

THE RETURN OF DRAGONS

SHODAN

[HTTPS://WWW.SHODAN.IO](https://www.shodan.io)

SEARCH ENGINE OF INTERNET-CONNECTED DEVICES

GOOGLE FINDS WEBSITES

SHODAN FINDS DEVICES

The search engine for **Webcams**

Shodan is the world's first search engine for Internet-connected devices.

Create a Free Account

Getting Started



Explore the Internet of Things

Use Shodan to discover which of your devices are connected to the Internet, where they are located and who is using them.



See the Big Picture

Websites are just one part of the Internet. There are power plants, Smart TVs, refrigerators and much more that can be found with Shodan!



Monitor Network Security

Keep track of all the computers on your network that are directly accessible from the Internet. Shodan lets you understand your digital footprint.



Get a Competitive Advantage

Who is using your product? Where are they located? Use Shodan to perform empirical market intelligence.

CNNMoney

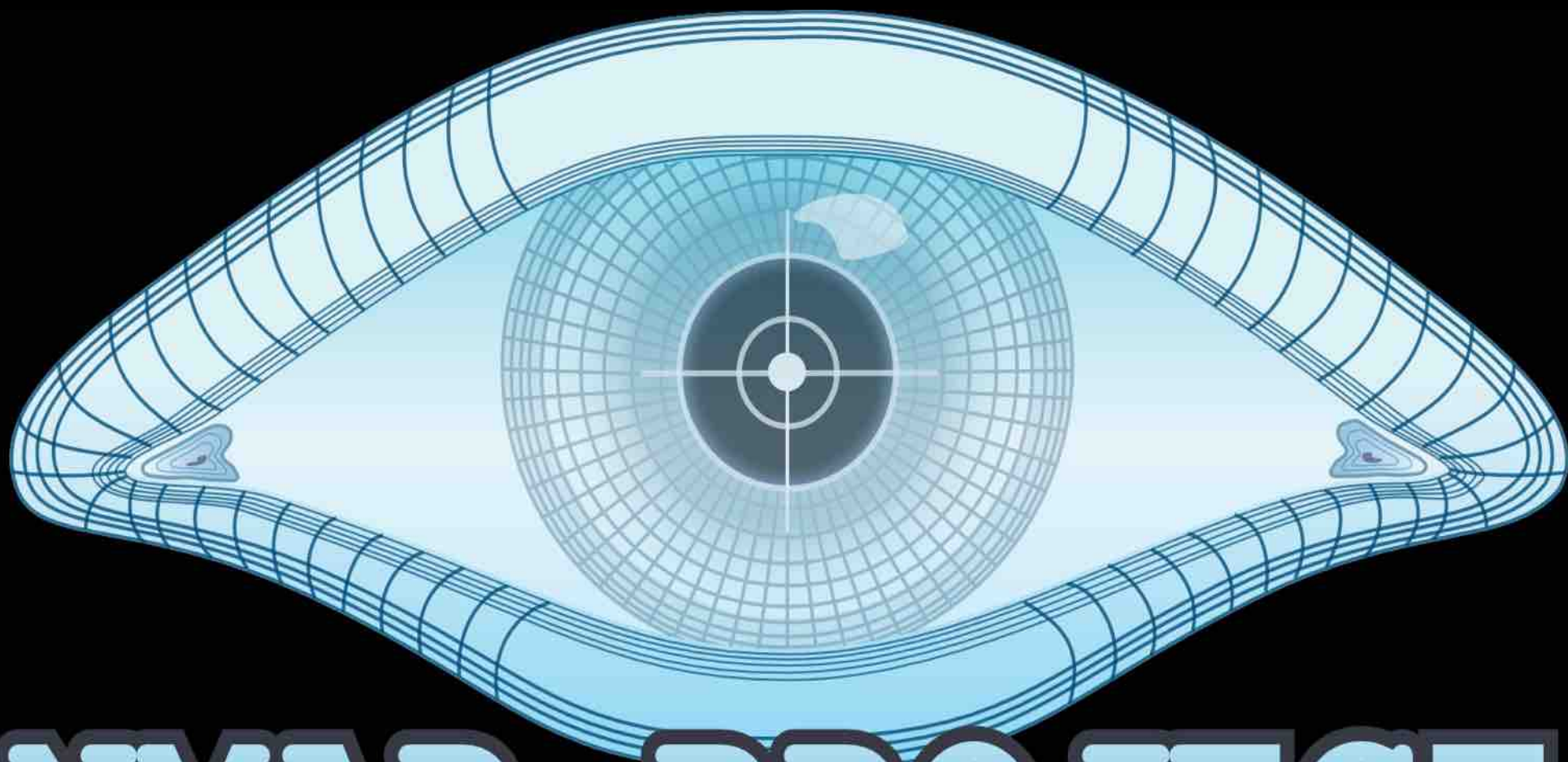
Dagbladet

The Washington Post

BBC NEWS

WIRED

CIO



NMAP PROJECT

STATELESS SCANNING

C++



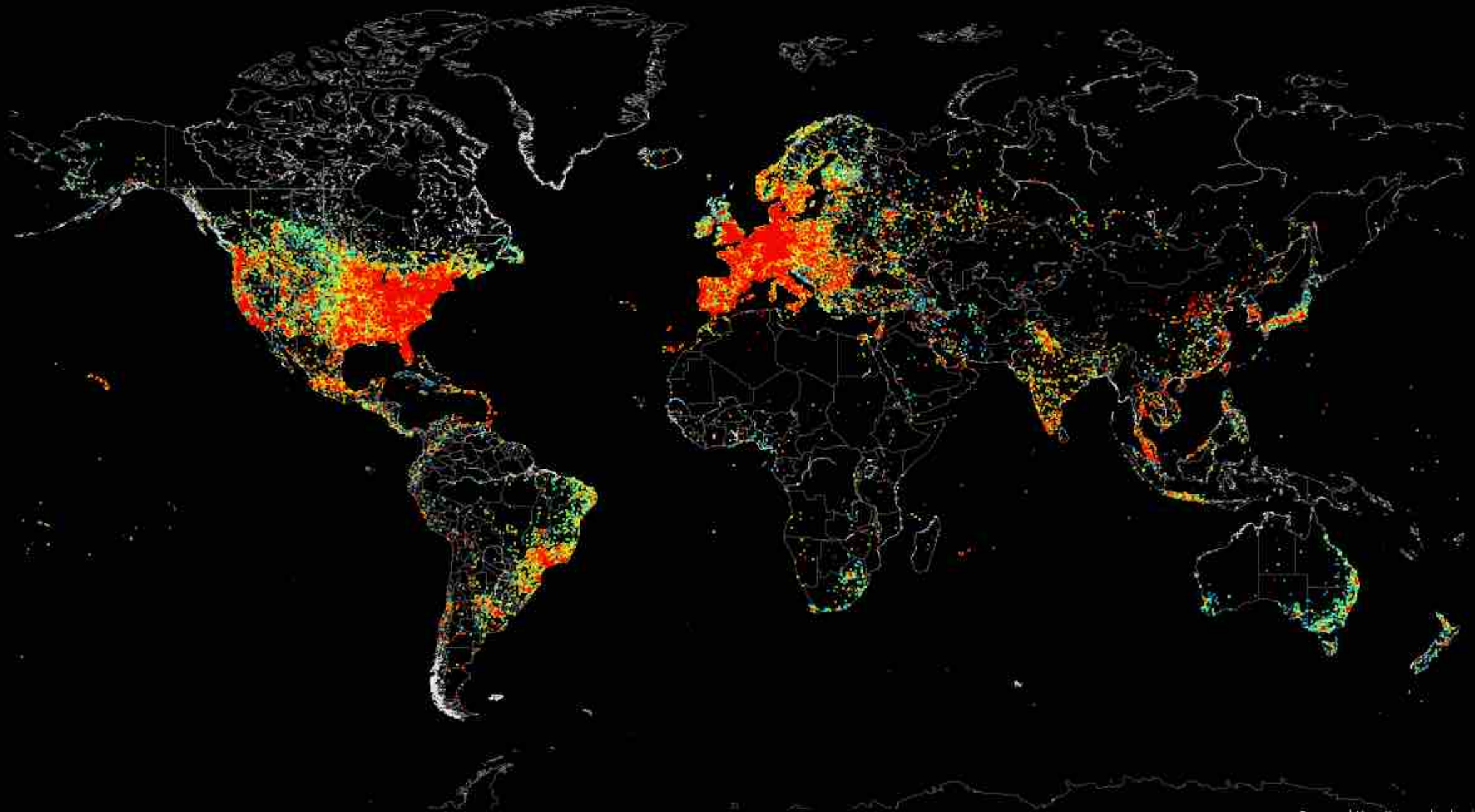
python™



5 Minutes

shodan scan internet 443 https

- 1. Policy Impact**
- 2. Network Security**
- 3. Malware**
- 4. Security Rating**
- 5. Market Research**



Search

O Pakistan, We Stand on Guard for Thee: An Analysis of Canada-based Netsweeper's Role in Pakistan's Censorship Regime

June 20, 2013

Tagged: [Netsweeper](#), [Pakistan](#)

Categories: [News and Announcements](#), [Reports and Briefings](#), [Research News](#)



[Download PDF](#)

O Pakistan, We Stand on Guard for Thee:¹ An Analysis of Canada-based Netsweeper's Role in Pakistan's Censorship Regime

Summary of Key Findings

- Netsweeper filtering products have been installed on Pakistan Telecommunication Company Limited (PTCL)'s network. PTCL is Pakistan's largest telecommunications company and also operates the Pakistan Internet Exchange Point.
- Netsweeper technology is being implemented in Pakistan on PTCL for the purposes of political and social filtering, including websites relating to human rights, sensitive religious topics, and independent media.
- In addition to using Netsweeper technology to block websites, ISPs also use other less transparent methods, such as DNS tampering.²

