# Beyond Cyber Security

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IBM Cyber Security Advisor

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IBM

# Dangerous Toys

**USB Device Impersonators**

**USB Killers**

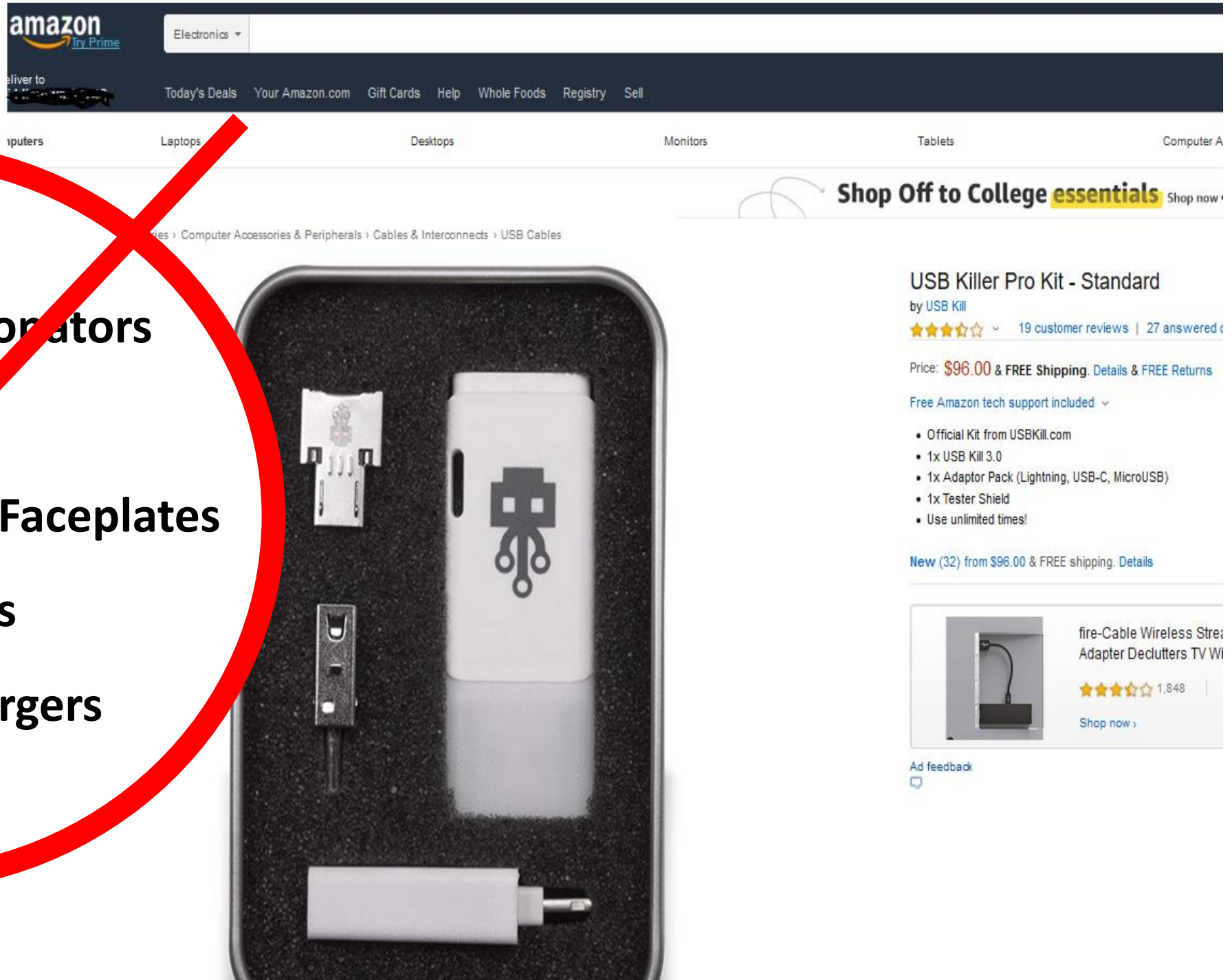
**Man in the Middle Faceplates**

**Wireless Pineapples**

**Payload Phone Chargers**

# Dangerous Toys

- USB Device Impersonators
- USB Killers
- Man in the Middle Faceplates
- Wireless Pineapples
- Payload Phone Chargers



# Dangerous Toys

**USB Device Impersonators**

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**Wireless Pineapples**

**Payload Phone Chargers**

Wifi Pineapple Wireless Network Wifipineapple Wireless Security

**$75.99** from eBay - chunyu1991_1

NOTE: The version of the **wireless** security auditing device wifipineapple sixth generation

Wifi Pineapple Wireless Network Wifipineapple Wireless Security

**$75.09** from eBay

**WiFi Pineapple Wireless** Network wifipineapple **wireless** security auditing hak5 Descrip

Wireless · USB · Wi-Fi

Wifi Pineapple Wireless Network Security Audit Wireless Wifi Security

**$62.69** from eBay - xiaof12

Please do not upgrade the new system firmware. If there is any problem, please brush bac

Wireless · 802.11n · 802.11g · 802.11b · USB · PC · Wi-Fi

Lusya WiFi Pineapple Wireless Network Security Audit Wireless WIFI

**$83.44** from AliExpress.com

in from on AliExpress.com | Alibaba Group

With Wi-Fi · Wireless

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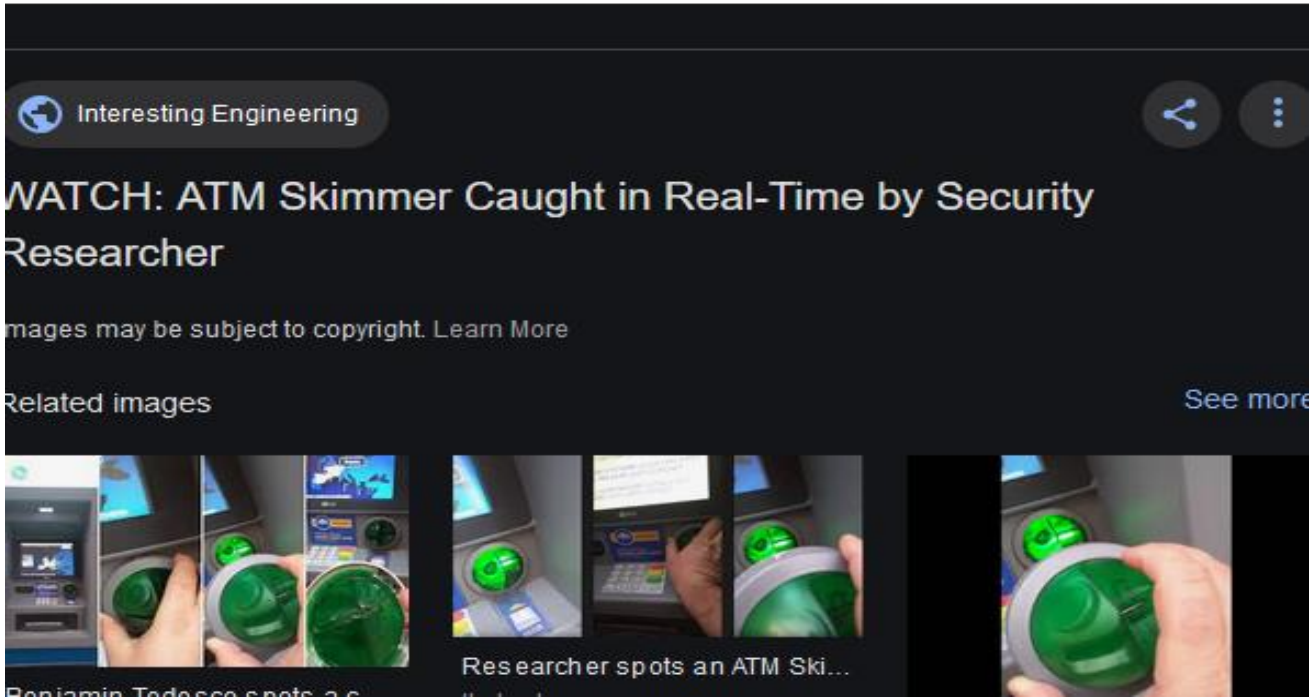


# https://censys.io

FTP and Telnet Sites North Carolina US

66.207.227.71 (pode.intrstar.net)
STARWIRELESS-15153 - StarVision, Inc. (15153) Dunn, North Carolina, United States
21/ftp, 23/telnet
location.province: `North Carolina`

152.13.178.2 (CAM225DSJ1300.uncg.edu)
UNC-GREENSBORO - University of North Carolina at Greensboro (53785) Greensboro, North Carolina, United States
21/ftp, 23/telnet, 443/https, 80/http
HP Designjet 36B634A0
tags: `ftp`

198.85.198.4
NCREN - MCNC (81) Albemarle, North Carolina, United States
21/ftp, 23/telnet
21.ftp.banner.banner: `220 Welcome to the Valere FTP server.`

152.20.39.207
NCREN - MCNC (81) Wilmington, North Carolina, United States
21/ftp, 23/telnet
21.ftp.banner.banner: `220 FTP print`

98.26.91.139 (cpe-98-26-91-139.nc.res.rr.com)
TWC-11426-CAROLINAS - Charter Communications Inc (11426) Durham, North Carolina, United States
21/ftp, 23/telnet

location.country_code: US and tags: scada

64.19.73.45 (45-73-19-64-wtn-ny.a-315.westelcom.com)
WFC-ASN - Westelcom Internet, Inc. (11722) Watertown, New York, United States
Schneider Electric BMX P34 2020 v2.0 502/modbus
tags: `scada` `gateway`
SCADA SCADA GATEWAY

