloed and Ineffective Threat Intelligence
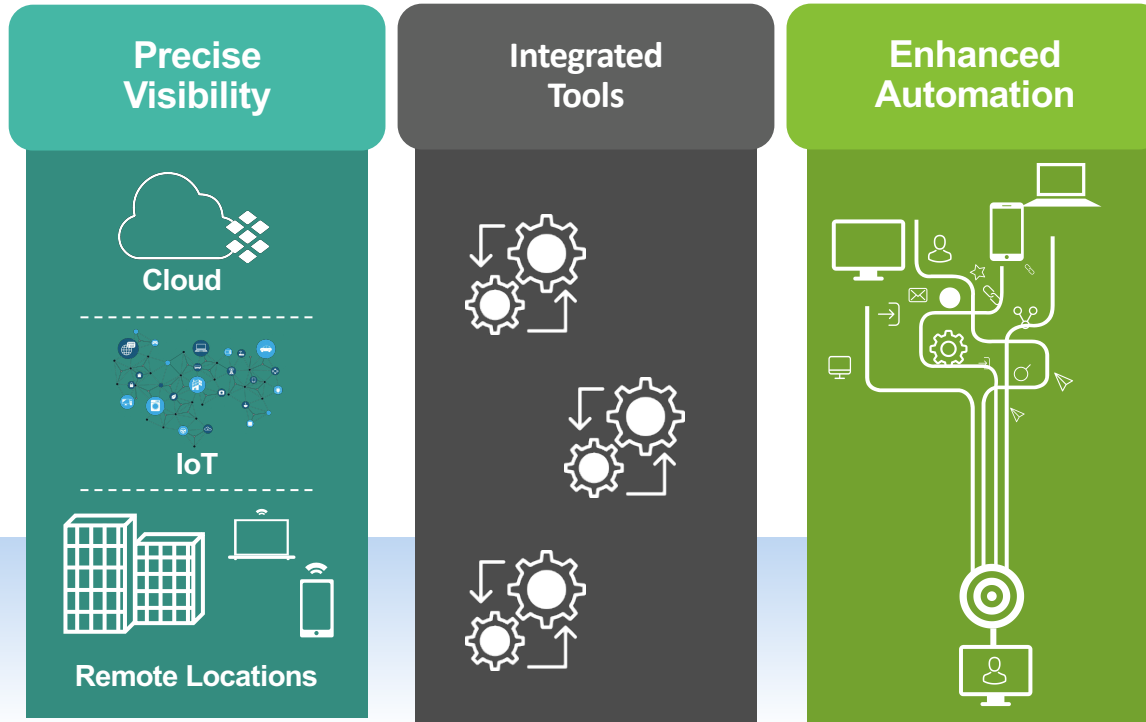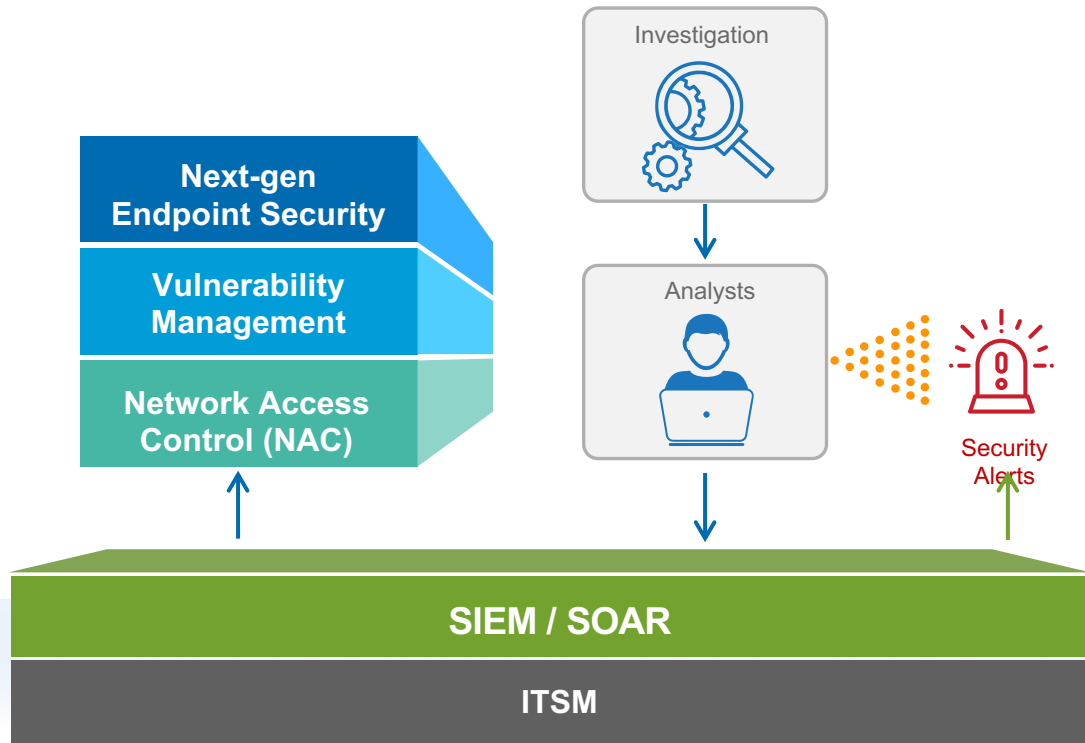
The Bottomline