Introduction

SUMMARY INFORMATION

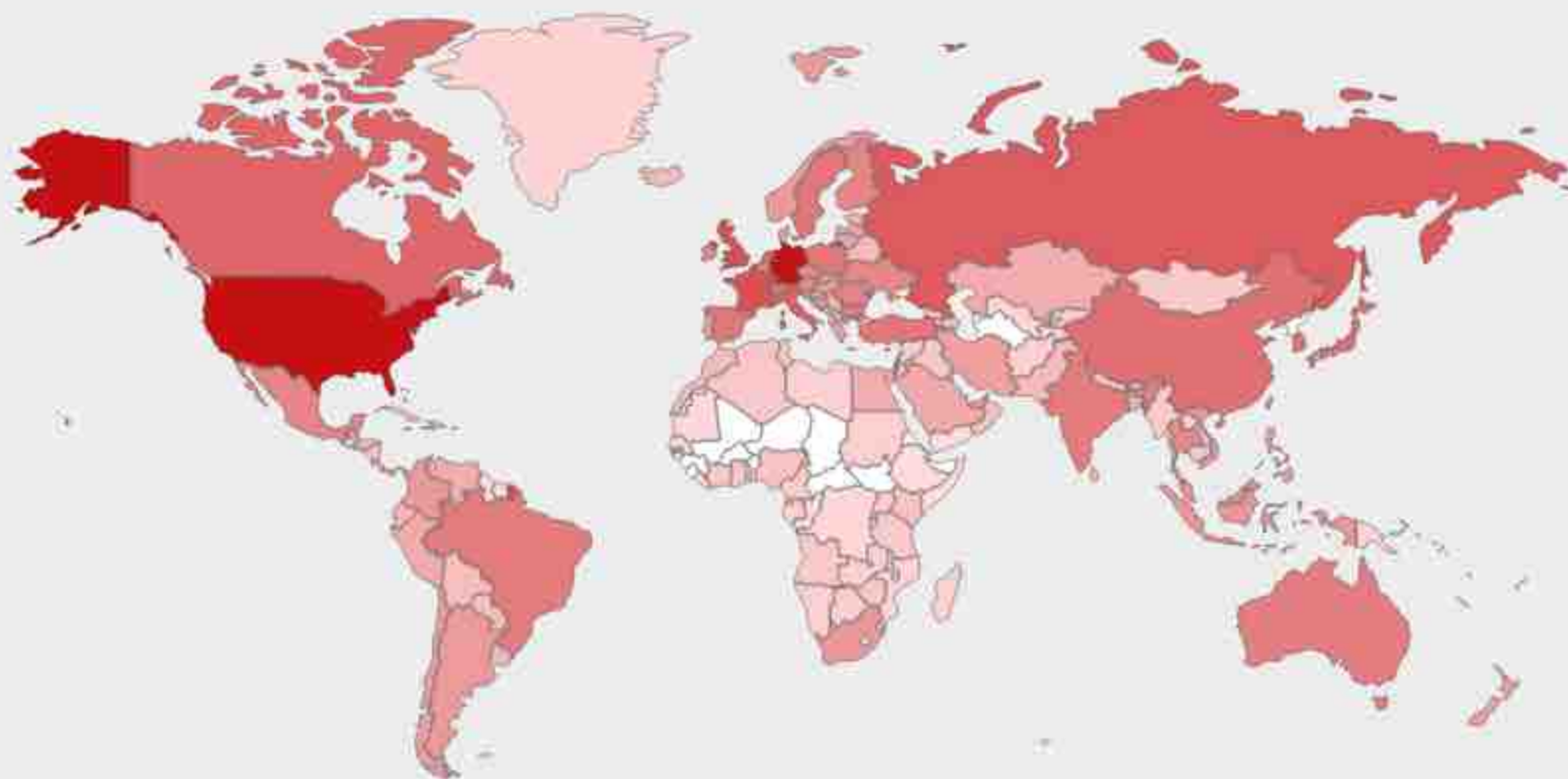
Total Hosts
223,260



LOW HOST COUNT

MEDIUM HOST COUNT

HIGH HOST COUNT



TOP SERVICES

LOW OCCURRENCE

MEDIUM OCCURRENCE

HIGH OCCURRENCE

HTTPS	198,869
HTTPS (8443)	23,707
POP3 + SSL	264
IMAP + SSL	252
SYNOLOGY	84

198,869

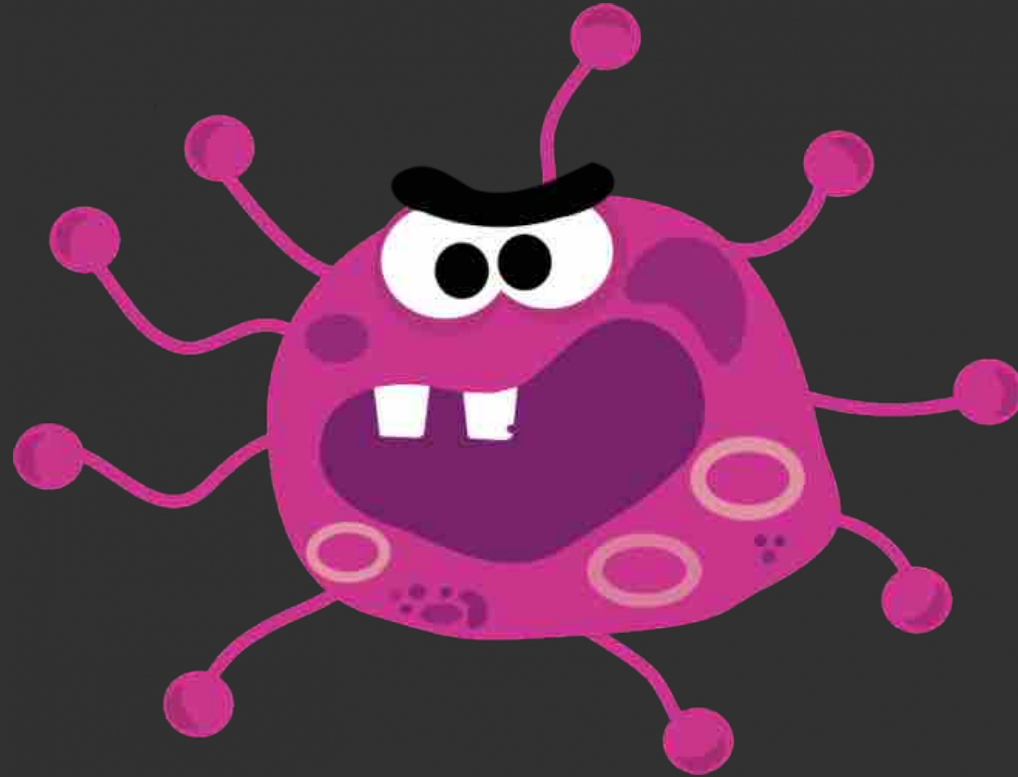
23,707

264

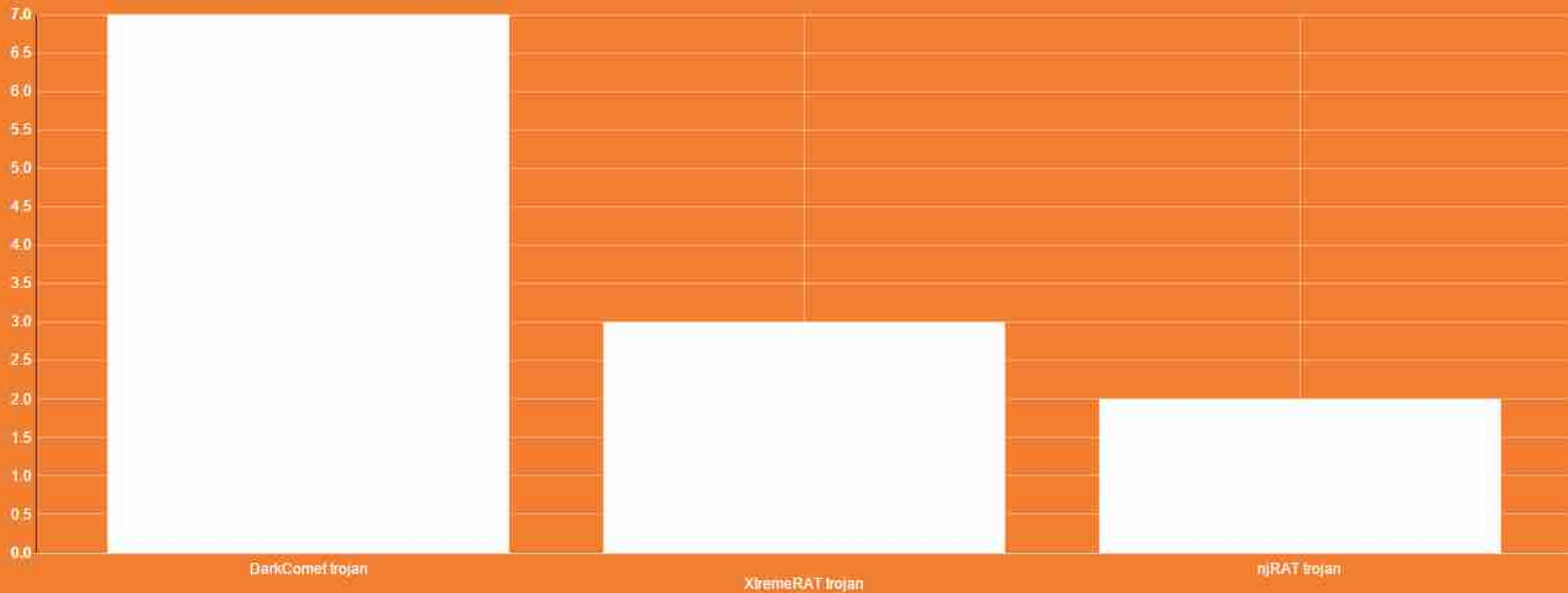
252

84

Malware



Top Products



TOP COUNTRIES



Netherlands 17

TOP CITIES

Malden 1
 Dordrecht 1
 Amsterdam 1

TOP SERVICES

HTTP 14
 HTTPS 2
 8081 1

TOP ORGANIZATIONS

Digital Ocean 4
 i3d B.V. 1
 XS4ALL Internet BV 1
 XL Internet Services B.V. 1

Showing results 1 - 10 of 17

Hacked By HolaKo

128.199.50.13
 DigitalOcean
 Added on 2015-05-28 00:58:21 GMT
 Netherlands, Amsterdam
[Details](#)

HTTP/1.1 200 OK
 Date: Thu, 28 May 2015 00:58:21 GMT
 Server: Apache/2.4.6 (CentOS) mod_fcgid/2.3.9 PHP/5.5.22 Phusion
 X-Powered-By: PHP/5.5.22
 Content-Length: 617
 Content-Type: text/html; charset=UTF-8

Hacked by Team_CC

89.21.102.83
 timezone.nl
 XL Internet Services B.V.
 Added on 2015-05-27 22:15:28 GMT
 Netherlands
[Details](#)

HTTP/1.1 200 OK
 Date: Wed, 27 May 2015 22:15:13 GMT
 Server: Apache/2.2.14 (Ubuntu)
 X-Powered-By: PHP/5.3.2-1ubuntu4.38
 Vary: Accept-Encoding
 Content-Length: 1426
 Connection: close
 Content-type: text/html

Hacked By Lou sh

82.161.248.138
 82-161-248-138.adsnize4all.nl
 XS4ALL Internet BV

HTTP/1.0 200 OK
 Date: Sat, 23 May 2015 16:37:41 GMT

1. **GHoST61**: 57
2. **OxFoRD & Omis Exe**: 54
3. **Kuroi'SH**: 41
4. **Oum99**: 40
5. **Oussama911**: 37
6. **Best Cracker**: 35
7. **root-x**: 31
8. **Prodigy TN**: 25
9. **TechnicalL**: 25
10. **koat_halk_palesten**: 24

Security Rating

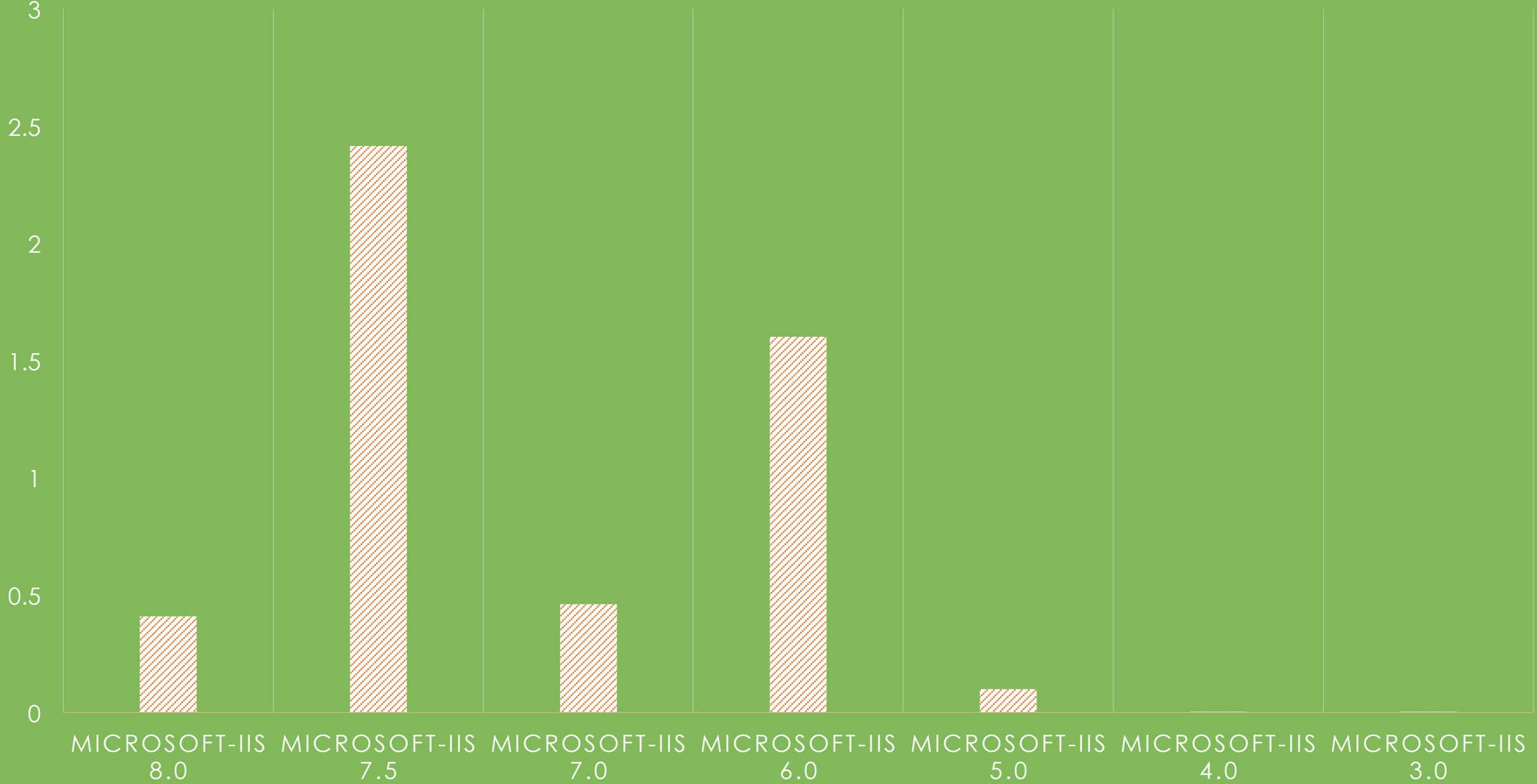


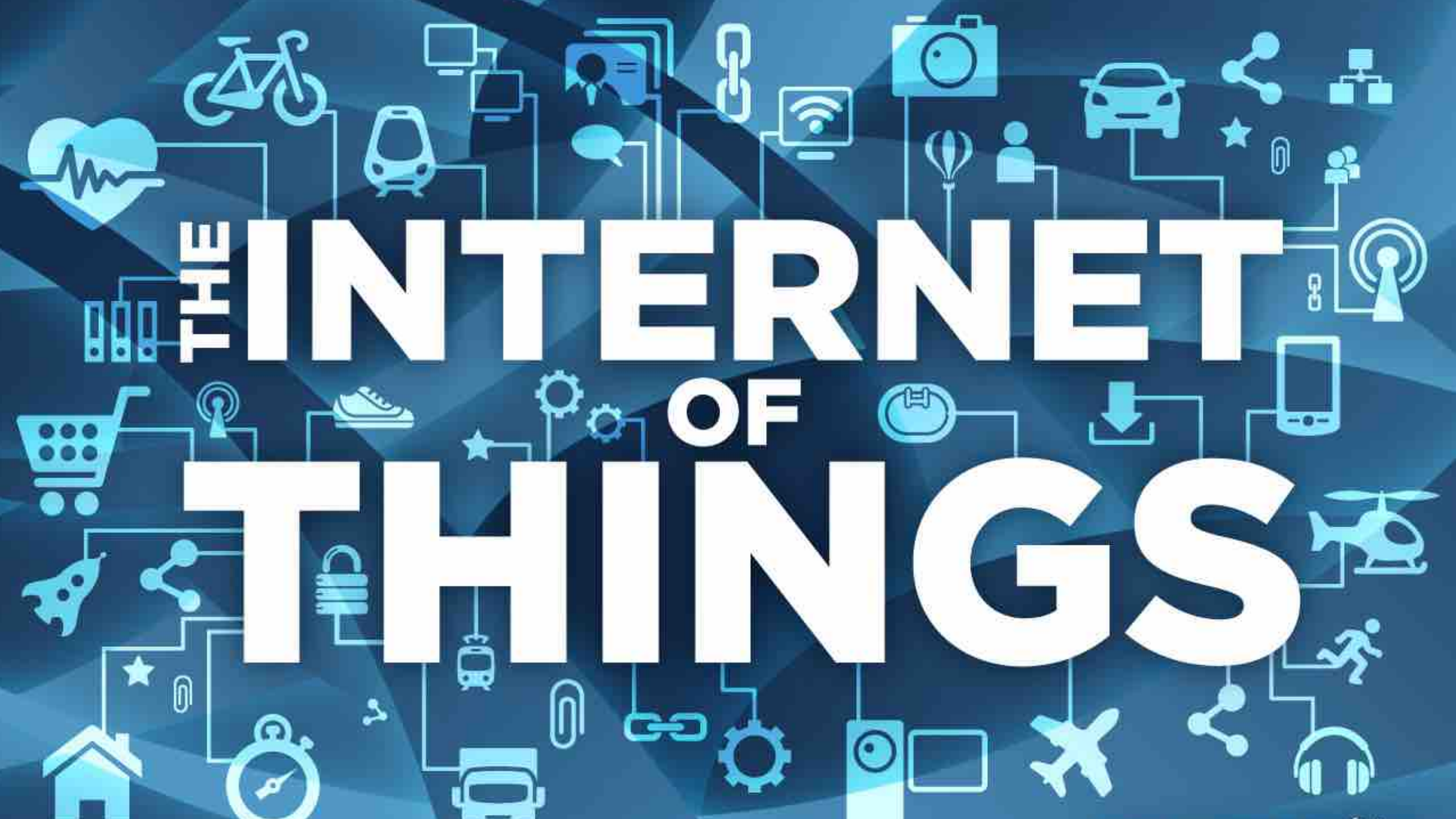
\$2 BILLION



MARKET SHARE

Millions





THE INTERNET OF THINGS

MACHINE \leftrightarrow MACHINE

QUANTIFIED WORLD

Egg Minder

THE SMART EGG TRAY





Sat, Aug 4, 2012 01:16 PM

Hide Memo

Detach

why the [redacted] does
my fridge

need
twitr

- epi
- Ap
- P
- Twitter
- Settings

Intelligent Dispenser



PLEASE RATE OUR TOILET!