66.44.215.170 (170.subnet-66-44-215.ellijay.com)
ELJY30540 - Ellijay Telephone Company (25853) Blue Ridge, Georgia, United States
Schneider Electric BMX NOE 0100 V2.80 502/modbus
tags: `scada` `gateway`
SCADA SCADA GATEWAY

162.155.7.242 (rrcs-162-155-7-242.central.biz.rr.com)
TWC-10796-MIDWEST - Charter Communications Inc (10796) Strongsville, Ohio, United States
Schneider Electric BMX P34 2020 v2.5 502/modbus
tags: `scada` `gateway`
SCADA SCADA GATEWAY

166.250.100.120 (120.sub-166-250-100.myvzw.com)
CELLCO - Cellco Partnership DBA Verizon Wireless (22394) United States
Schneider Electric BMX P34 2020 v2.6 502/modbus
tags: `scada` `gateway`
SCADA SCADA GATEWAY

# https://shodan.io

**Jo-ann Stores, LLC**
Added on 2019-08-01 12:53:58 GMT
United States, Stow

**166.215.52.198**
mobile-166-215-52-198.mycingular.net
**AT&T Wireless**
Added on 2019-08-01 12:43:45 GMT
United States

```
Basic Hardware: 6ES7 212-1BE31-0XB0  v.0.2
Module: 6ES7 212-1BE31-0XB0  v.0.2
Basic Firmware: 6ES7 212-1BE31-0XB0  v.3.0.2
```

ics

**209.201.40.202**
209-201-40-202.dia.static.centurylink.net
**CenturyLink**
Added on 2019-08-01 12:44:05 GMT
United States, Logan

```
HTTP/1.1 400 Bad Request\r\nContent-Type: text/html; charset=us-ascii\r\nServer: Microsoft-HTTPAPI/2.0\r\nDate: Tl
\n<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN""http://www.w3.org/TR/html4/strict.dtd">\r\n<HTML><HEAD...
```

**67.141.196.22**
h22.196.141.67.static.ip.windstream.net
**Windstream Communications**
Added on 2019-08-01 12:50:53 GMT
United States, Cornelius

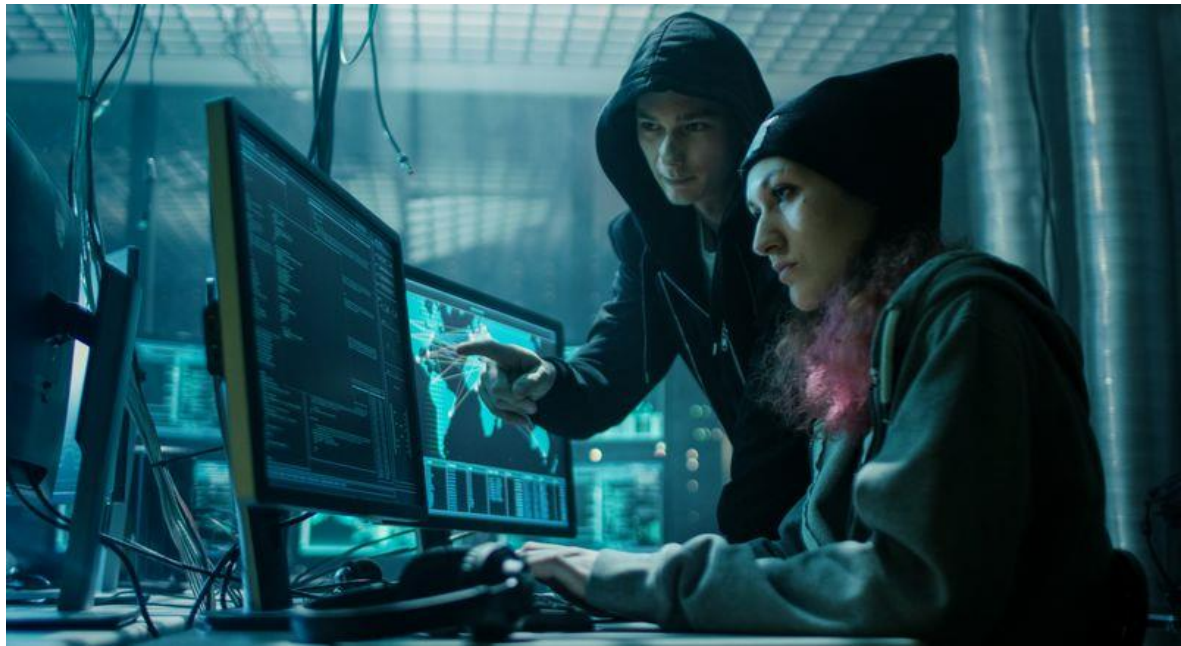
```
Basic Hardware: 6ES7 215-1HG31-0XB0  v.0.1
Module: 6ES7 215-1HG31-0XB0  v.0.1
Basic Firmware: 6ES7 215-1HG31-0XB0  v.3.0.2
```

ics

**165.227.224.226**
**Digital Ocean**
Added on 2019-08-01 12:45:03 GMT
United States, New York

honeypot cloud

```
Location designation of a module:
Copyright: Operation
Module type: IM151-8 PN/DP CPU
PLC name: Technodrome
Module: v.0.0
Plant identification: Mouser Factory
OEM ID of a module:
Module name: Operation
Serial number of module: 88111222
```



# https://shodan.io Internet of Medical Things

https://www.shodan.io/search?query=dicom

TOTAL RESULTS

**2,539**

TOP COUNTRIES

| | |
|---|---|
| United States | 720 |
| India | 305 |
| Brazil | 203 |
| Iran, Islamic Republic of | 145 |
| China | 140 |

TOP SERVICES

| | |
|---|---|
| 104 | 1,447 |
| 11112 | 586 |
| 4242 | 441 |
| 33338 | 6 |
| 8081 | 5 |

TOP ORGANIZATIONS

| | |
|---|---|
| Amazon.com | 124 |
| Comcast Business | 60 |
| Microsoft Azure | 57 |
| Turk Telekom | 24 |
| Netlife | 16 |

TOP OPERATING SYSTEMS

| | |
|---|---|
| Windows 7 or 8 | 6 |
| Windows XP | 2 |
| Windows Server 2008 | 1 |
| Windows 7 Ultimate 7601 Service Pack 1 | 1 |
| Windows 6.1 | 1 |

TOP PRODUCTS

New Service: Keep track of what you have connected to the Internet. Check out Shodan Monitor

**5.200.91.191**
Bahar Samaneh Shargh
Added on 2020-01-14 18:49:32 GMT
Iran, Islamic Republic of

medical

```
DICOM Server Response
\x02\x00\x00\x00\x00\xba\x00\x01\x00\x00ANY-SCP         FINDSCU         \x00\x00\x00\x00\x00\x00\x
0\x00\x00\x10\x00\x00\x151.2.840.10008.3.1.1.1!\x00\x00\x1b\x01\x00\x00\x00@\x00\x00...
```

**3.6.87.143**
ec2-3-6-87-143.ap-south-1.compute.amazonaws.com
Amazon.com
Added on 2020-01-14 17:53:12 GMT
United States, Seattle

medical

```
DICOM Server Response
\x02\x00\x00\x00\x00\xb8\x00\x01\x00\x00ANY-SCP         FI
0\x00\x00\x10\x00\x00\x151.2.840.10008.3.1.1.1!\x00\x00\x1
```

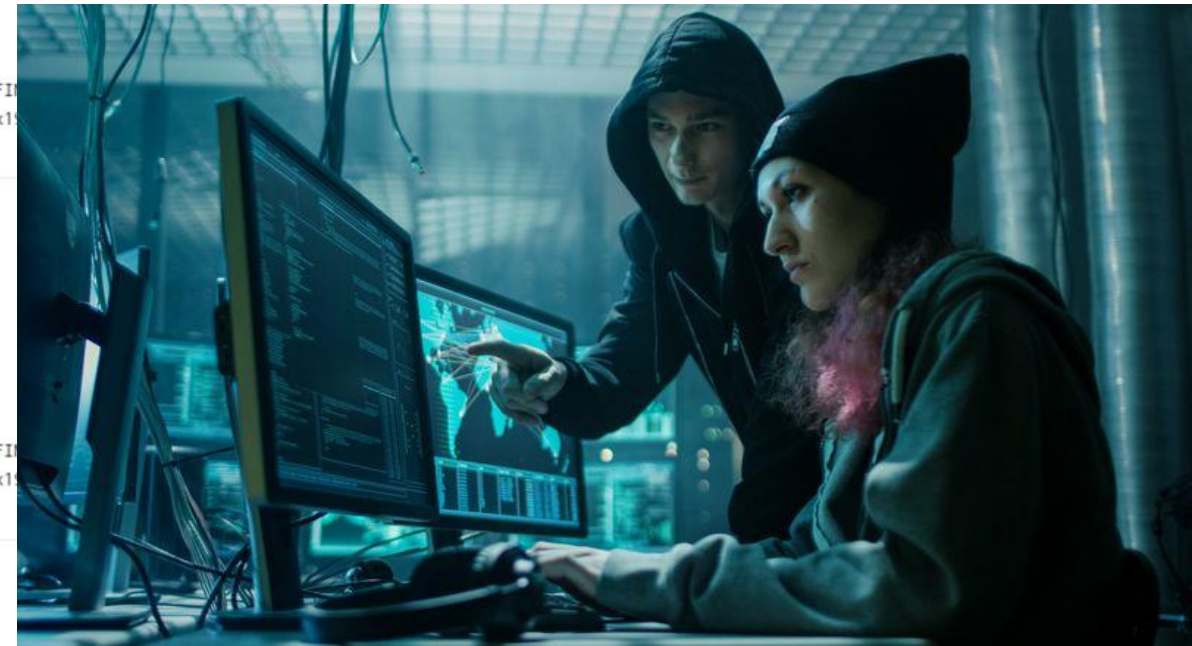
**64.83.176.24**
h64-83-176-24.meadco.broadband.dynamic.tds.net
TDS Telecom
Added on 2020-01-14 18:36:03 GMT
United States, Mead

medical

```
DICOM Server Response
\x02\x00\x00\x00\x00\xb3\x00\x01\x00\x00ANY-SCP         FI
0\x00\x00\x10\x00\x00\x151.2.840.10008.3.1.1.1!\x00\x00\x1
```

