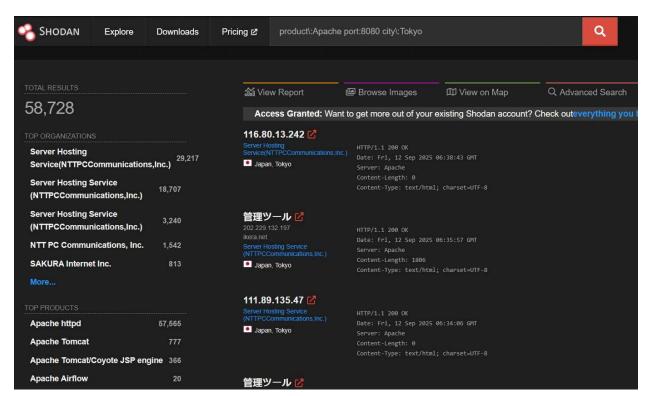
Q1. Using Shodan, search for following devices: -

- Find Apache servers in Tokyo running on port 8080
- Search for Nginx servers hosted in Canada
- Identify Microsoft IIS web servers across India
- Search for Cisco ASA firewalls in the 203.0.113.0/24 subnet
- Locate any exposed devices near latitude/longitude: 51.5074, -0.1278
 (London)
- Find Windows machines with SMB (port 445) open in California
- Detect Linux servers in South Korea running an exposed FTP (port 21) service
- Look for PostgreSQL databases in France with version 12.5
- Find expired TLS certificates from devices belonging to "Jazz Telecom"
- Identify Apache Tomcat instances running version 9.0.39
- Search for network cameras in the 10.0.0.0/8 private IP range
- Search for universities running devices vulnerable to CVE-2021-22986 (F5 BIG-IP RCE)
- Webcams:
 - Yawcams
 - WebcamXP
 - Android IP Webcam Server
 - Security DVRs
- Printers & Copiers
 - HP Printers
 - Xeros Copiers / Printers
 - o Epson Printers
 - Canon Printers
- Home Devices
 - Yamaha Stereos
 - o Apple AirPlay Receivers
 - Chromecasts / Smart TVs
 - OctoPrint 3D Printer Controllers
- FTP Servers with Anonymous Login

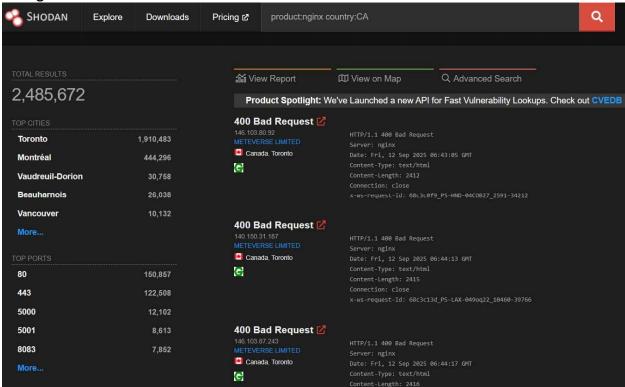
Q1. Using Shodan, searched devices

Search Query	Expected Results
product\:Apache port:8080 city\:Tokyo	Apache servers on port 8080 in Tokyo
product\:nginx country\:CA	Nginx servers in Canada
product:"Microsoft-IIS" country\:IN	Microsoft IIS servers in India
product:"Cisco ASA" net:203.0.113.0/24	Cisco ASA firewalls in given subnet
geo:51.5074,-0.1278	Devices near London coordinates
os:"Windows" port:445 country\:US	Windows machines with SMB open in
region\:California	California
os:"Linux" country\:KR port:21	Linux servers in South Korea with FTP open
product\:PostgreSQL version:"12.5"	PostgreSQL v12.5 databases in France
country\:FR	
org:"Jazz Telecom" ssl.cert.expired\:true	Jazz Telecom devices with expired TLS
	certificates
product:"Apache Tomcat" version:"9.0.39"	Apache Tomcat servers v9.0.39
category\:camera net:10.0.0.0/8	Network cameras in private 10.0.0.0/8 range
vuln:"CVE-2021-22986" product:"BIG-IP"	University devices vulnerable to CVE-2021-
(http.title:"University" OR org:"University")	22986