Excellent



Good



Satisfactory



Poor



Very Poor

Housekeeping Hotline : 91445414

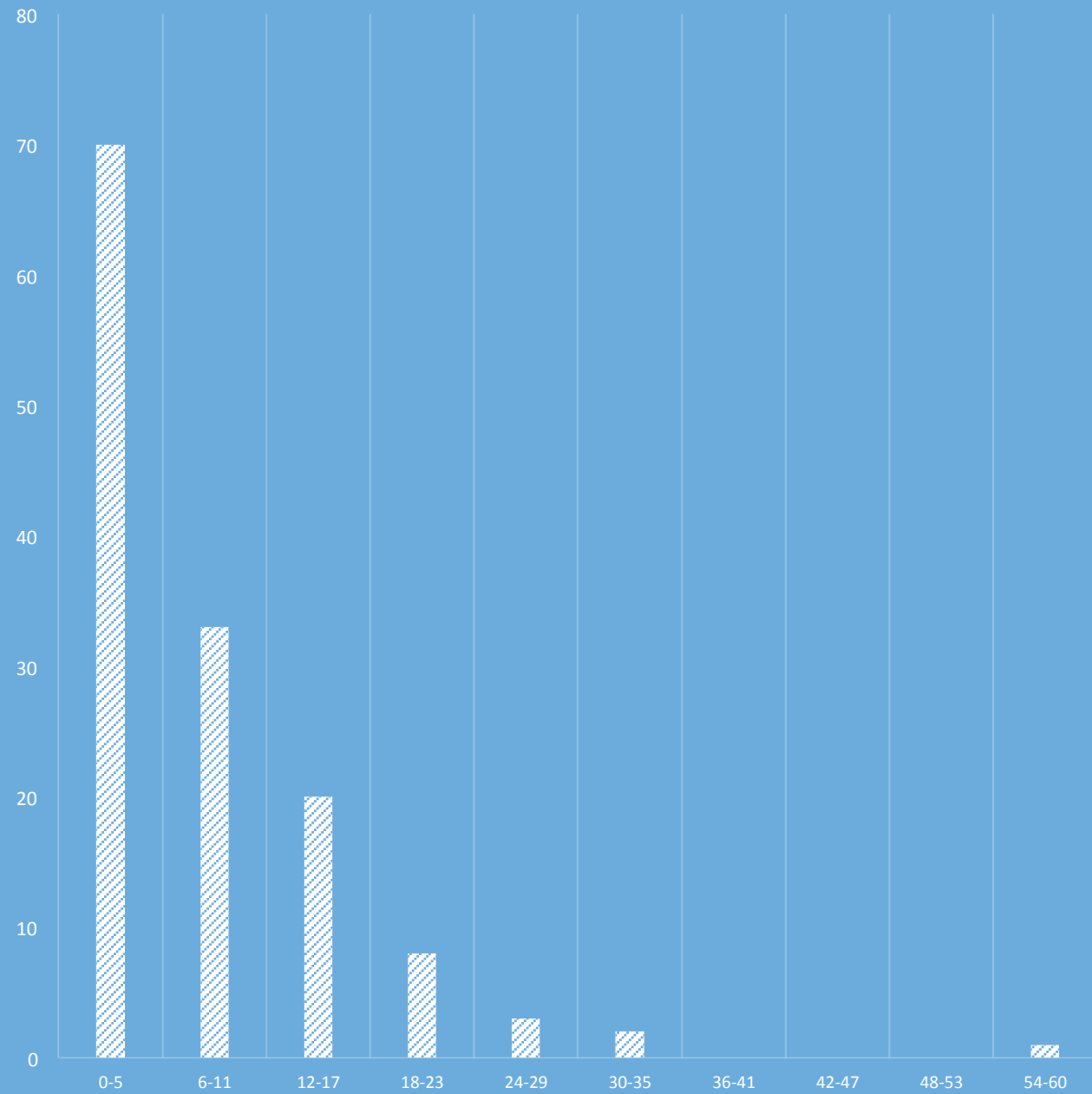
This screen is sanitised regularly



Universities Needing Toner

#1	Minnesota	89
#2	Hawaii	75
#3	Austin	60
#4	San Francisco	60
#5	Toronto	56
#6	Santa Cruz	55
#7	South Florida	55
#8	Boston	55
#9	Washington	54
#10	Pennsylvania	48

NUMBER OF TURBINES



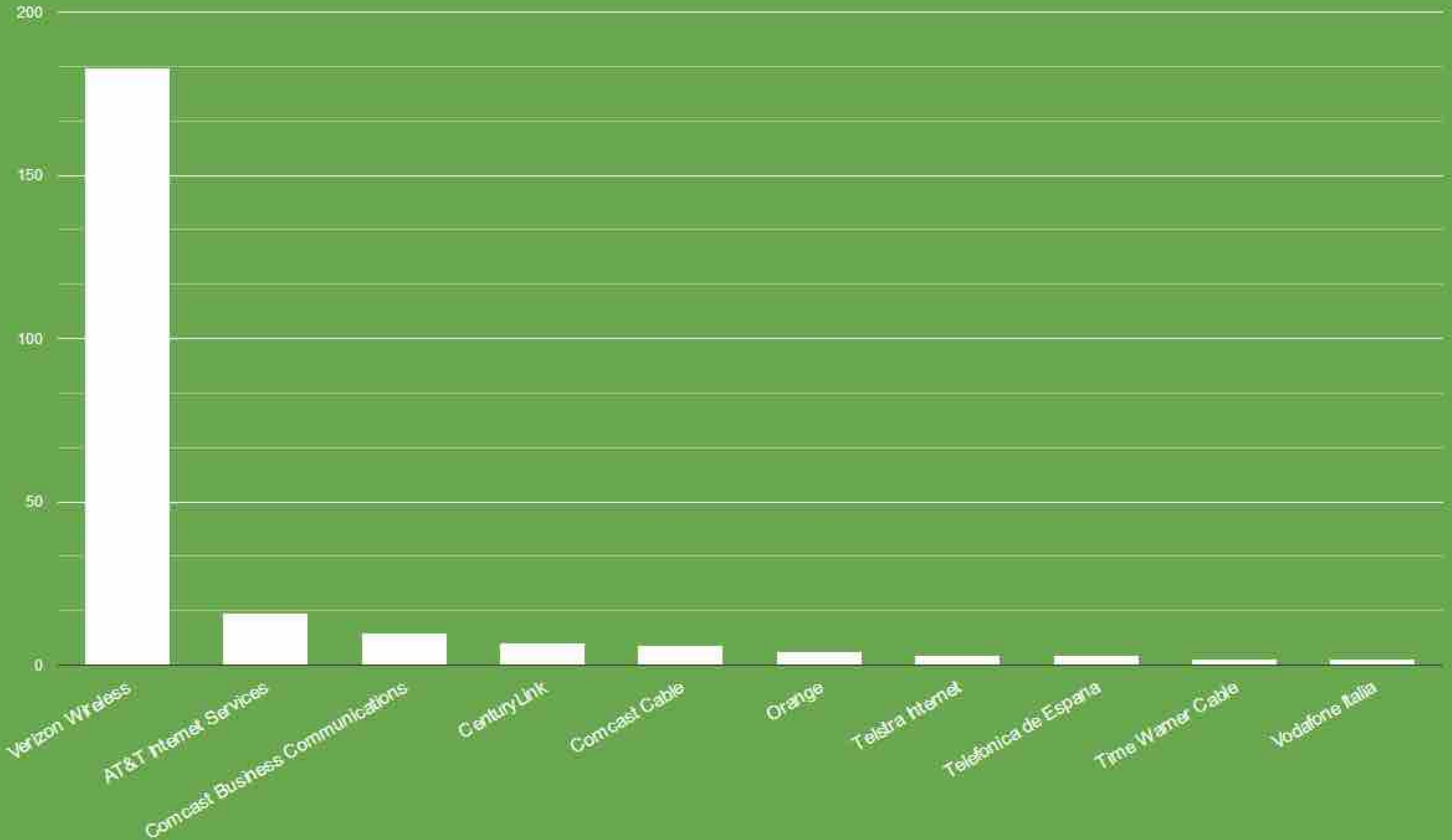
The
Hyper Connected
World

IS NOW



- 1. Physical Device**
- 2. Vendor Network**
- 3. Maintenance**
- 4. Privacy**

Top Organizations



NO AUTHENTICATION

Map of Industrial Control Systems on the Internet

<https://icsmap.shodan.io>



What is an Industrial Control System?

In a nutshell, Industrial control systems (ICS) are computers that control the world around you. They're responsible for managing the air conditioning in your office, the turbines at a power plant, the lighting at the theatre or the robots at a factory.

[Learn more about ICS](#)



See the Presentation

The latest research that generated the above map is being presented at the 4SICS conference in Stockholm. Visit the website to see the video once it becomes available.

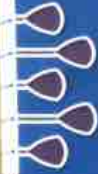
[4SICS Conference](#)

Power Plants on the Internet? Really?

Why are they on the Internet?



DOSE DELIVERED



EXIT

ENTER

1

2

3

4

5

6

7

8

9

CALL

0

CALL

HISTORY



SILENCE
VOLUME

ON
OFF



START
PAUSE

Hospira



LIFECARE
PCA



DEVICE SECURITY

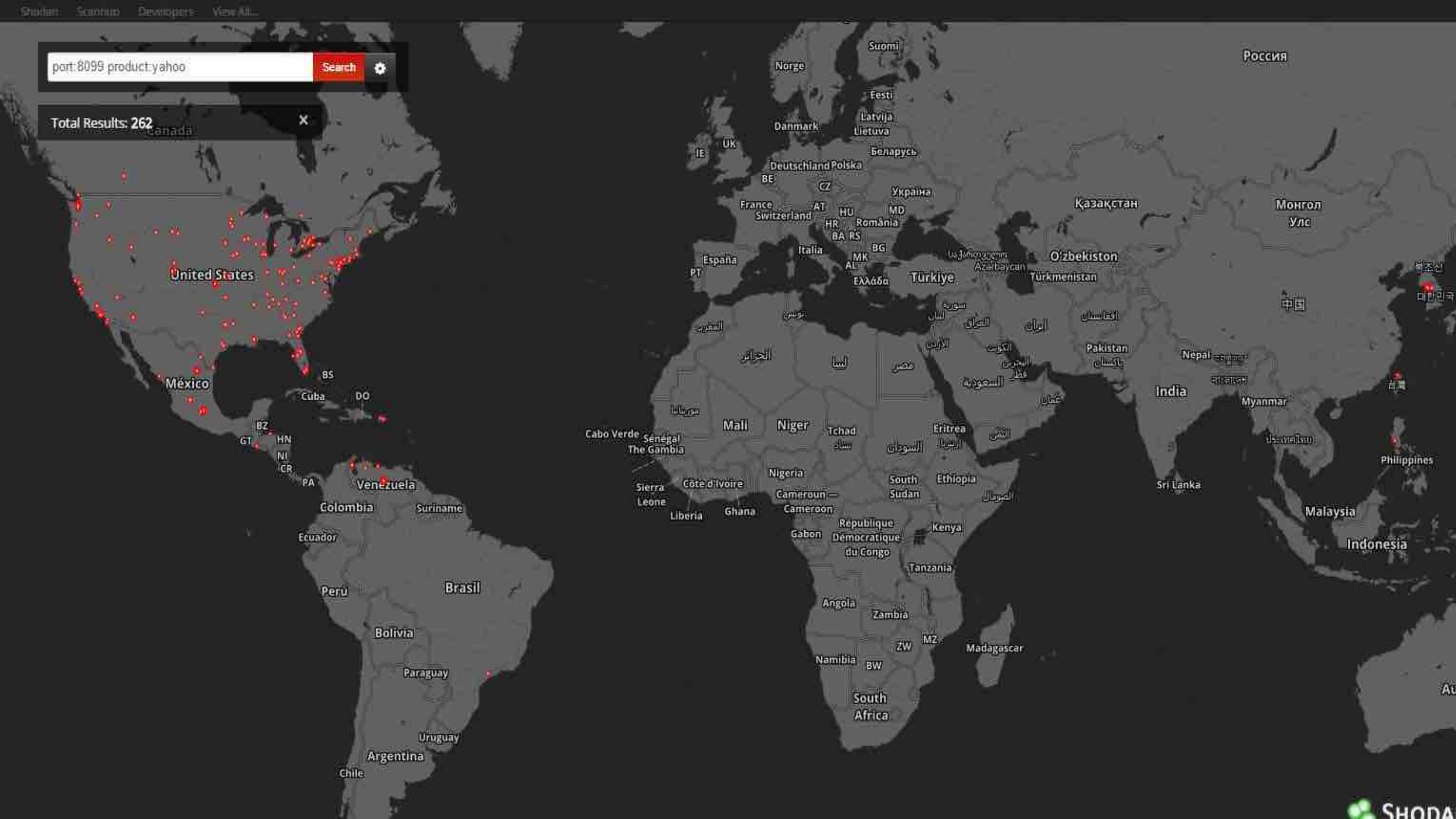
TV Signal

VIZIO

YAHOO!

port:8099 product:yahoo

Total Results: 262





SmartThings

telnet 192.168.1.50

Password:



urman

ANDREW URMAN

Apr 13

Telnet is only there right now for debugging on our end and will eventually not even be compiled into the hub firmware. Kris for now Eric is right, email us at support@smarthings.com and we'll give you specific instructions on how to remove a z-wave device. Right now when you remove a z-wave device, the hub goes into "zwave exclude mode" for 10 seconds, and we are working on adding a zwave remove button in the mobile app.

CNET » Appliances » Smart Home » Quirky needs your Wink Hub back after a botched security update

Quirky needs your Wink Hub back after a botched security update

After a failed security update, Quirky asks Wink Hub owners to send their units in for a repair.

by Rich Brown  @rh_brown / April 19, 2015 6:01 AM PDT



BECOME A CNET MEMBER FOR FREE!

Share your ideas with the community, receive exclusive offers for sweeps and events, and get the latest news, reviews and how-tos in your inbox.

GET STARTED NOW

No, thanks.

THIS WEEK'S MUST READS /

1

Quirky needs your Wink Hub back after a botched security update

Smart Home

2

Google Glass is still misunderstood, says the guy who wore them in the shower

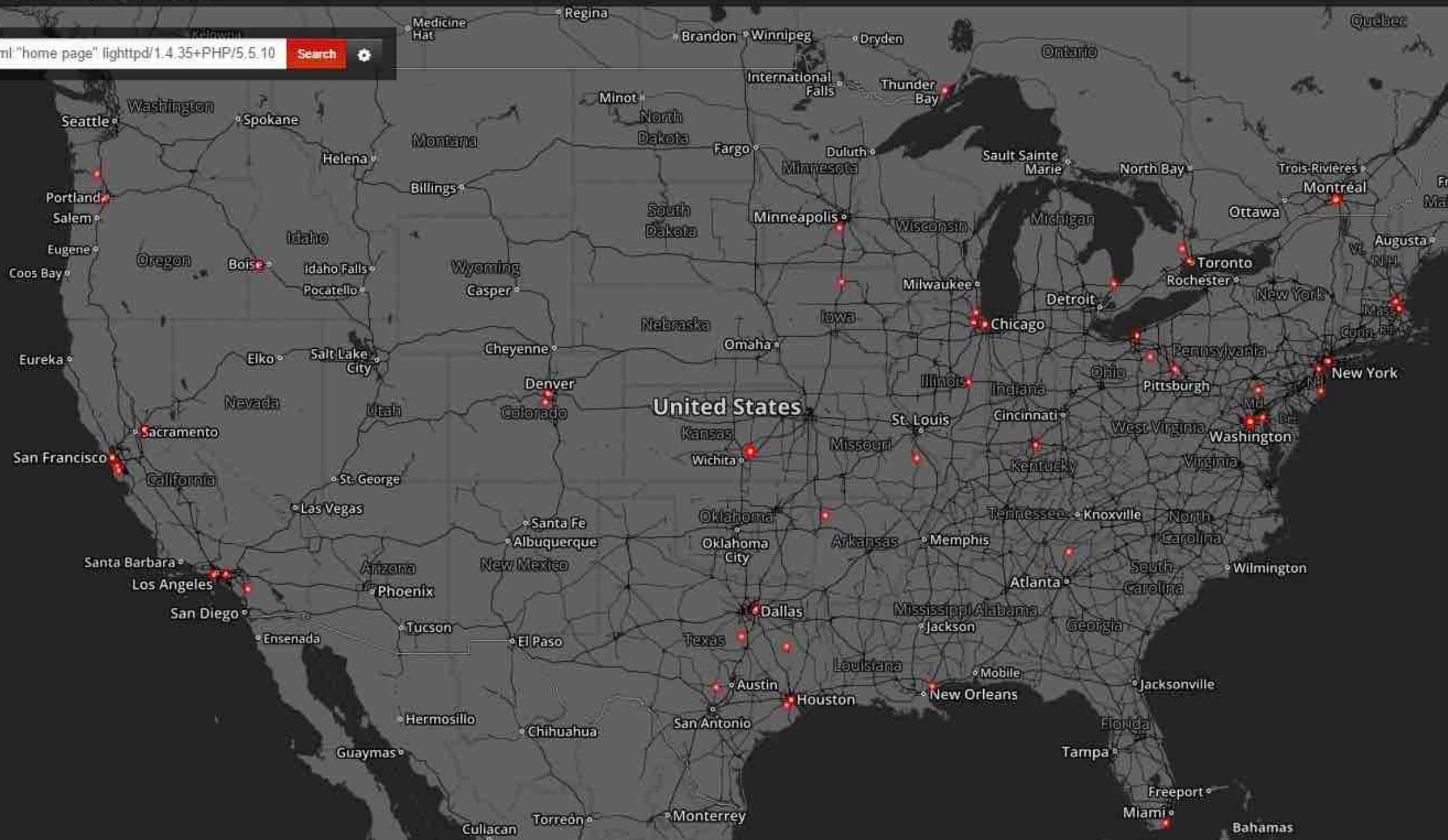
Tech Industry

3

Mary Meeker sees messaging becoming the heart of mobile

html "home page" lighttpd/1.4.35+PHP/5.5.10

Search



VENDOR NETWORK



+



redis :6379> monitor

OK

```
1399153823.250101 [0 10.134.9.33:56020] "RPOP" "conf:provider"
1399153823.250189 [0 10.134.9.33:56046] "RPOP" "conf:provider"
1399153823.250216 [0 10.134.9.33:56024] "RPOP" "conf:provider"
1399153823.250237 [0 10.134.9.33:56021] "RPOP" "conf:provider"
1399153823.250277 [0 10.134.9.33:56023] "RPOP" "conf:provider"
1399153823.250298 [0 10.134.9.33:55998] "RPOP" "FUL:"
1399153823.250363 [0 10.134.9.33:56019] "RPOP" "conf:provider"
1399153823.250383 [0 10.134.9.33:56022] "RPOP" "conf:provider"
1399153823.250714 [0 10.134.9.33:56037] "RPOP" "conf:tagimage"
1399153823.250788 [0 10.134.9.33:56034] "RPOP" "conf:tagimage"
1399153823.250940 [0 10.134.9.33:55998] "RPOP" "conf:CONTENTIMPORT:"
1399153823.250983 [0 10.134.9.33:56032] "RPOP" "conf:tagimage"
1399153823.251054 [0 10.134.9.33:56047] "RPOP" "conf:tagimage"
1399153823.251156 [0 10.134.9.33:54214] "RPOP" "conf:banimage"
1399153823.251202 [0 10.134.9.33:56039] "RPOP" "conf:tagimage"
1399153823.251223 [0 10.134.9.33:56038] "RPOP" "conf:tagimage"
1399153823.251240 [0 10.134.9.33:54209] "RPOP" "conf:banimage"
1399153823.251289 [0 10.134.9.33:56033] "RPOP" "conf:tagimage"
1399153823.251451 [0 10.134.9.33:55998] "HGET" "conf:ST:" "crawler.status.numitems-10.134.9.33-7553@Prism-QA6-2"
1399153823.251544 [0 10.134.9.33:54212] "RPOP" "conf:banimage"
1399153823.251612 [0 10.134.9.33:54213] "RPOP" "conf:banimage"
1399153823.251684 [0 10.134.9.33:54215] "RPOP" "conf:banimage"
1399153823.251737 [0 10.134.9.33:54219] "RPOP" "conf:disicon"
1399153823.251763 [0 10.134.9.33:54211] "RPOP" "conf:banimage"
1399153823.251781 [0 10.134.9.33:54222] "RPOP" "conf:disicon"
1399153823.251825 [0 10.134.9.33:54216] "RPOP" "conf:banimage"
1399153823.251934 [0 10.134.9.33:55998] "HGET" "conf:ST:" "crawler.status.bytesmedia-10.134.9.33-7553@Prism-QA6-2"
1399153823.252031 [0 10.134.9.33:54218] "RPOP" "conf:disicon"
1399153823.252076 [0 10.134.9.33:54221] "RPOP" "conf:disicon"
1399153823.252155 [0 10.134.9.33:54229] "RPOP" "conf:disimage"
1399153823.252206 [0 10.134.9.33:54235] "RPOP" "conf:disimage"
1399153823.252227 [0 10.134.9.33:54220] "RPOP" "conf:disicon"
```

ES node REST endpoint

Refresh every

Keep

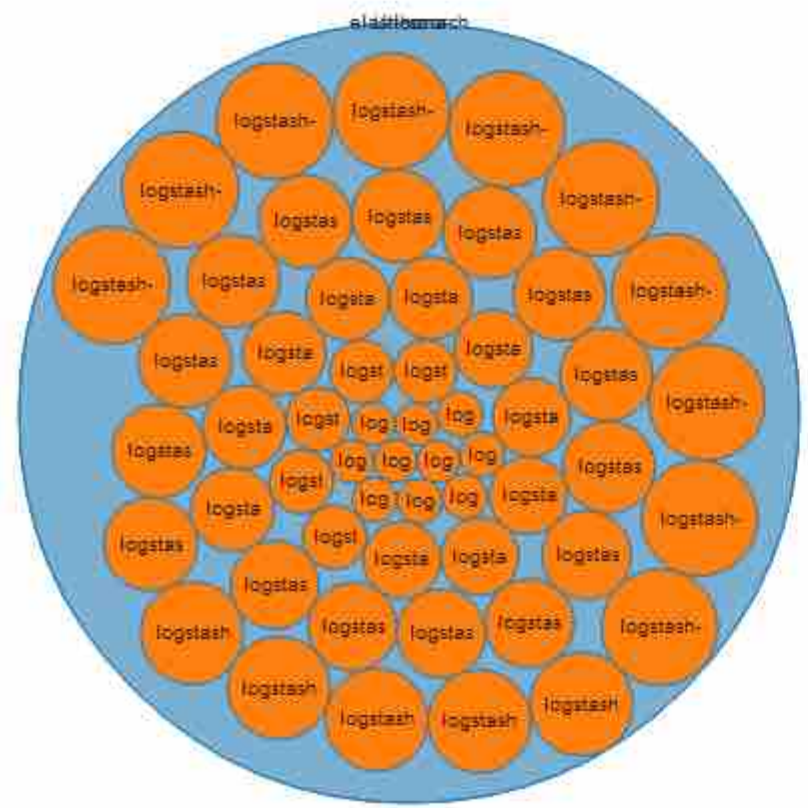
[history](#)

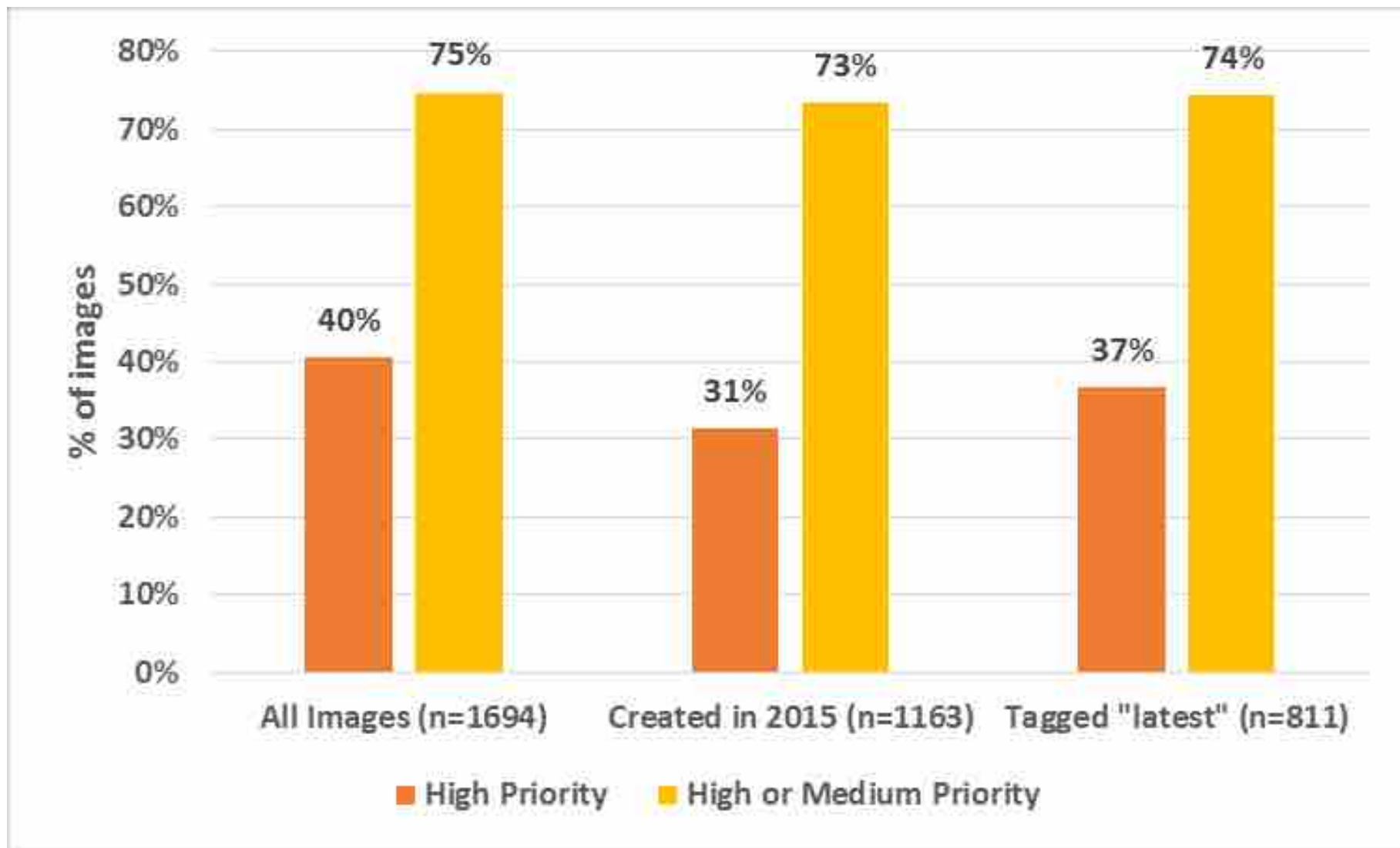


[nodes](#) [cluster](#)

Cluster: elasticsearch
Number of nodes: 2
Status: **yellow**

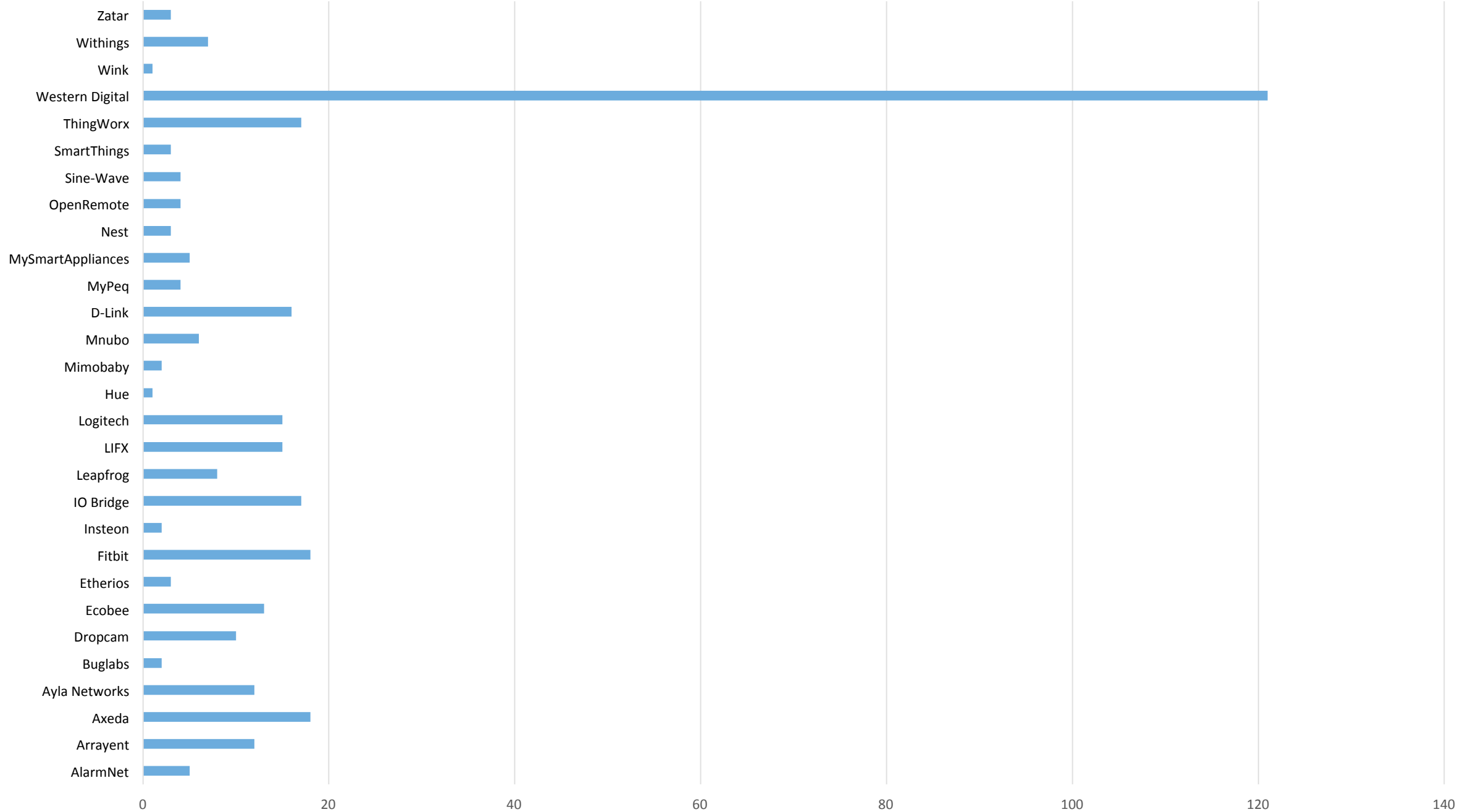
Experimental cluster Pack diagram:





[HTTP://WWW.BANYANOPS.COM/BLOG/ANALYZING-DOCKER-HUB/](http://www.banyanops.com/blog/analyzing-docker-hub/)

OpenDNS





**Western
Digital[®]**

3 Memcache

13 VNC

38 Telnet



1 Heartbleed
9 FREAK

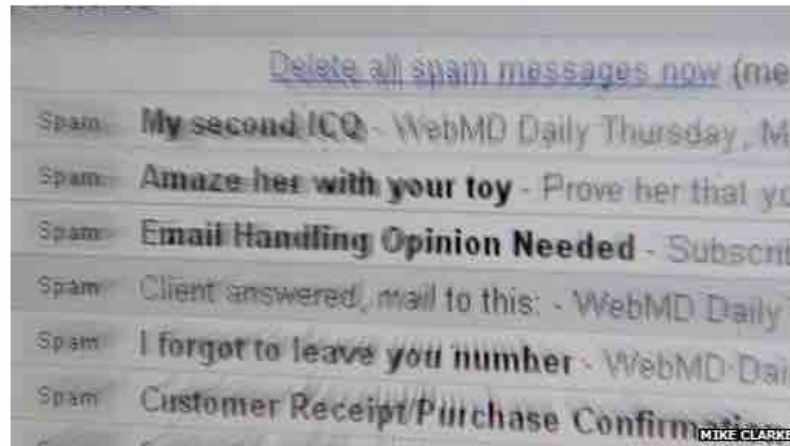
34% of Vendors

MAINTENANCE & OPERATION

17 January 2014 Last updated at 12:18 ET



Fridge sends spam emails as attack hits smart gadgets



The fridge was one of 100,000 devices used as part of the spam attack

A fridge has been discovered sending out spam after a web attack managed to compromise smart gadgets.

The fridge was one of more than 100,000 devices used to take part in the spam campaign.

Uncovered by security firm Proofpoint the attack compromised computers, home routers, media PCs and smart TV sets.

The attack is believed to be one of the first to exploit the lax security on devices that are part of the "internet of things".

Poor protection

The spam attack took place between 23 December 2013 and 6 January this year, **said Proofpoint in a statement**. In total, it said, about 750,000 messages were sent as part of the junk mail campaign. The emails were routed through the compromised gadgets.

Related Stories

Connected tech sparks privacy fears

LG promises fix for 'spying' TVs

Food bytes: The kitchen goes digital

Top stories



Israel calls up 16,000 reservists **NEW**

Leaders meet to discuss MH17 access

Race to find India landslide missing

Argentina defaults for second time

Liberia shuts schools over Ebola

Features & Analysis



Tiki taste

Why the Tiki bar became an American phenomenon



Black trailblazer

US Vogue's first African American cover girl 40 years on



Mystery woman

The figure clad in black, walking across the US



Information spread

Just what are the dangers of the Streisand effect?

Most Popular

Shared **Read** Video/Audio

Israel calls up 16,000 reservists	1
House votes to sue President Obama	2
Nato 'unprepared for Russia threat'	3



BERKSHIRE HATHAWAY
Investment
Collection
LUXURY REAL ESTATE REDEFINED



NO LEFT TURN

↑ ONLY

↑ ONLY



FOR LEASE
404.869.7100

Advertisement for a business or service, featuring a logo and text.



PLANNED OBSCOLESCENCE



France Wants Companies to Make Appliances That Last Longer

By THE ASSOCIATED PRESS | MARCH 2, 2015, 11:37 A.M. E.S.T.



Email



Share



Tweet



Save



More

PARIS — France is ordering manufacturers to inform consumers how long they can expect their TV, cell phone or other appliance to last — before they buy it.

A new French government decree that came into effect this week aims at fighting so-called planned obsolescence. That is when companies design strategies to limit the life span of appliances, so that consumers will have to replace them.

The measure requires manufacturers to inform vendors how long spare parts for an appliance will continue to be produced. The vendor is then required to inform the buyer, in writing. Violators face up to 15,000 euros (\$16,800) in fines.

A similar French measure coming into effect next year will require manufacturers to replace or repair faulty appliances for free for the first two years after purchase.

NEXT IN EUROPE

David Cameron Sets Course for Britain Amid
Pageantry of Queen's Speech

CCTV cameras secretly being switched off by cash-strapped councils



PRIVACY IMPLICATIONS



iOS 7

iBeacons







9520
DAYS LIVED

43
DAYS RECORDED

James



TODAY
NOVEMBER 21ST



HEALTH

CREATIVITY



ROUTINE

PLEASURE



TODAY
NOVEMBER 21ST



WEIGHT

158.5lb

HEALTH STATUS

100%

GLASSES OF WATER

7

STRESS LEVEL

20%

STEPS

7854

CALORIES

562cal

EXAMPLE: LICENSE PLATES



- Main Menu**
- System
- Update
- Preferences
- Monitor ▶
- Configuration ▶
- Diagnostics ▶
- Contact us
- Legal

Copyright 2006
 PIPS Technology Inc.,
 PIPS Technology Ltd.

Build ref:26

PIPS Technology ALPR Processors

PIPS Technology ALPR processes licence plate recognition (ALPR) cameras/illuminators, and wheel licence plate information (now and other required information). Ethernet, RS232, RS485 and G5.

This web interface will help you. Ideally, you should have available Manual. This explains what the values.

ON LINE HELP is available for entry field and the bottom of screen.

If you have any comments or like to hear from you. Use the telephone number. Thanks!

Display Type: Data transfer:

<p>Gain/Shutter: 2/11 Plate: VOB939 Width: 720 Confidence: 86:1824</p>		<pre>2000/300 1111 4 0.02 MPA279: 511ms 1 1019,1741051.1, MPA279.91.00005914,148629092 ves: image set recvd after 1126 mS on cam:1, lane:0 ves_head: using 980 next is 981 ves_create_er: slot 0 p:11ms, f:0ms, c:558ms ves_image: evidential record overall size: 51136 bytes inc 15 padding crc:f63a ves_image: jpeg:569mS, hmac:0mS, encrypt:0mS, crc: 18mS ves_image: recvd slot 0 open_link 10000 servers 0 udp_ping: (36 mS) recvd 98.172.63.198 98.175.128.190 5081e513-01315155-0000021f 5791 881 0 ves_image: cap to host (ER): 1793mS, req to host: 79ms, t_tx:7ms ves_clear_slot: 0 ves_tail: set to 981 ves_tx: scan pass ves_del: periodic delete ves_tx - servers found ves_tx: scanning for BSRs ves_tx: BSR scan complete</pre>
<p>Gain/Shutter: 2/9 Plate: DBGF177 Width: 720 Confidence: 81:1773</p>		
<p>Gain/Shutter: 2/11 Plate: X289102 Width: 720 Confidence: 84:1853</p>		

PHOTO: DAN TENTLER, THINKSTOCK

port:23 ATZ+application

Total Results: 75

Top Organizations

Cox Communications	34
Charter Communications	27
Verizon Wireless	6
University of Southern ...	6
AT&T Wireless	2



0000000 377 330 377 340 000 020 112 106
111 106 000 001 001 000 000 001 377 330
377 340 \0 020 J F I F \0 001 001 \0 \0 001
0000020 000 001 000 000 377 376 000 015
122 106 066 061 113 126 114 040 \0 001
\0 \0 377 376 \0 \r **R F 6 1 K V L**
0000040 071 064 012 377 333 000 103 000
020 013 014 016 014 012 020 016 9 4 \n
377 333 \0 C \0 020 \v \f 016 \f \n 020
016 0000060 015 016 022 021 020 023 030
050 032 030 026 026 030 061 043 045 \r
016 022 021 020 023 030 (032 030 026 026
030 1 # %



License Plates DB

RF61KVC



Plate: RF6XXXX

Camera IP: 87.83.239.83



Plate: Y06XXXX

Camera IP: 97.89.219.214

RF61KVC



Plate: RF6XXXX

Camera IP: 87.83.239.83

RF61KVC



Plate: RF6XXXX

Camera IP: 87.83.239.83



Plate: X18XXXX

Camera IP: 97.89.219.182

RF61KVC



Plate: RF6XXXX

Camera IP: 87.83.239.83



Plate: W97XXXX

Camera IP: 68.14.195.119

RF61KVC



Plate: RF6XXXX

Camera IP: 87.83.239.83

RF61KVC



Plate: 7KVXXXX

Camera IP: 68.181.160.189



Plate: A82XXXX

Camera IP: 98.172.57.195

RF61KVC



Plate: L67XXXX

Camera IP: 97.89.219.198



Plate: RF6XXXX

Camera IP: 87.83.239.83

RF61KVC



Plate: RF6XXXX

Camera IP: 87.83.239.83

RF61KVC



Plate: RF6XXXX

Camera IP: 87.83.239.83

RF61KVC



Plate: X61XXXX

Camera IP: 97.89.213.90

RF61KVC



Plate: RF6XXXX

Camera IP: 87.83.239.83

RF61KVC



Plate: RF6XXXX

Camera IP: 87.83.239.83

RF61KVC



Plate: 6JBXXXX

Camera IP: 128.125.166.144

RF61KVC



Plate: Y06XXXX

Camera IP: 97.89.219.226

RF61KVC



Plate: J22XXXX

Camera IP: 166.161.36.47

100 Cameras

5 Days

62,857 Unique License Plates

**SEWTHIS
EMBALMR
CUISINE
GOODDAY**

1.3% Novelty Plates

Home

About

Media

Press

Products

Contact Vigilant

Support

National Vehicle Location Service (NVLS)



The National Vehicle Location Service (NVLS) is a national data sharing initiative started by Vigilant in 2008. The data in NVLS is made up from two primary sources: 1) data shared to

System Specifications

- Secure and hosted LPR data for law enforcement only
- Private LPR data collection of over 70 million records per month
- Accessible via an Agency's LEARN account
- Hotlist matching and alerting capabilities

System Application & Benefits

- Improved investigative data set
- Locate vehicles of interest
- Increase investigative leads

Technical Datasheets NVLS

- LEARN Datasheet
- LPR Data (NVLS) Datasheet



Our Goals for the "Internet of Things"

- 👁️ FOCUS effort towards crowd-funded, small commercial and bootstrapped vendors
- ♥️ BUILD partnerships and goodwill between IoT vendors and the security community
- ✓ COORDINATE efforts to incentivize security researchers for reporting vulnerabilities
- 📝 CURATE informational resources to help educate vendors on security best practices
- 👤 PRESENT research at relevant events and be a point of contact for press inquiries



Vendors Participating With BuildItSecure.ly



Pinoccio is a complete toolkit for building the Internet of Things. Makers, Software Developers, and Product Designers can use the tiny microcontroller to quickly prototype ideas. It has mesh networking and wireless web connectivity baked right in. Pair that with the REST API and web app, and you have an end-to-end system that works right out of the box.



Dropcam is a cloud-based video monitoring service with free live HD streaming, two-way talk and mobile apps that makes it easy to stay connected to places, people and pets, no matter where you are. Featuring automatic updates, stream sharing, location awareness and optional Cloud Recording, Dropcam has redefined home monitoring and do-it-yourself security.



Zendo is a South Florida-based technology company that creates, designs, and manufactures simple devices for custom home monitoring and control, as well as best-in-class apps and services. Zendo products will be available at leading retailers.



DipJar is the first-ever tip jar and donation box for credit and debit cards; a hardware/software solution for one-step collection and seamless disbursement of electronic payments.

Internet of Things Nmap Fingerprints

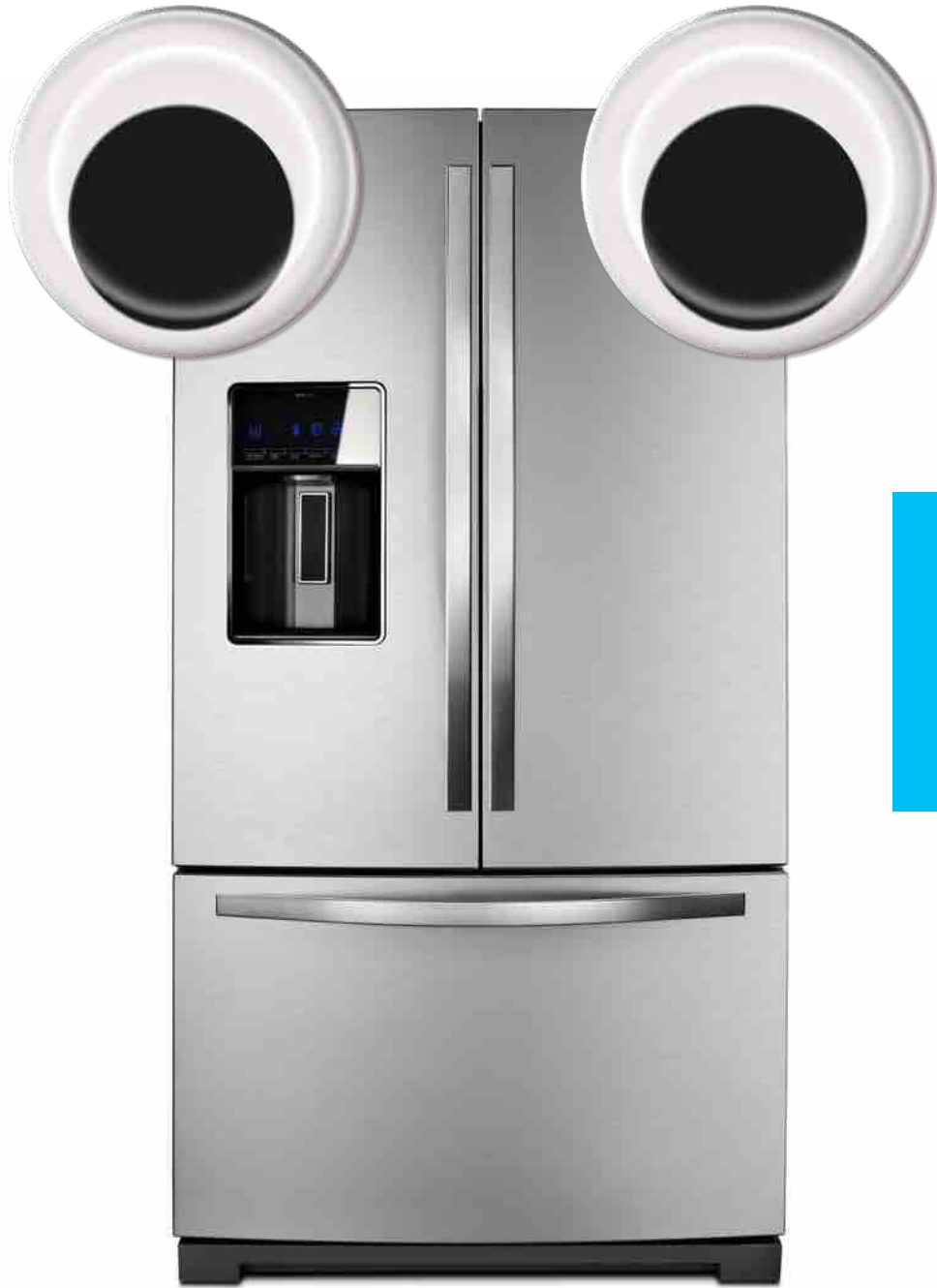
A repository of Nmap scans for various IoT devices. The following command was run to perform the scan:

```
nmap -Pn -p- -A -oX <name> <ip>
```

Where **name** is a descriptive name for the device (ex: "wink-hub") and **ip** is the IP address the device has on your local network.

To have your Nmap scan results added to this repository either submit a pull request or send your XML file to support@shodan.io

github.com/shodan-labs/iotdb



Questions?