**186.10.233.222**
z420.entelchile.net
Entel Chile S.A.

## Digital Imaging and Communications in Medicine - DICOM



# https://shodan.io Internet of Medical Things

## 52.144.121.135 View Raw Data

medical self-signed

| | |
|---|---|
| Country | United States |
| Organization | Medical Imaging Associates of Idaho Falls, P.A. |
| ISP | Medical Imaging Associates of Idaho Falls, P.A. |
| Last Update | 2020-01-14T11:05:21.173191 |
| ASN | AS395861 |

## Vulnerabilities

Note: the device may not be impacted by all of these issues. The vulnerabilities are implied based on the software and version.

| | |
|---|---|
| CVE-2010-1899 | Stack consumption vulnerability in the ASP implementation in Microsoft Internet Information Services (IIS) 5.1, 6.0, 7.0, and 7.5 allows remote attackers to cause a denial of service (daemon outage) via a crafted request, related to asp.dll, aka "IIS Repeated Parameter Request Denial of Service Vulnerability." |
| CVE-2010-2730 | Buffer overflow in Microsoft Internet Information Services (IIS) 7.5, when FastCGI is enabled, allows remote attackers to execute arbitrary code via crafted headers in a request, aka "Request Header Buffer Overflow Vulnerability." |
| CVE-2010-3972 | Heap-based buffer overflow in the TELNET_STREAM_CONTEXT::OnSendData function in ftpsvc.dll in Microsoft FTP Service 7.0 and 7.5 for Internet Information Services (IIS) 7.0, and IIS 7.5, allows remote attackers to execute arbitrary code or cause a denial of service (daemon crash) via a crafted FTP command, aka "IIS FTP Service Heap Buffer Overrun Vulnerability." NOTE: some of these details are obtained from third party information. |
| CVE-2012-2531 | Microsoft Internet Information Services (IIS) 7.5 uses weak permissions for the Operational log, which allows local users to discover credentials by reading this file, aka "Password Disclosure Vulnerability." |
| CVE-2012-2532 | Microsoft FTP Service 7.0 and 7.5 for Internet Information Services (IIS) processes unspecified commands before TLS is enabled for a session, which allows remote attackers to obtain sensitive information by reading the replies to these commands, aka "FTP Command Injection Vulnerability." |
| CVE-2010-1256 | Unspecified vulnerability in Microsoft IIS 6.0, 7.0, and 7.5, when Extended Protection for Authentication is enabled, allows remote authenticated users to execute arbitrary code via unknown vectors related to "token checking" that trigger memory corruption, aka "IIS Authentication Memory Corruption Vulnerability." |

## Ports

80 104 443

## Services

80
tcp
http

### Microsoft IIS httpd Version: 7.5

```
HTTP/1.1 500 Internal Server Error
Cache-Control: private
Content-Length: 3035
Content-Type: text/html; charset=utf-8
Server: Microsoft-IIS/7.5
X-AspNet-Version: 2.0.50727
X-Powered-By: ASP.NET
Date: Sat, 11 Jan 2020 04:43:51 GMT
```

104
tcp
dicom

```
DICOM Server Response
\x02\x00\x00\x00\x00\xb8\x00\x01\x00\x00ANY-SCP         FIND
00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x
1!\x00\x00\x1b\x01\x00\x00\x00@\x00\x00\x131.2.840.10008.1.2
46.670589.42.1.4.4.5U\x00\x00\x10PhilipsISPACS445
```

443
tcp
https

### Microsoft IIS httpd Version: 7.5

```
HTTP/1.1 500 Internal Server Error
Cache-Control: private
Content-Length: 3035
Content-Type: text/html; charset=utf-8
```