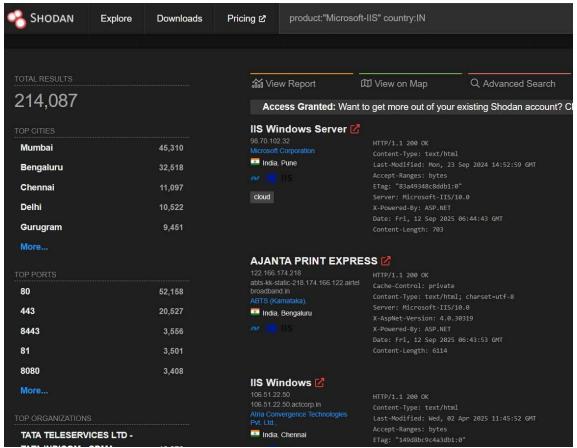
Apache servers on port 8080 in Tokyo:



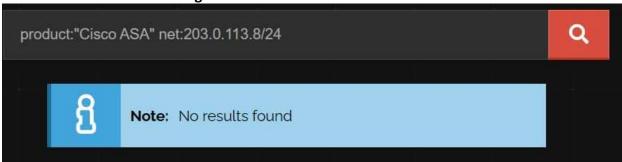
Nginx servers in Canada:



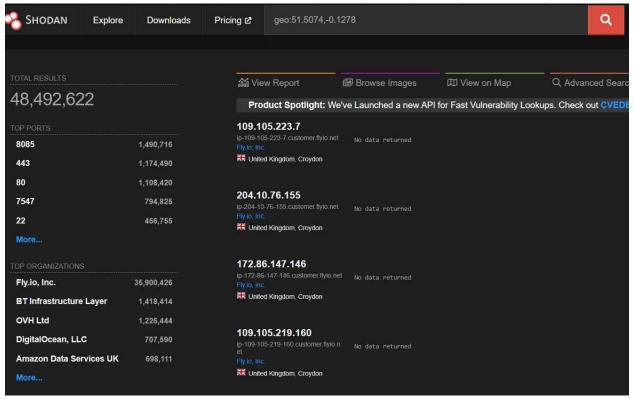
Microsoft IIS servers in India:



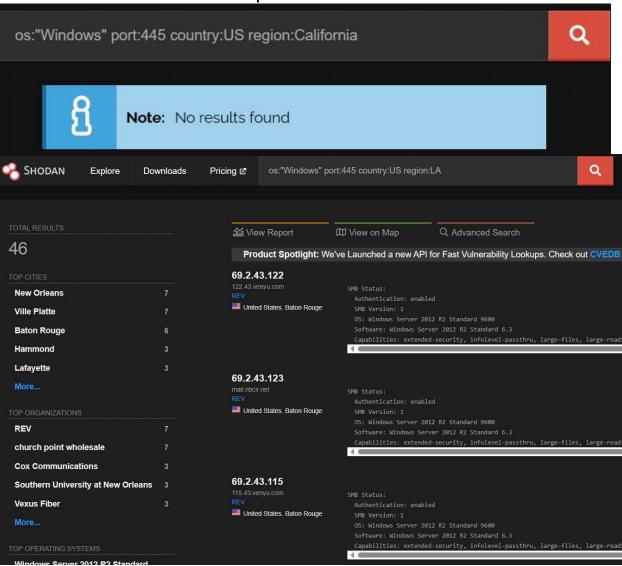
> Cisco ASA firewalls in given subnet:



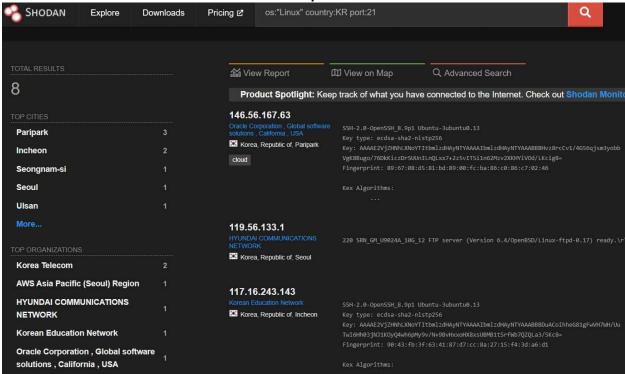
Devices near London coordinates:



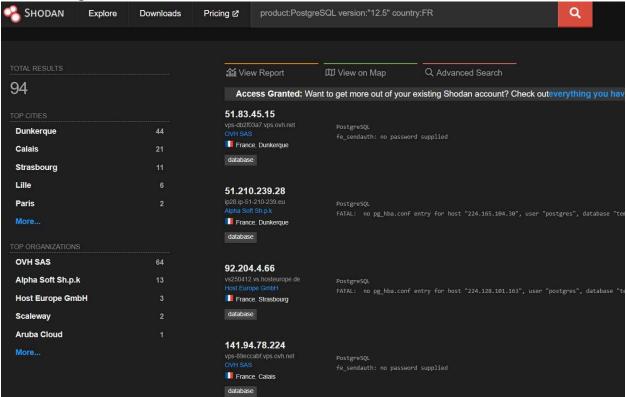
> Windows machines with SMB open in California:



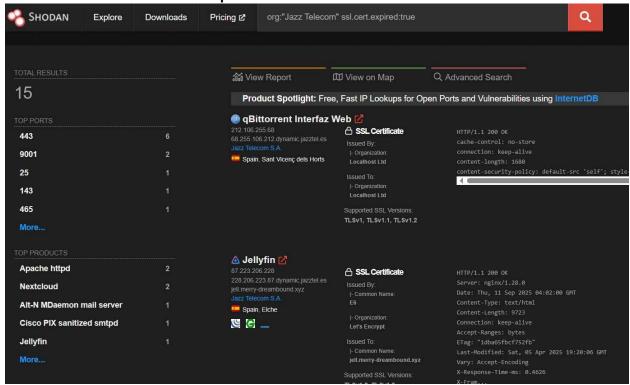
> Linux servers in South Korea with FTP open:



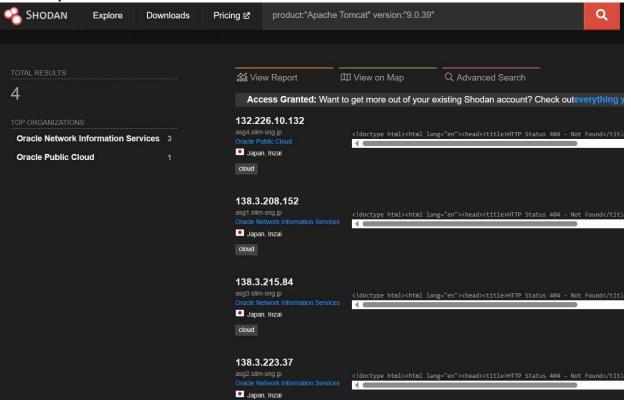
> PostgreSQL v12.5 databases in France:



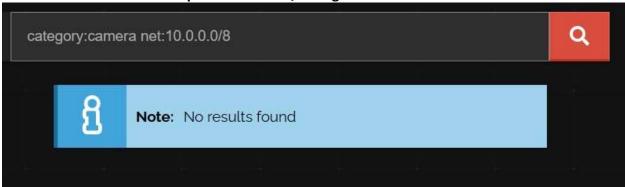
> Jazz Telecom devices with expired TLS certificates:



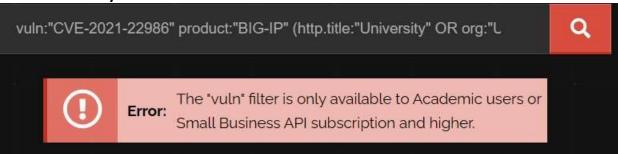
> Apache Tomcat servers v9.0.39:



➤ Network cameras in private 10.0.0.0/8 range:



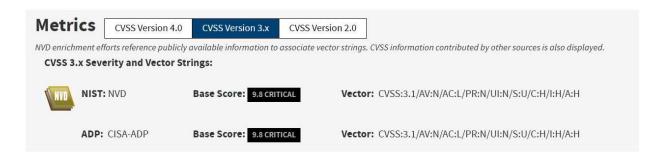
University devices vulnerable to CVE-2021-22986:



¥CVE-2021-22986 Detail

Description

On BIG-IP versions 16.0.x before 16.0.1.1, 15.1.x before 15.1.2.1, 14.1.x before 14.1.4, 13.1.x before 13.1.3.6, and 12.1.x before 12.1.5.3 amd BIG-IQ 7.1.0.x before 7.1.0.3 and 7.0.0.x before 7.0.0.2, the iControl REST interface has an unauthenticated remote command execution vulnerability. Note: Software versions which have reached End of Software Development (EoSD) are not evaluated.



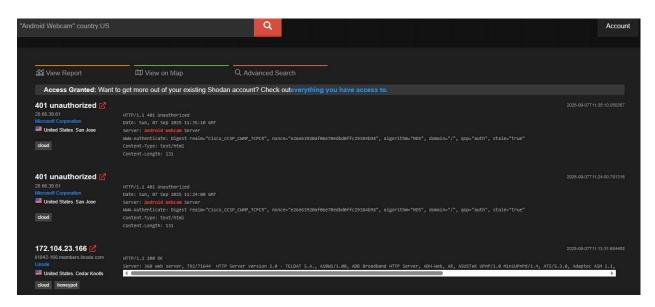
IoT Devices Research Using Shodan.io:

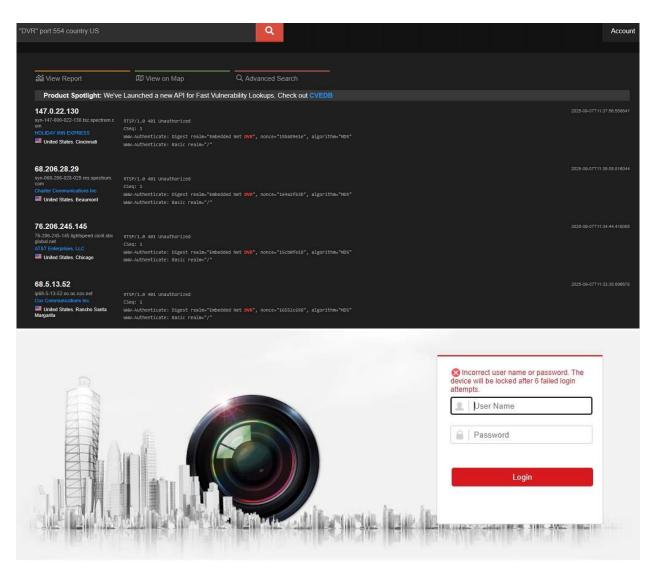
Device Type	Search Query (Shodan.io)	Expected Results
Yawcams (Webcams)	"Yawcam" country:US	Exposed webcam IPs
WebcamXP	"WebcamXP" country:US	Live camera feeds
Android IP Webcam	"Android Webcam"	Exposed mobile cameras
	country:US	
Security DVRs	"DVR" port:554 country:US	Open security cameras

HP Printers	"HP Printer" country:US	Open HP printers on the internet
Xerox Printers	"Xerox Printer" country:US	Exposed Xerox printers
Epson Printers	"Epson Printer"	Open Epson devices
Canon Printers	"Canon Printer"	Vulnerable Canon printers
Yamaha Stereos	"Yamaha" country:US	Open Yamaha devices
Apple AirPlay Receivers	"AirPlay" country:US	Exposed Apple AirPlay devices
Chromecasts / Smart	"Chromecast" port:8008	Publicly accessible Chromecast
TVs		devices
OctoPrint 3D Printers	"OctoPrint"	Open 3D printer controllers
FTP Servers	"220 Anonymous FTP"	FTP servers allowing anonymous
	port:21	login