- Threats growing exponentially

- Impossible to match skills of a well trained, distributed, global malware developer

- Malware operators work round the clock and are relentless

- Encryption makes it difficult to separate malicious from normal traffic

- Simple manual review of logs not enough to recognize patterns over time
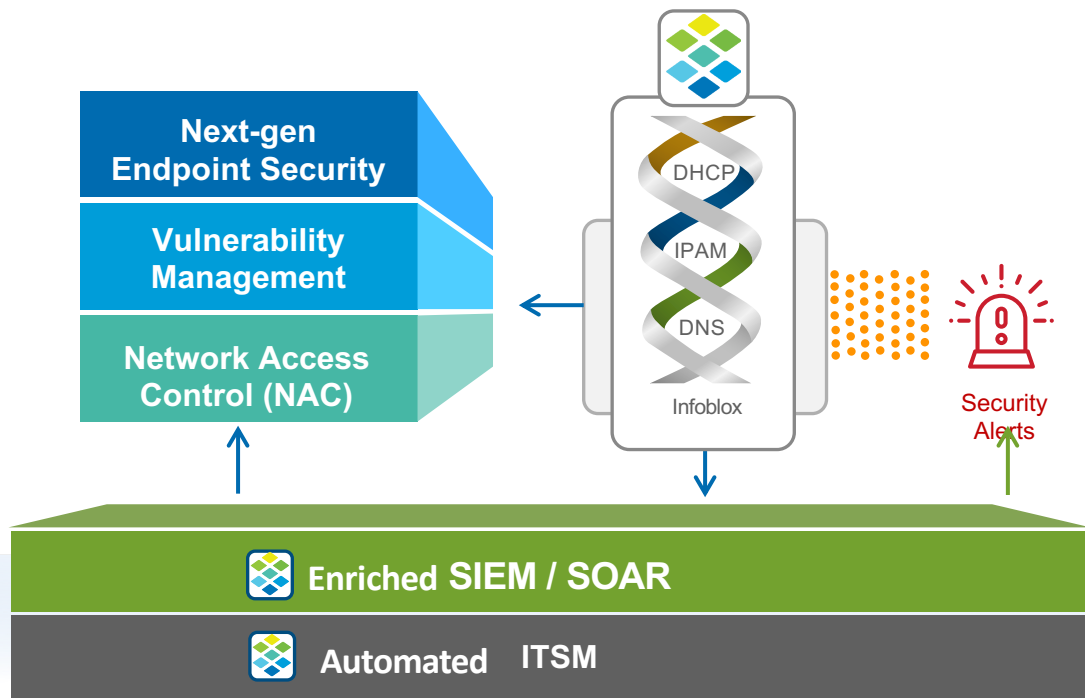
Key Tenets of Efficient Security Operations

Improve Productivity and Enhance Automation

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Next-gen Endpoint Security

Vulnerability Management

Network Access Control (NAC)

DHCP

IPAM

DNS

Infoblox

Security Alerts

Enriched **SIEM / SOAR**

Automated **ITSM**

DNS
- Malicious activity inside the security perimeter
- Includes BYOD and IoT device
- Profile device & user activity

DHCP
Device Audit Trail and Fingerprinting
- Device info, MAC, lease history

IPAM
Application and Business Context
- "Metadata" via Extended Attributes: Owner, app, security level, location, ticket number
- Context for accurate risk assessment and event prioritization

Combined DDI, Threat Intel and Context to Power SOAR Platforms

Enriched data and integrations that can be relied upon to build automation

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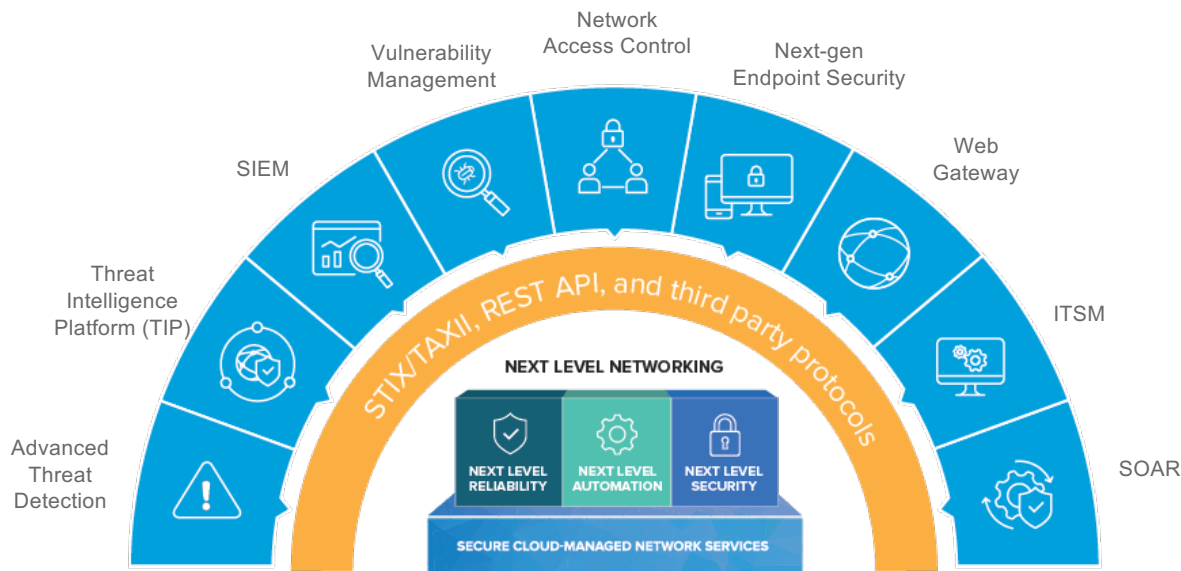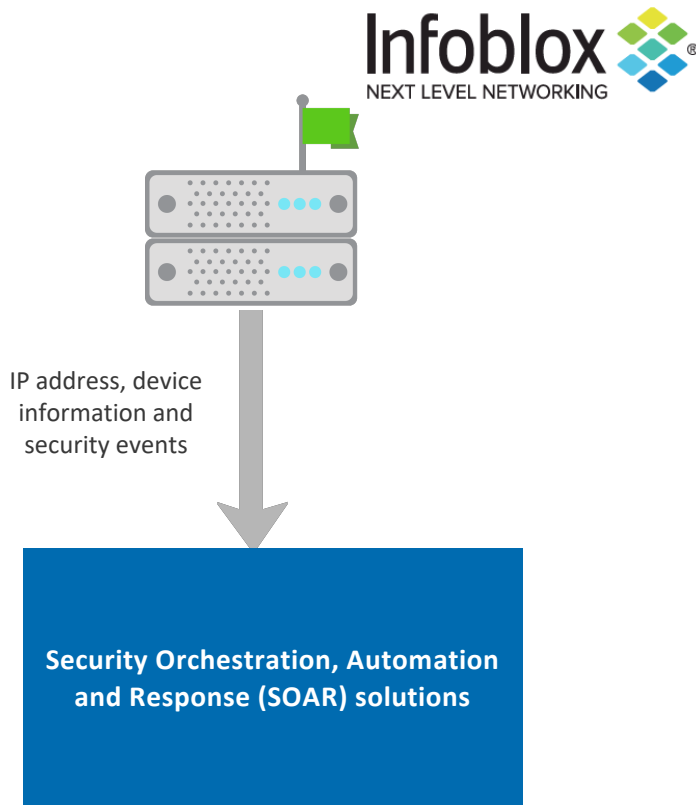- Device info, MAC, lease history

IPAM
Application and Business Context
- "Metadata" via Extended Attributes: Owner, app, security level, location, ticket number
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Prioritize 100s of alerts | Automate incident response | Reduce cost of human touch/error

SOAR Integration

Infoblox
NEXT LEVEL NETWORKING

IP address, device information and security events

Security Orchestration, Automation and Response (SOAR) solutions

- SOAR solution receives information on IP address, network devices and malicious events from Infoblox

- SOAR uses that information to block/unblock/check domain, check information about IP/host/network/domain
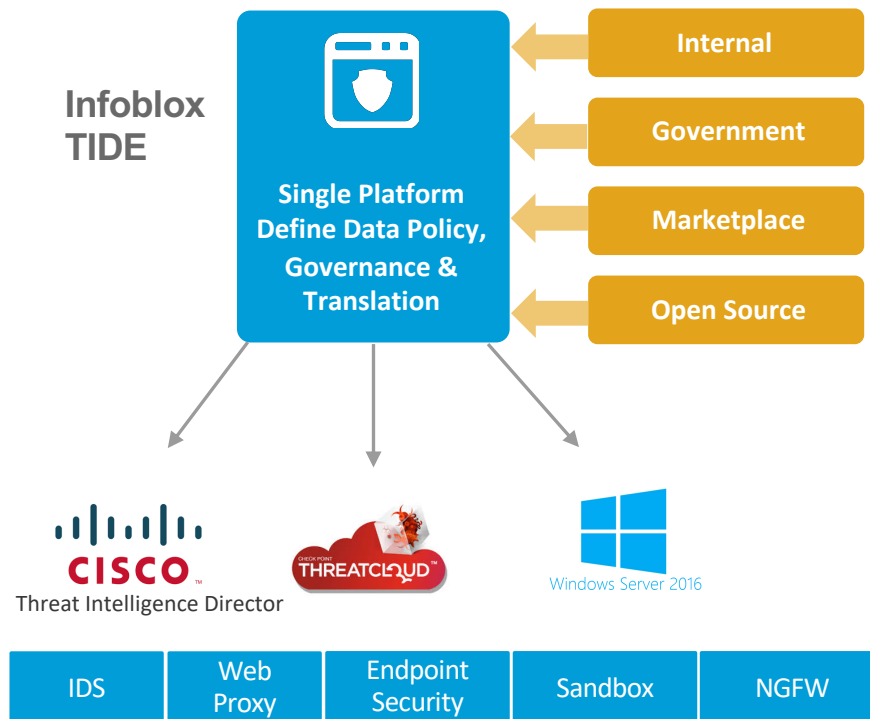
- IPAM information enrichment from events/tools

Benefits:
- Integrate disparate security tools and provide vendor-neutral threat intelligence for all devices
- Faster response with full set of threat intelligence APIs
- Enhance and improve incident response with better threat intelligence
- Improve security processes by integrating with other systems via SOAR

Security Policy Unification

- 3rd party platform receives malicious host names, IP addresses and URLs from TIDE

- 3rd party platform can now block/ monitor more threats

- Improves effectiveness and delivers better ROI for your security stack

Infoblox TIDE

Single Platform Define Data Policy, Governance & Translation

| Internal |
| Government |
| Marketplace |
| Open Source |

CISCO
Threat Intelligence Director

CHECK POINT THREATCLOUD™

Windows Server 2016

| IDS | Web Proxy | Endpoint Security | Sandbox | NGFW |

Customer Story: Major Insurance Company

Customer Use Case:

- Customer says: "I'm not interested in your DNS firewall. I have a Palo Alto Network Firewall, it can do all the things Infoblox can."
- But they did have security operations challenges
  - Inefficient and ineffective vulnerability scanning for compliance; hours of wasted time and resources
  - Sandbox solution does not scale for mitigation; expensive and can't block in remote offices
  - Query logging (for feeding into their SIEM) on Microsoft DNS can't be enabled

Solution: ActiveTrust with cybersecurity ecosystem

Outcomes:

- Infoblox tells vulnerability scanner when a new device is on the network, making it more effective
- Enable sandbox to add domains to RPZ – block across entire DNS infrastructure
- Enables DNS Query data to be sent to their SIEM

Customer Story: EMEA Bank

Customer Use Case:
- Looking to maximize threat intelligence investment
- Existing threat intelligence was tied to appliances they had bought

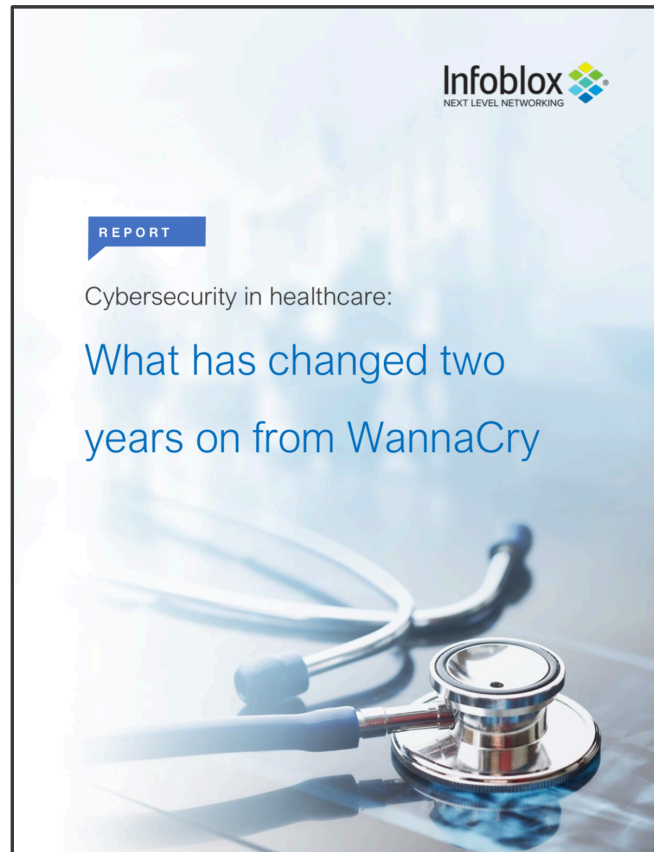**Solution:** Infoblox TIDE, ActiveTrust, Cybersecurity ecosystem

Outcomes:
- Infoblox threat intelligence easily applied to existing Palo Alto Networks, Cisco and ArcSight platforms
- Improved ROI of existing security platforms

2nd Edition: Cybersecurity in Healthcare

- Infoblox released the second edition of the state of **cybersecurity in healthcare** report
- Includes the findings from a survey of **600+ healthcare IT professionals** in the UK, US, Germany and Benelux
- The study examines how organizations have adjusted their security practices in the wake of attacks such as Wanna Cry.
- The biggest challenges identified were **ransomware**, **connected devices/IoT**, and unpatched or **unsupported operating systems**.

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REPORT

Cybersecurity in healthcare:

What has changed two
years on from WannaCry