# https://shodan.io  Internet of Medical Things

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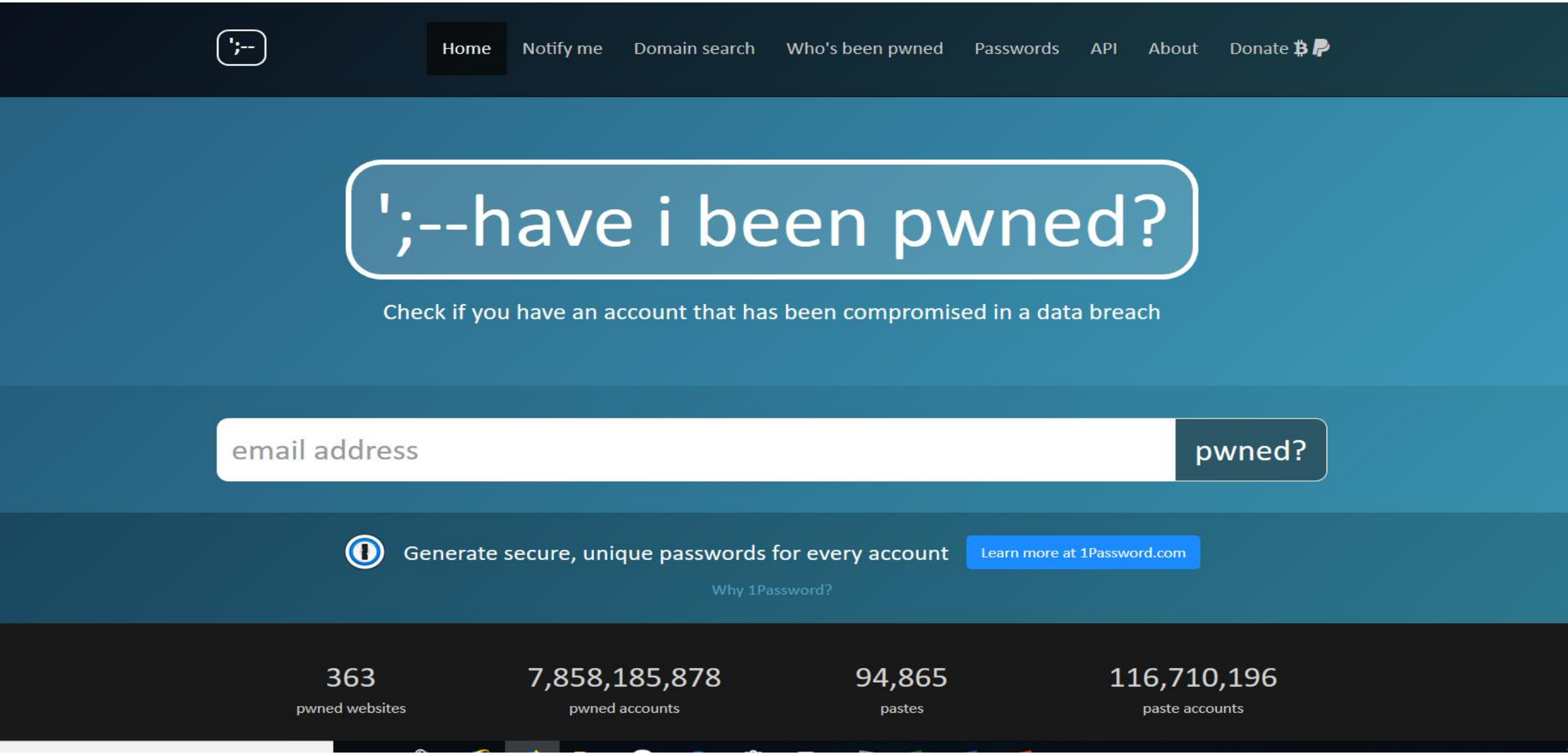
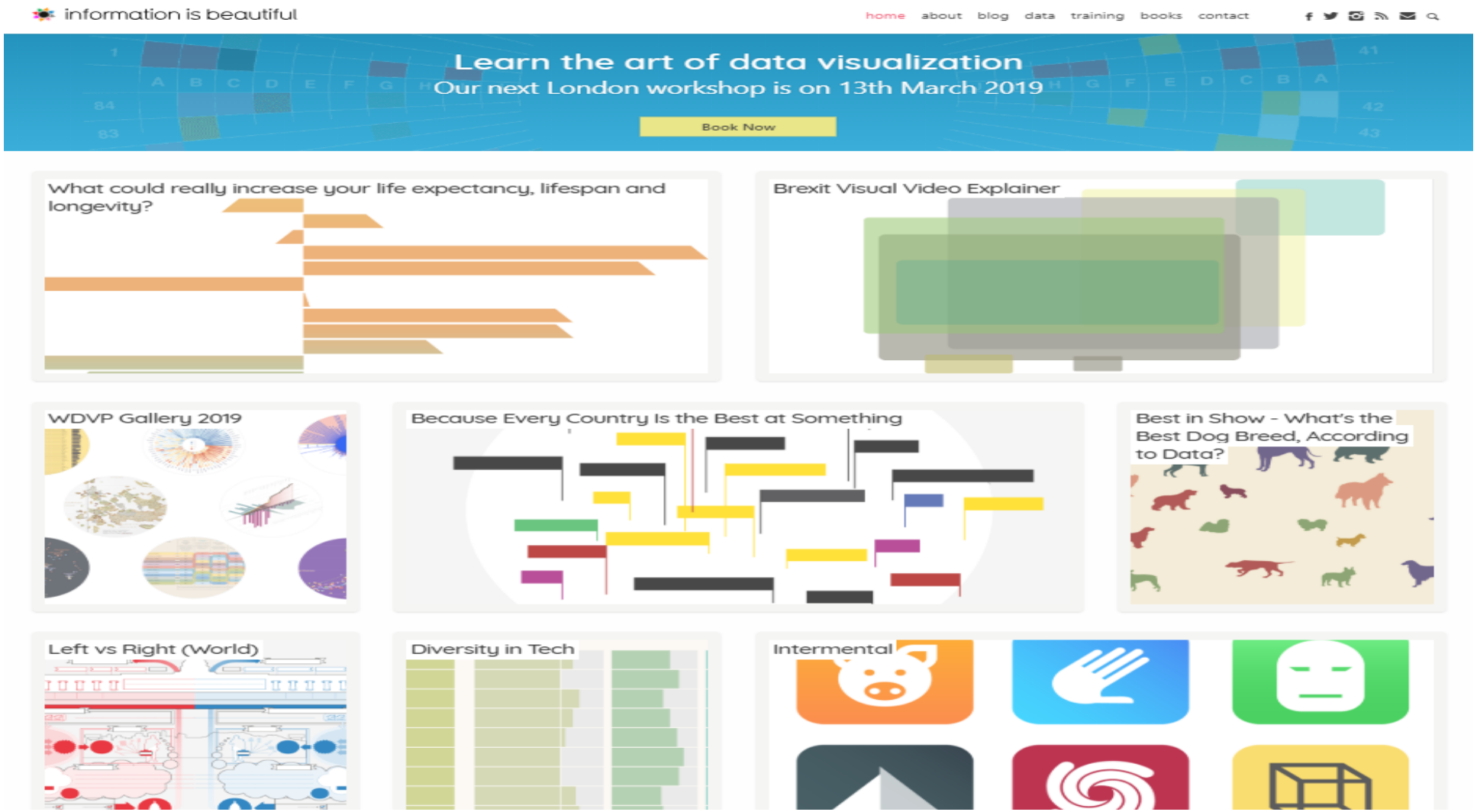
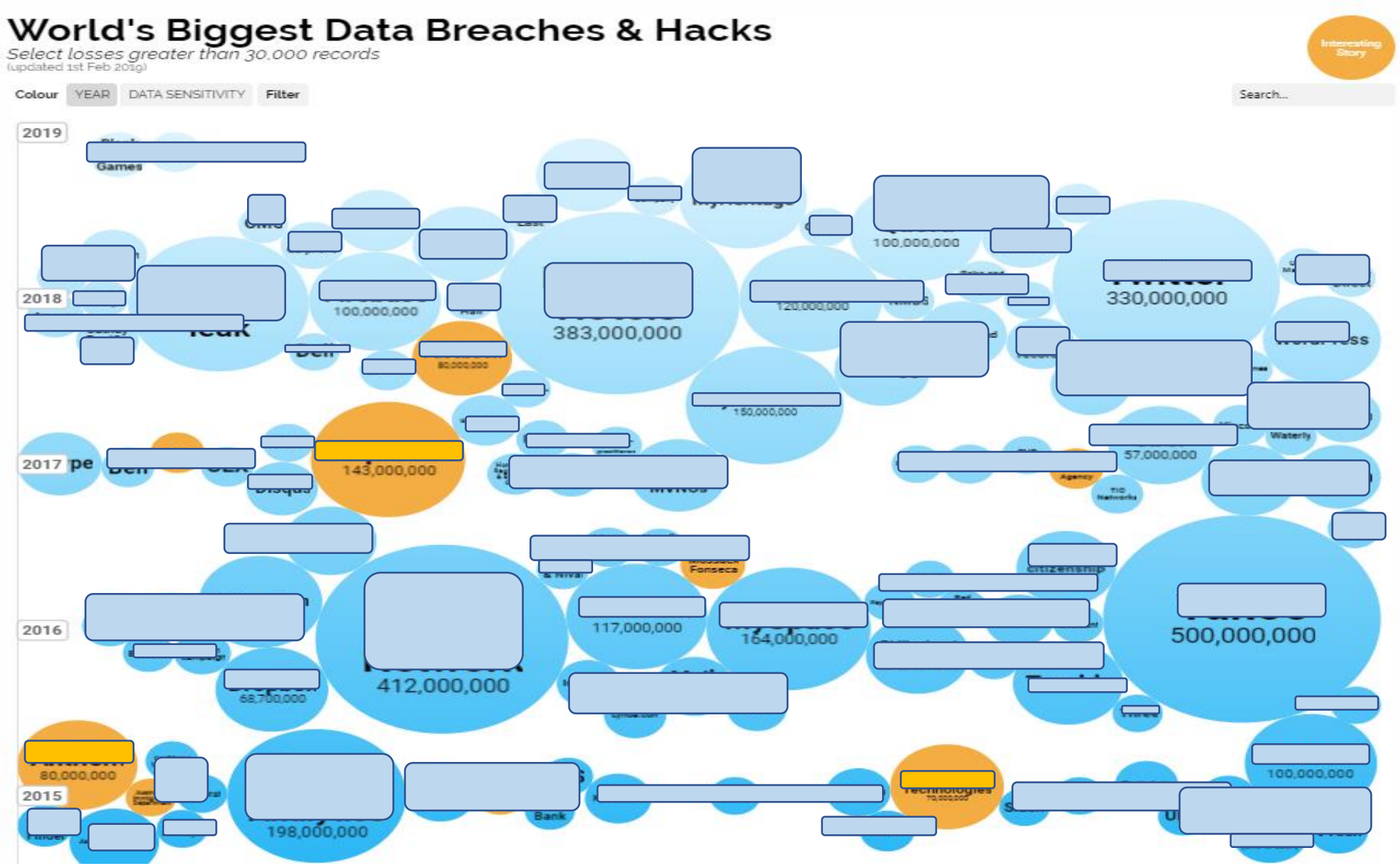
# https://haveibeenpwned.com



# http://informationisbeautiful.net



# http://informationisbeautiful.net



# The Song Remains The Same

| | |
|---|---|
| • Defense in depth failures | Since 1984 and still not effective |
| • Average separate security solutions | 40+  (30% feel right number) |
| • Time to discover Breaches | 200 Days |
| • Time to respond to Incidents | 56 Days |
| • Cost of a breach | $3.9 Million |