Output Screenshots of Shodan.io Results:

• Webcams:



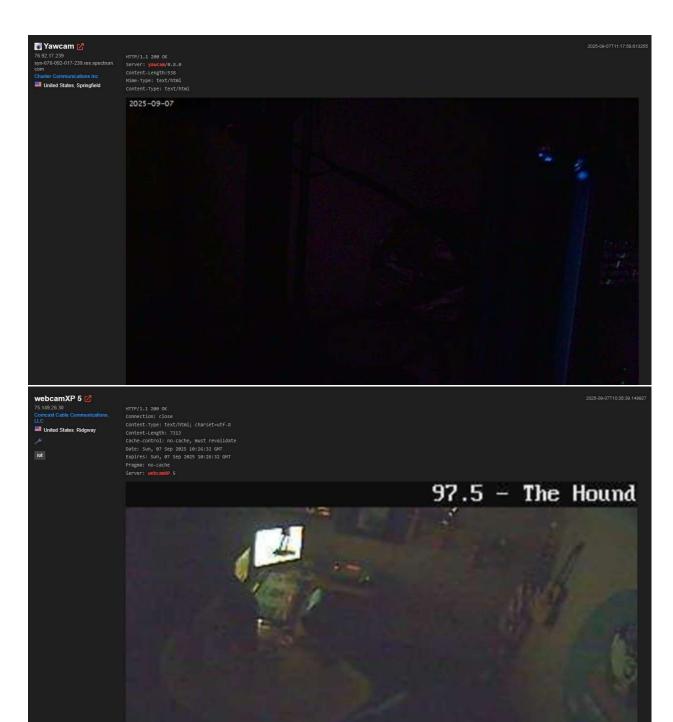


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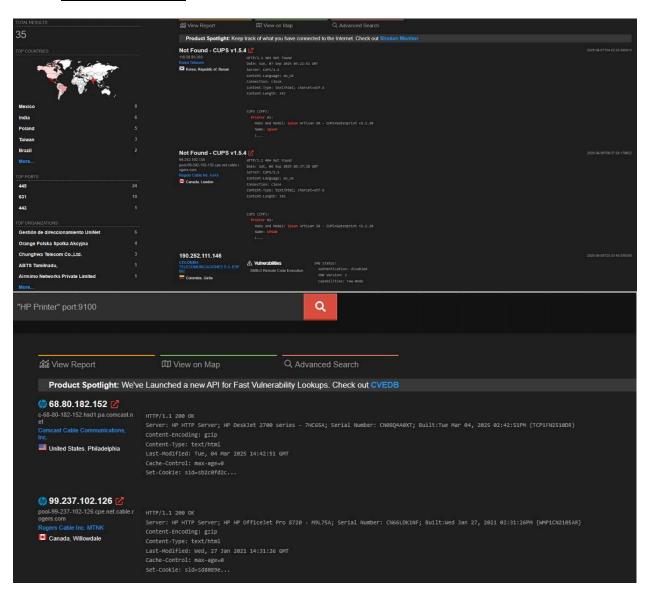
It's a webcam!