# Organized Threat Actors

State Sponsored Actors

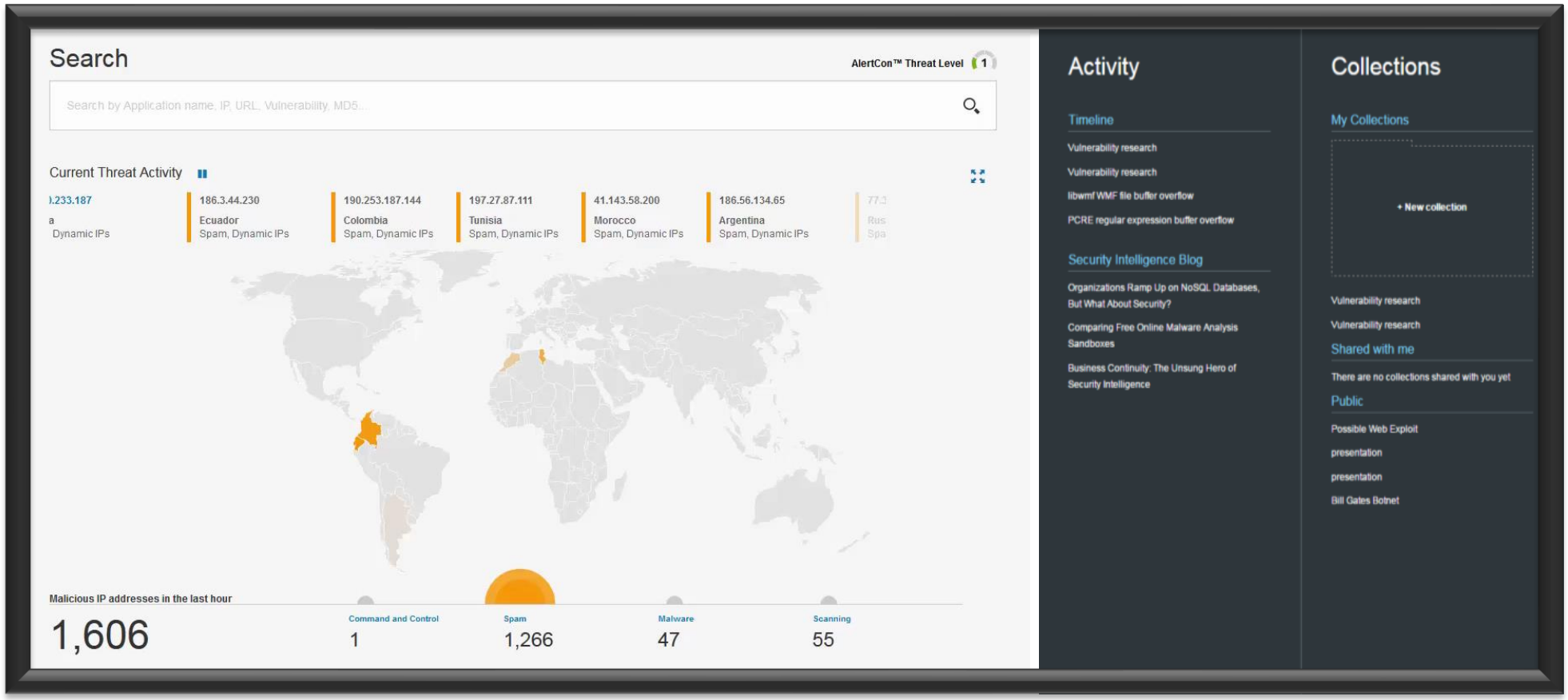
Sophisticated Talent

Anonymous Digital Currencies

Highly Funded R&D

Collaborative Development

Circumventive Tooling




**Crowd-sourced information sharing**

# Threats Du Jour

Start your 30-day trial

View API documentation

## Groups
Focal point for collaboration and sharing

**Security-Analyst**
354 Members | 7 Collections

**Feedback - IBM X-Force Exchange**
289 Members | 4 Collections

Manage Groups

## Threat Activity
Malicious IP addresses in the last hour

| | |
|---|---|
| Total | 369 |
| Command and Control | 3 |
| Spam | 188 |
| Malware | 0 |
| Scanning | 190 |

View threat activity map

## Security Intelligence Blog
Analysis and insight on information security, by IBM

**10 Do's and Don'ts for Writing a Winning Cybersecurity Resume**
Oct 4, 2019 - By Jasmine Henry

**When Digital Identity and Access Management Meets Physical Security**
Oct 3, 2019 - By George Platsis

**Ramnit Targets Japanese Shoppers, Aiming at Top Fashion Brands**
Oct 3, 2019 - By Itzik Chimino

Visit Security Intelligence Blog

Start your 30-day trial

Visit Early Warning dashboard

## Public Collections
Publicly shared community findings

Recommended

**Botnet Command and Control Servers**
Oct 3, 2019 - x-force

**Malware hashes**
Sep 26, 2019 - test, malware

**STIX 2.1 Update**
Sep 25, 2019 - stix, taxii

**The Massive Propagation of the Smominru Botnet**
Sep 23, 2019 - advisory, botnet, malware, xftas

Most Recent

**XFTAS Daily Threat Assessment for October 03, 2019**
Oct 4, 2019 - xftas

**Botnet Command and Control Servers**
Oct 3, 2019 - x-force

**XFTAS Daily Threat Assessment for October 02, 2019**
Oct 3, 2019 - xftas

**Phishing**
Oct 3, 2019

View more

## Featured from App Exchange
Verified extensions for a stronger enterprise defense

QRadar Advisor With Watson

IBM QRadar

Enrich security incidents with insights from Watson to rapidly respond to threats.

View more

Premium IRIS Threat Reports

**Travel Agencies and Services Industry Profile**
Last Updated : Jul 15, 2019

**Oil & Gas Industry Profile**
Last Updated : Jul 15, 2019

**NewCT Analysis Report**
Last Updated : Jul 15, 2019

**CobaltStrike Loader and Payload Analysis Report**
Last Updated : Jul 15, 2019

**Hive0045 Analysis Report**
Last Updated : Jul 14, 2019

Unlock all IRIS reports

## My Collections
Use Collections to store and share your findings

You did not create any Collections yet.

Recently shared with me

**Spam campaign delivers Malware**
Aug 1, 2018

**BadRabbit Malware**
Oct 26, 2017 - backdoor, ransomware, exploit-kit, threat-re...

View more

## Botnet Distribution
azorult

| | |
|---|---|
| Affected Countries | 115 |
| Peak | Sep 18, 2019 |
| Trend | ↘ |

View more

Oct 4, 2019

View more

## Vulnerabilities
The latest global security risks

**HHVM number_format code execution**
Consequences: Gain Access

**WhatsApp App for Android DDGifSlurp function code execution**
Consequences: Gain Access

**Micro Focus Enterprise Developer and Enterprise Server cross-site scripting**
Consequences: Cross-Site Scripting

**Node.js realms-shim module code execution**
Consequences: Gain Access

**Node.js realms-shim module code execution**
Consequences: Gain Access

**Ubercart module for Drupal cross-site scripting**
Consequences: Cross-Site Scripting

**Simple AMP module for Drupal security bypass**
Consequences: Bypass Security

View more

## IBM X-Force Commercial API
Programmatic access to the IBM X-Force Exchange

Query our threat intelligence through a RESTful API that supports multiple formats (including JSON and STIX/TAXII) for a simple integration with your security tools.

Start your 30-day trial

View API Documentation


# Training Exercises

# Who are High Performers?

Represent 26% of the 3655 in the study

Highest level of cyber resilience

More prepared to respond

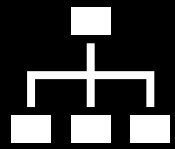
Less impacted by cyber threats.

Report less attacks, better containment and recovery

Confidence

Dedication

Communication Skills



Industry Awareness

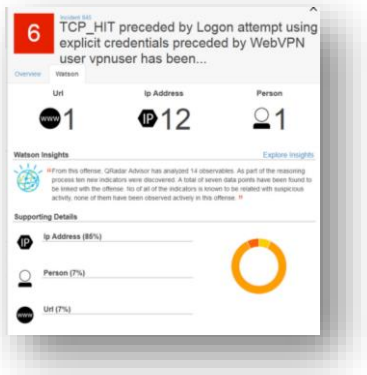
Streamlined SOC

# Workflow

## Advanced Analytics

**DETECT**

## Cognitive




**ENRICH**

## Threat Hunting

**INVESTIGATE**

**ORCHESTRATE**

# User Behavior

## Dashboard

Search For User

Next Refresh: 00:09

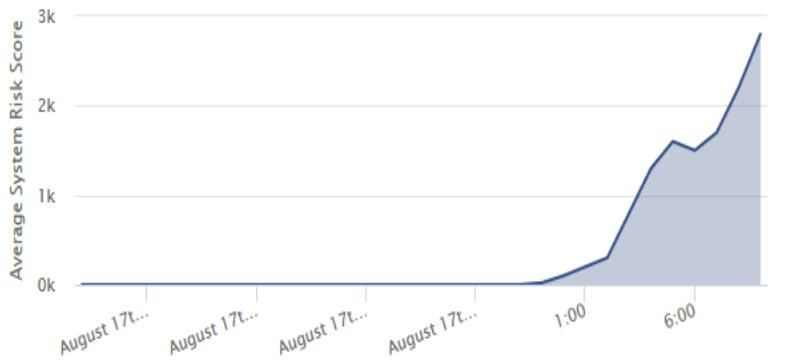
Reset Layout

| Monitored Users | Current High Risk Users | Sense Events (Last Hour) | Offenses Generated (Last Hour) |
|---|---|---|---|
| 401 | 3 | 42 | 0 |

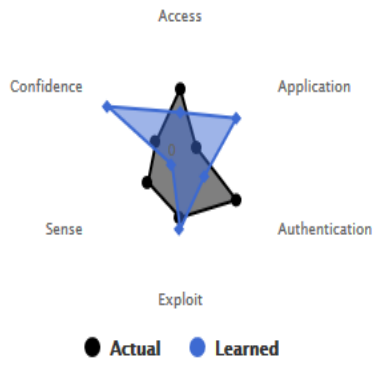
**Active Insights**

- Event Rules
- Flow Rules
- Anomaly Detection Rules
- Machine Learning Algorithms

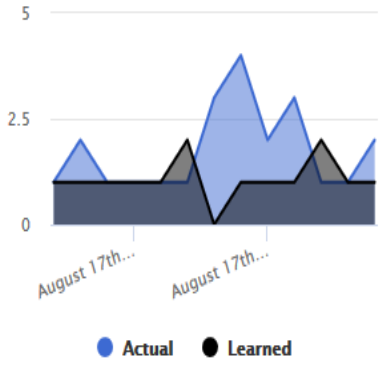
### System Score (Last Day)




### User Activity by Category




### 'System' Activity




### Recent Offenses

Offense #90 — about 2 hours ago
User: Mary Arnold
Event Count: 43 | Flow Count: 0 | Magnitude: 3/10

Offense #91 — about 2 hours ago
User: Nathan Farrell
Event Count: 38 | Flow Count: 8 | Magnitude: 5/10

Offense #92 — about 2 hours ago
User: Craig Murphy
Event Count: 38 | Flow Count: 8 | Magnitude: 5/10

Offense #97 — about 2 hours ago
User: tom_wilson
Event Count: 43 | Flow Count: 0 | Magnitude: 3/10

### Risky Users (Overall Score)

View All

| | |
|---|---|
| Mary Arnold | 2891 |
| Nathan Farrell | 2291 |
| Craig Murphy | 1826 |
| tom_wilson | 1436 |
| adam.benett | 0 |
| admin | 0 |

### Most Suspicious Users (Window Score)

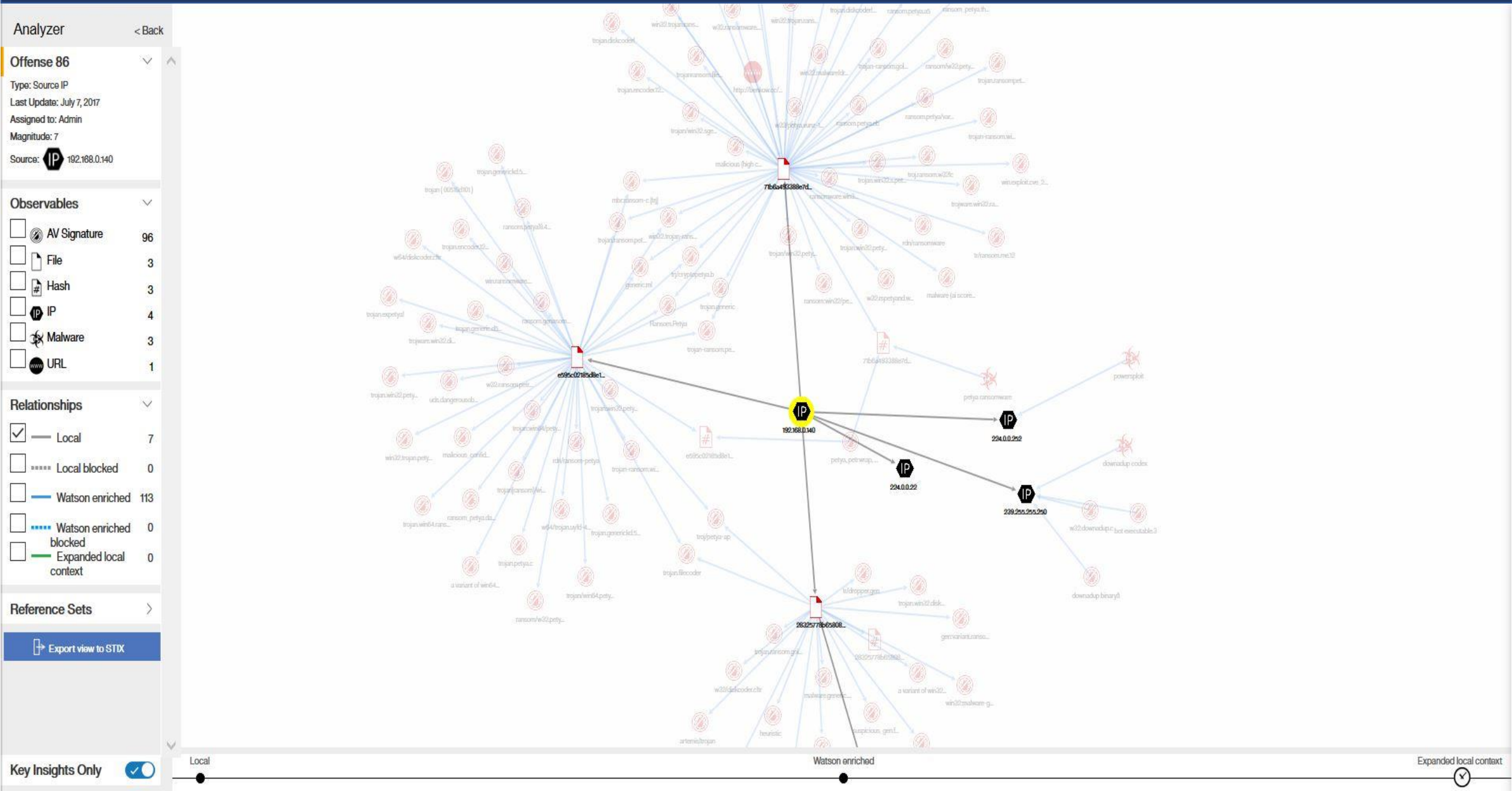
View All

| | |
|---|---|
| Mary Arnold | +2891 |
| Nathan Farrell | +2291 |
| Craig Murphy | +1826 |
| tom_wilson | +1436 |
| adam.benett | +0 |
| admin | +0 |

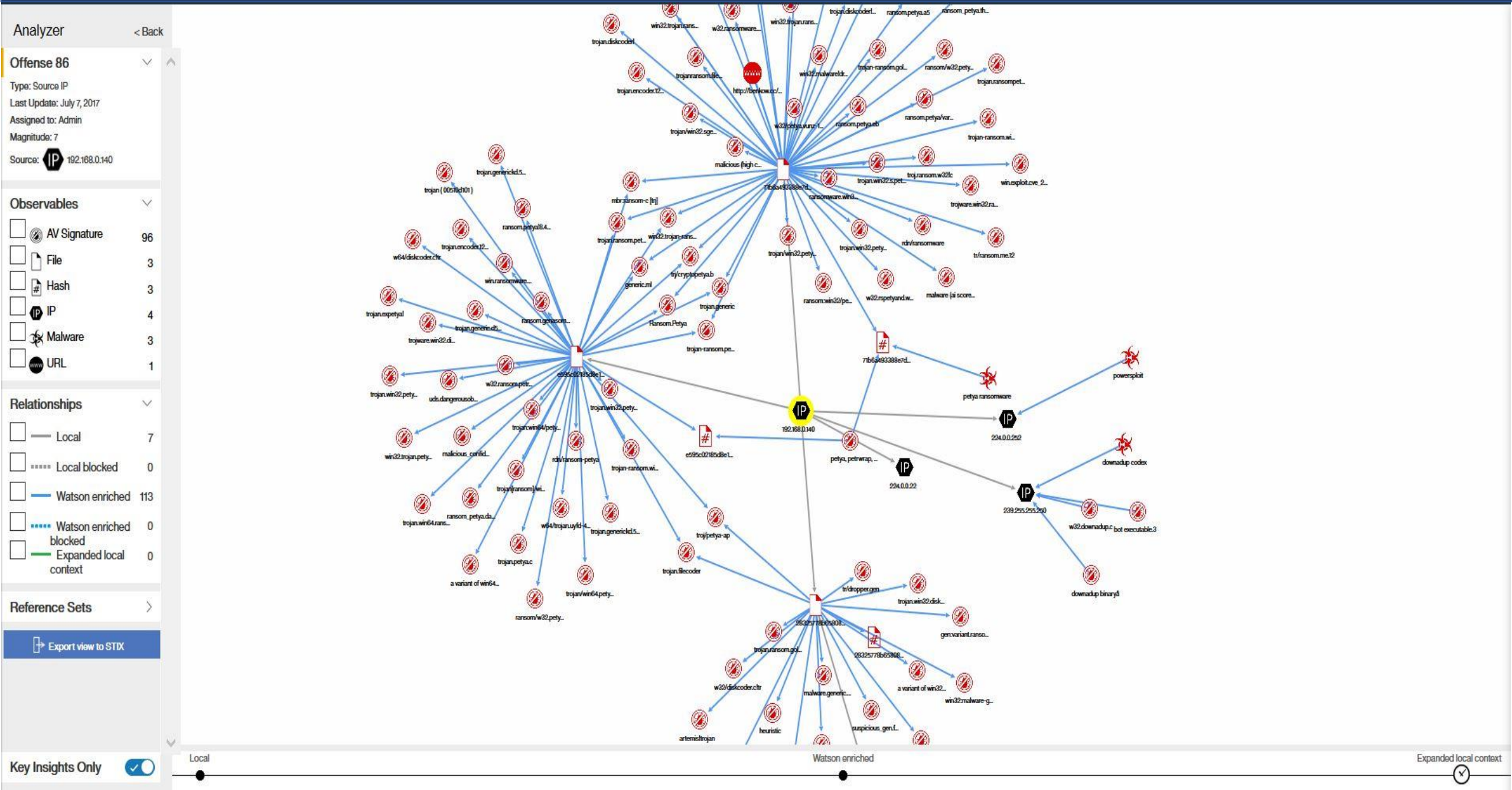
### Watchlist

| | |
|---|---|
| Mary Arnold | 2891 |
| Nathan Farrell | 2291 |
| Craig Murphy | 1826 |

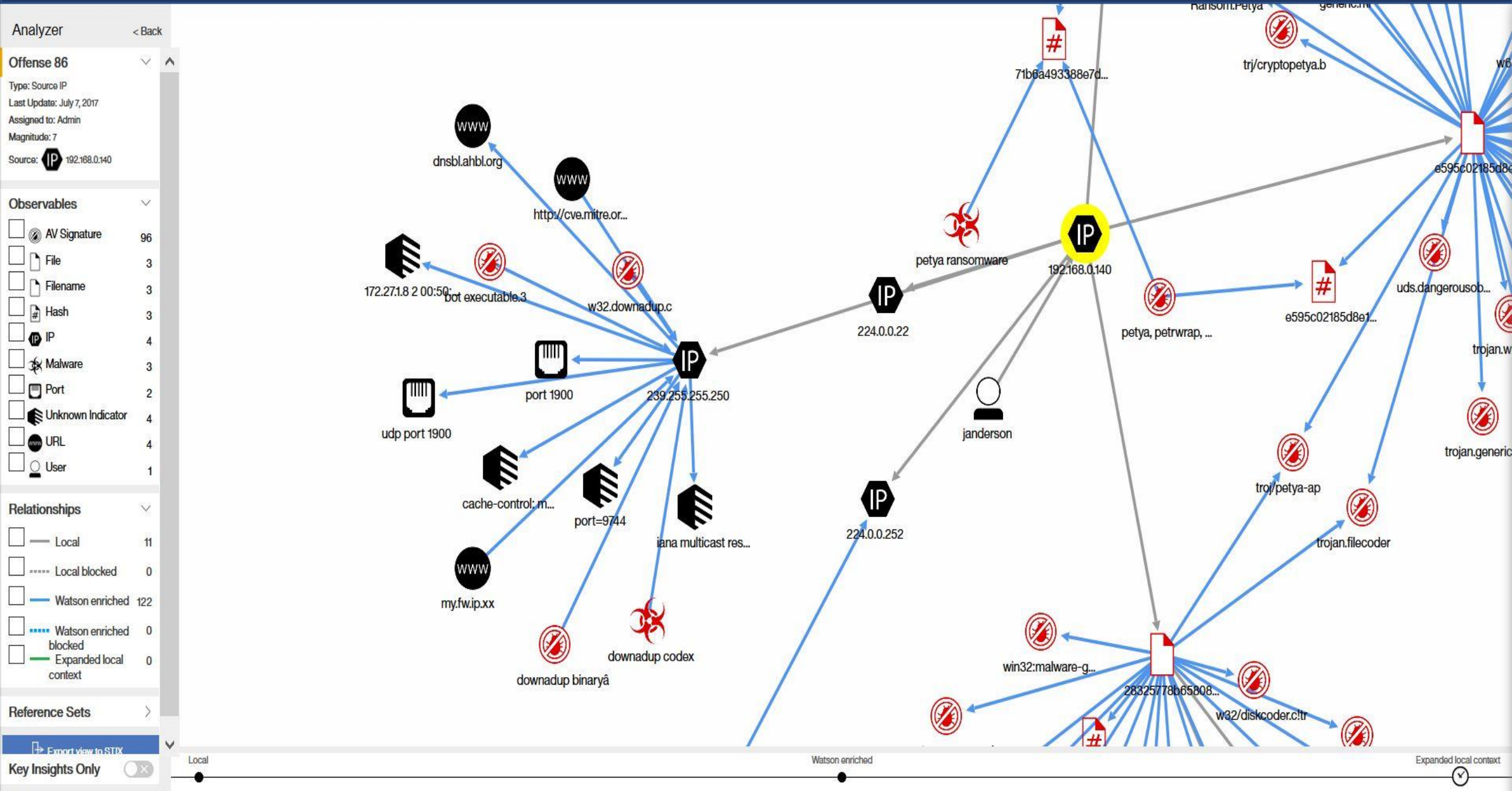
# Local Analysis



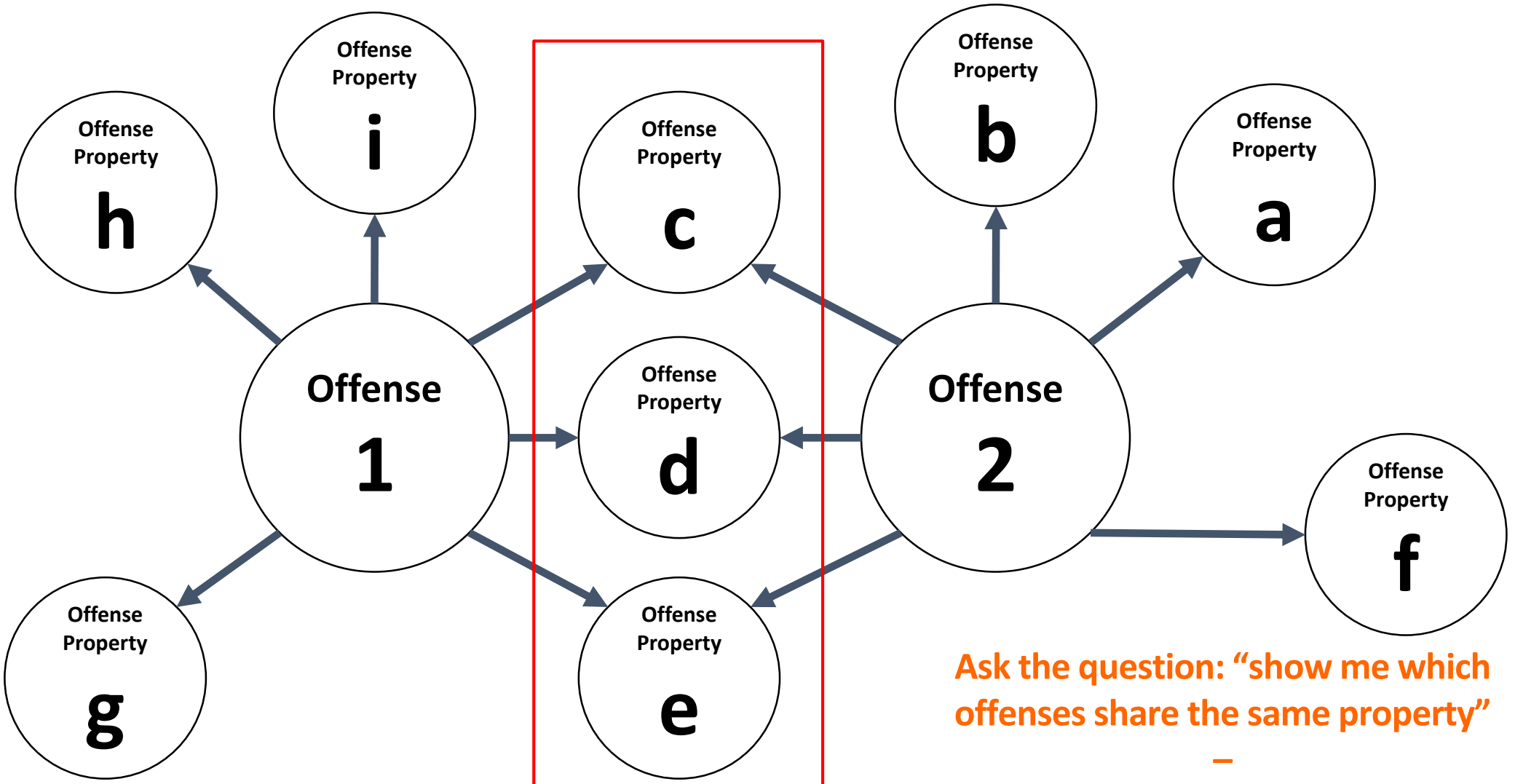
# AI Enriched Analysis



# AI Deep Insight



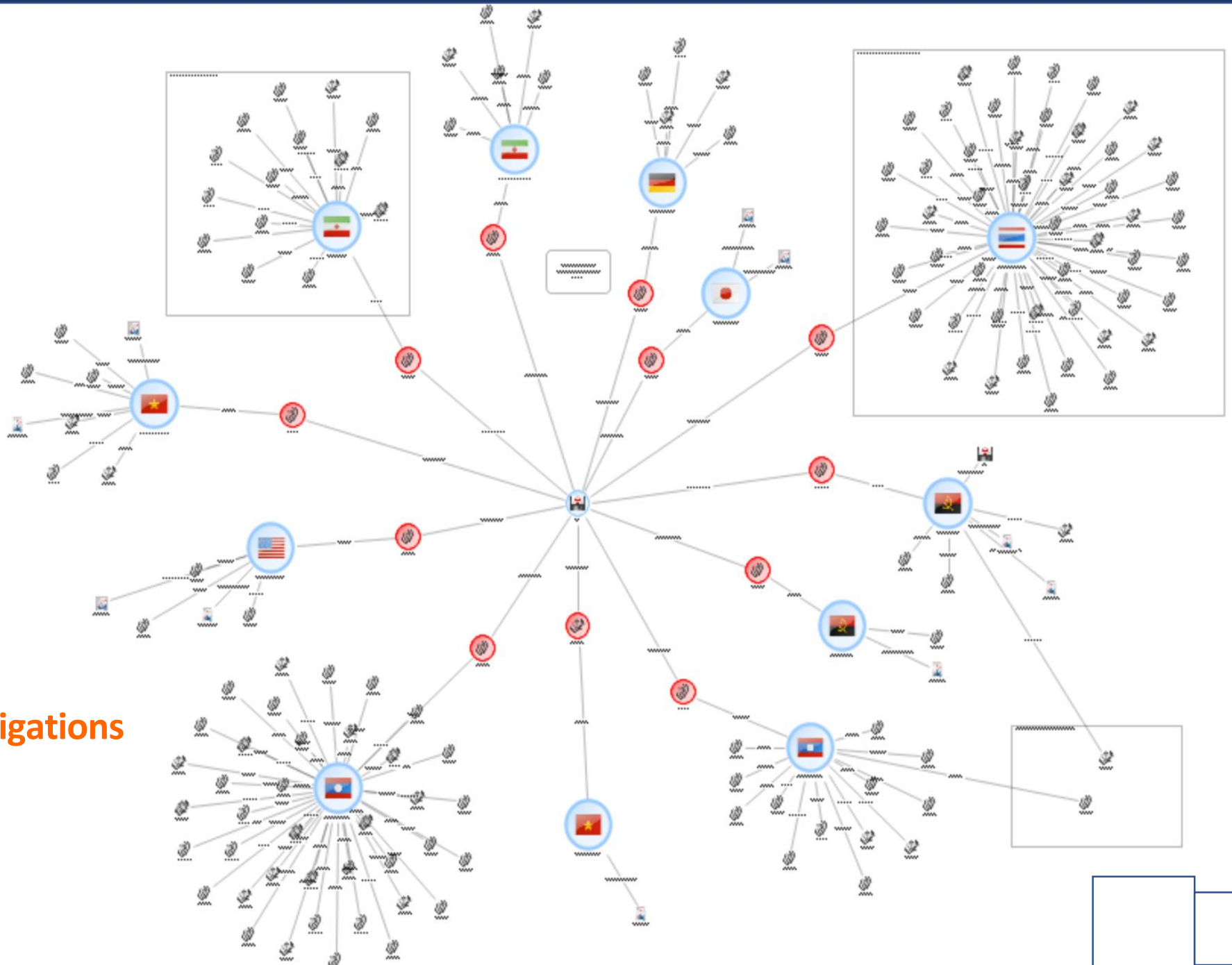
# What is an Unknown Unknown Search




**Ask the question: "show me which offenses share the same property"**

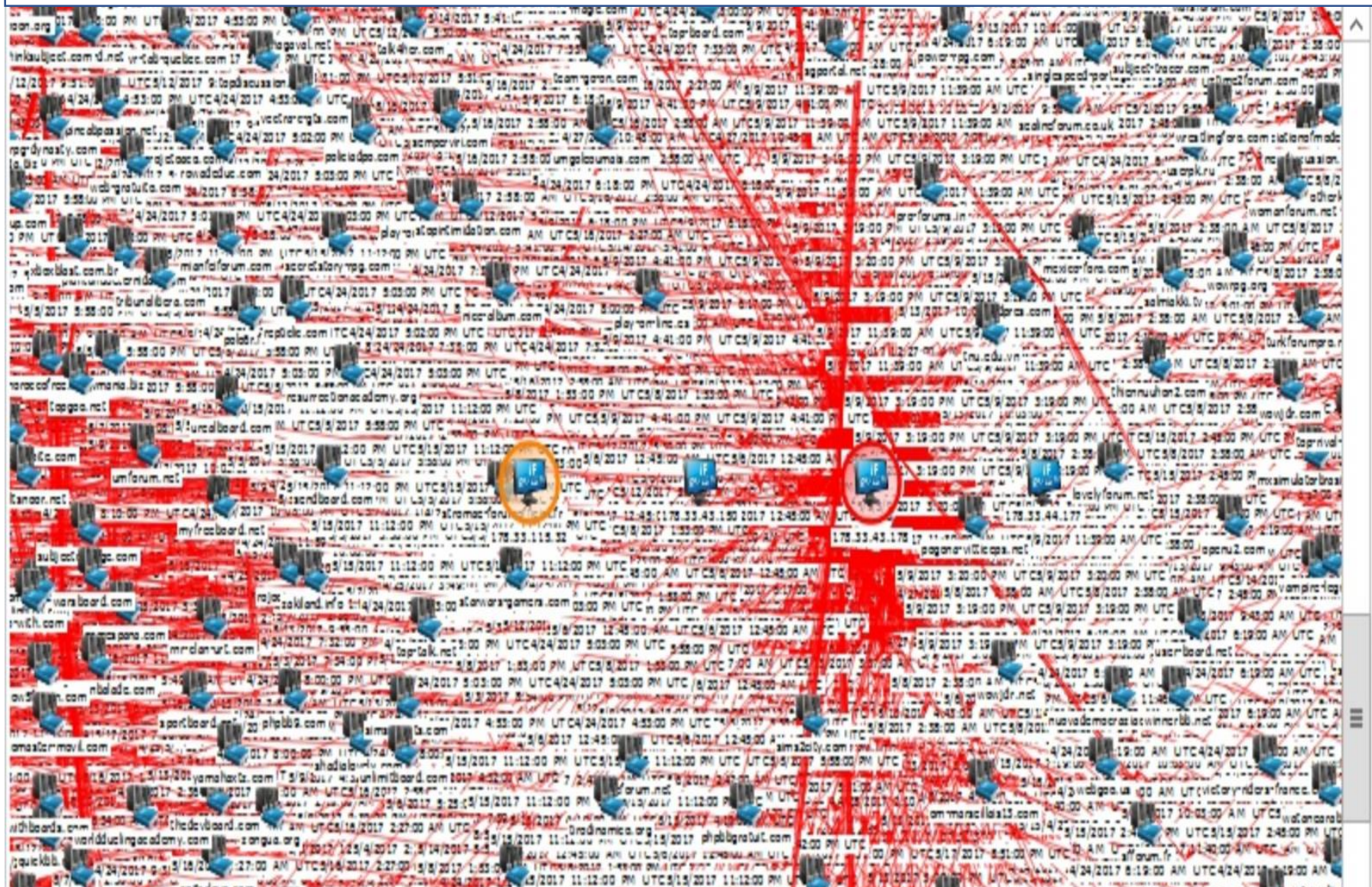
**–**

***you don't know the subset of offenses, not the subset of properties to search***



## Investigations

# Threat Hunting



Counts | Values

The number of links or number of connected items are cou

Most links

Most inbound

Connections with the most links

Restrict

**Entities with the most links**

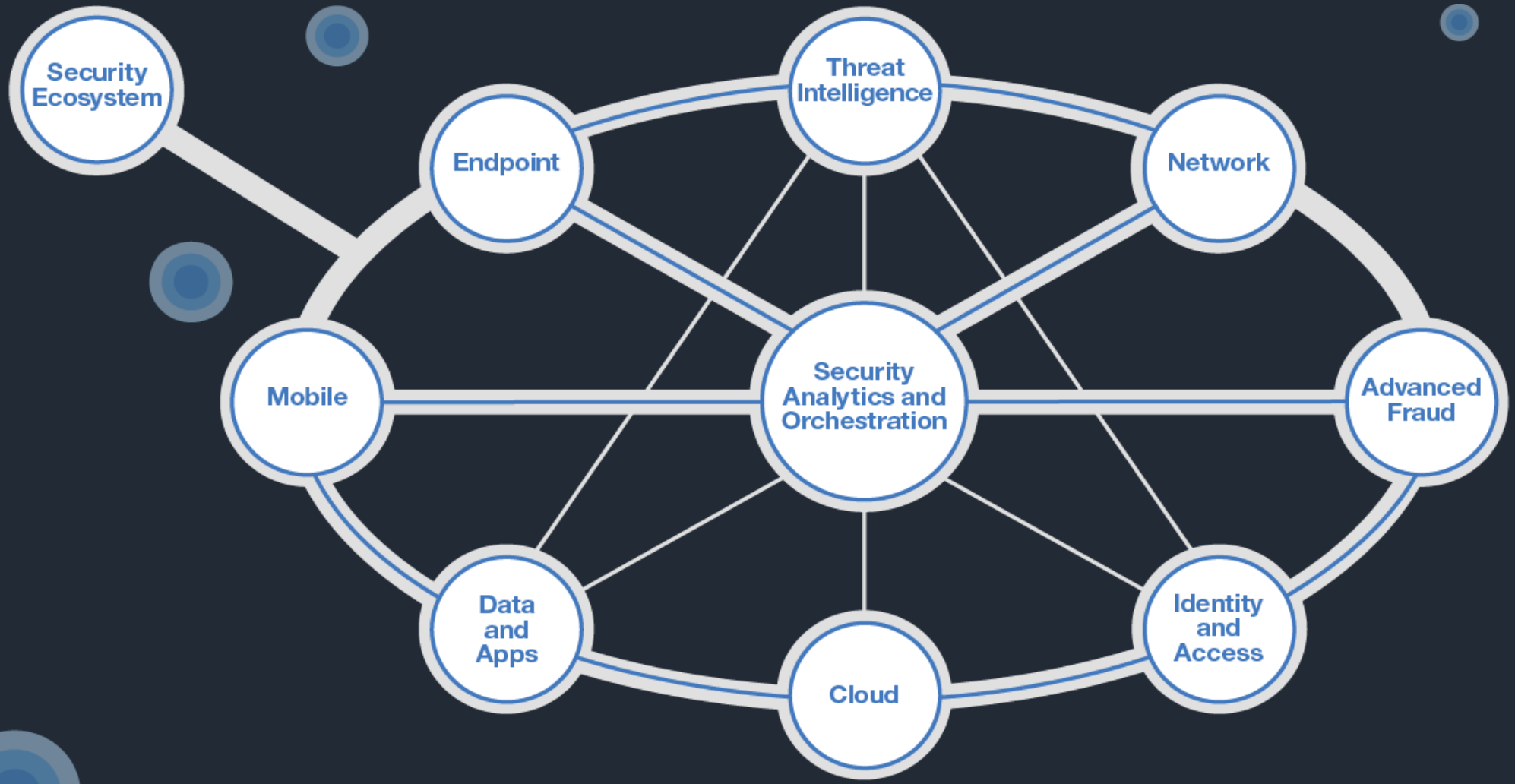
50%

| | |
|---|---|
| 178.33.43.178 | 14571 |
| 178.33.115.32 | 4927 |
| 178.33.44.177 | 4914 |
| 178.33.43.150 | 4863 |

Manual Incident Response Plans


**I**ncident
**R**esponse
**P**latforms

# Integrated and Intelligent Controls



# Beyond Cyber Security

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