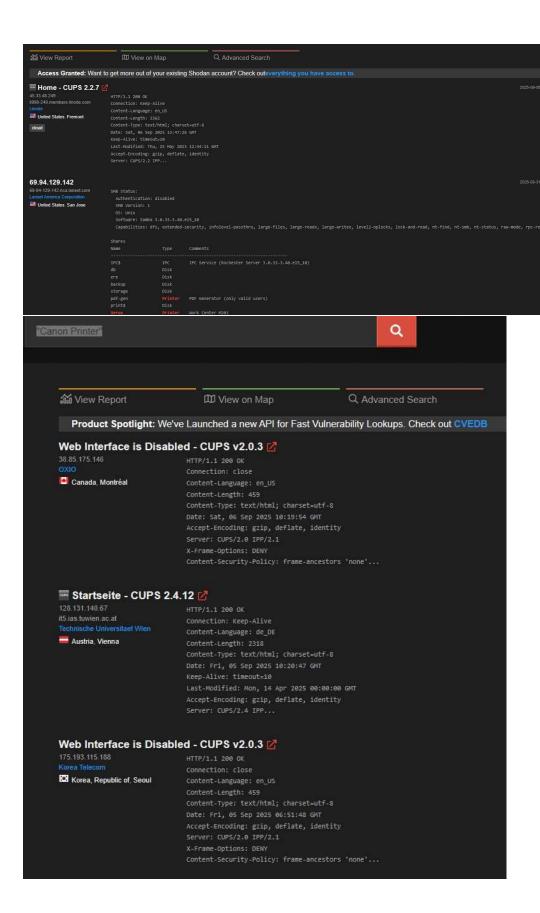


www.yawcam.com

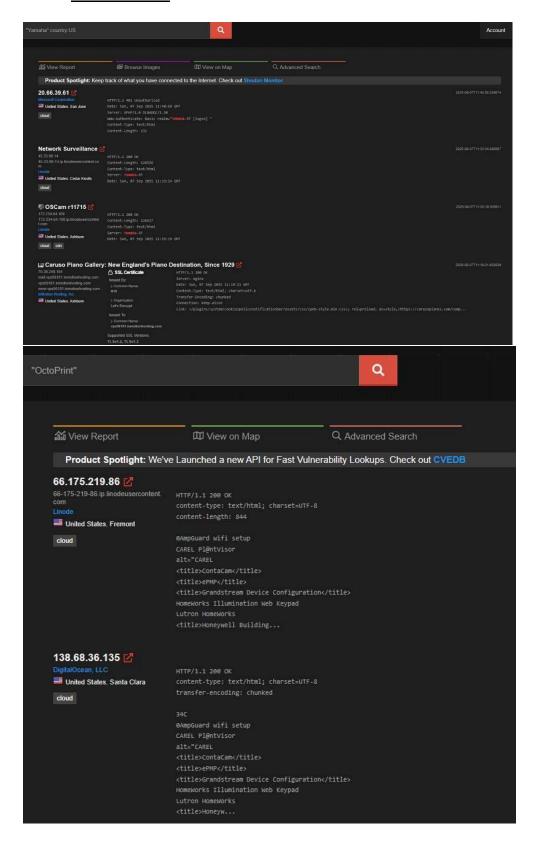


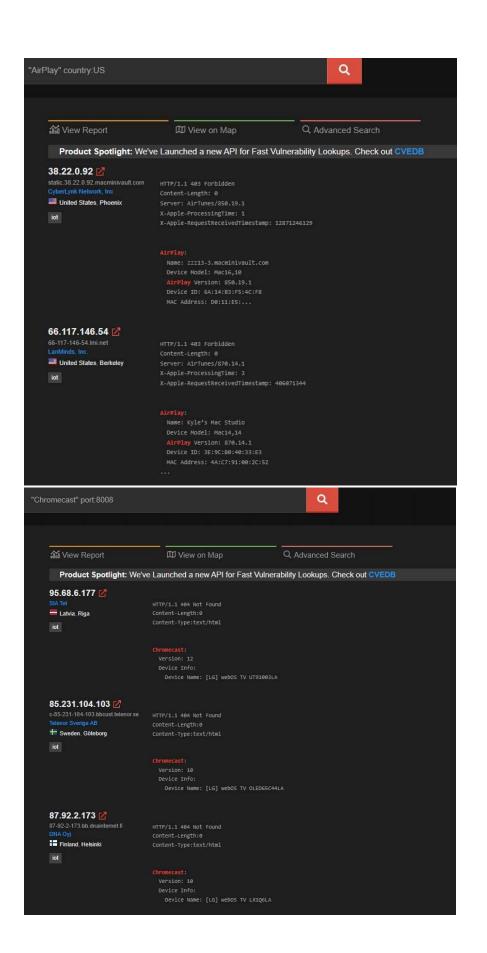
Printers & Copiers:





• Home Devices:





• FTP Servers Anonymous Login:

