

FAMILY
CYBERSECURITY
AND
PRIVACY PROTECTION

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WHAT TECHNOLOGY **CAN'T** DO

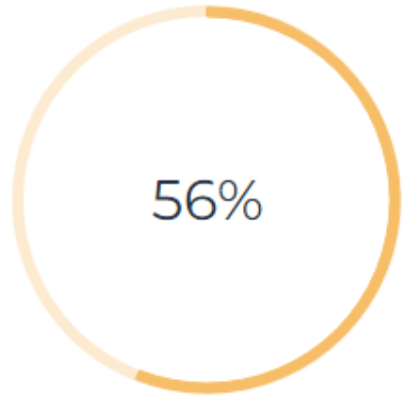
- Replace parenting
- Change a sinful heart
- Completely protect a family

Layers to an Onion

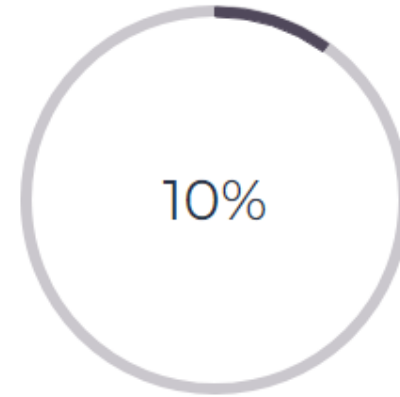
- Physical devices (Firewall, Routers)
- Computer Software (Anti-Virus, Anti-Malware)
- Parent Awareness



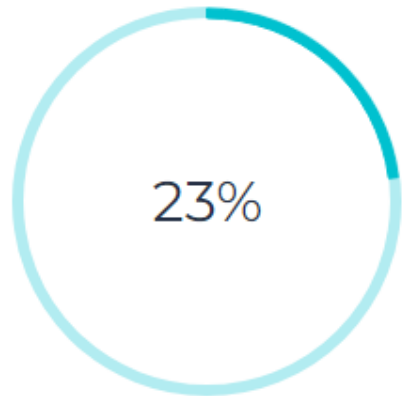
Inappropriate content facts and statistics



The NSPCC found that 56 % of 11-16 year olds have seen explicit material online



According to [Ofcom](#), one in ten children aged 8 -11 who go online say they have seen something nasty or worrying online



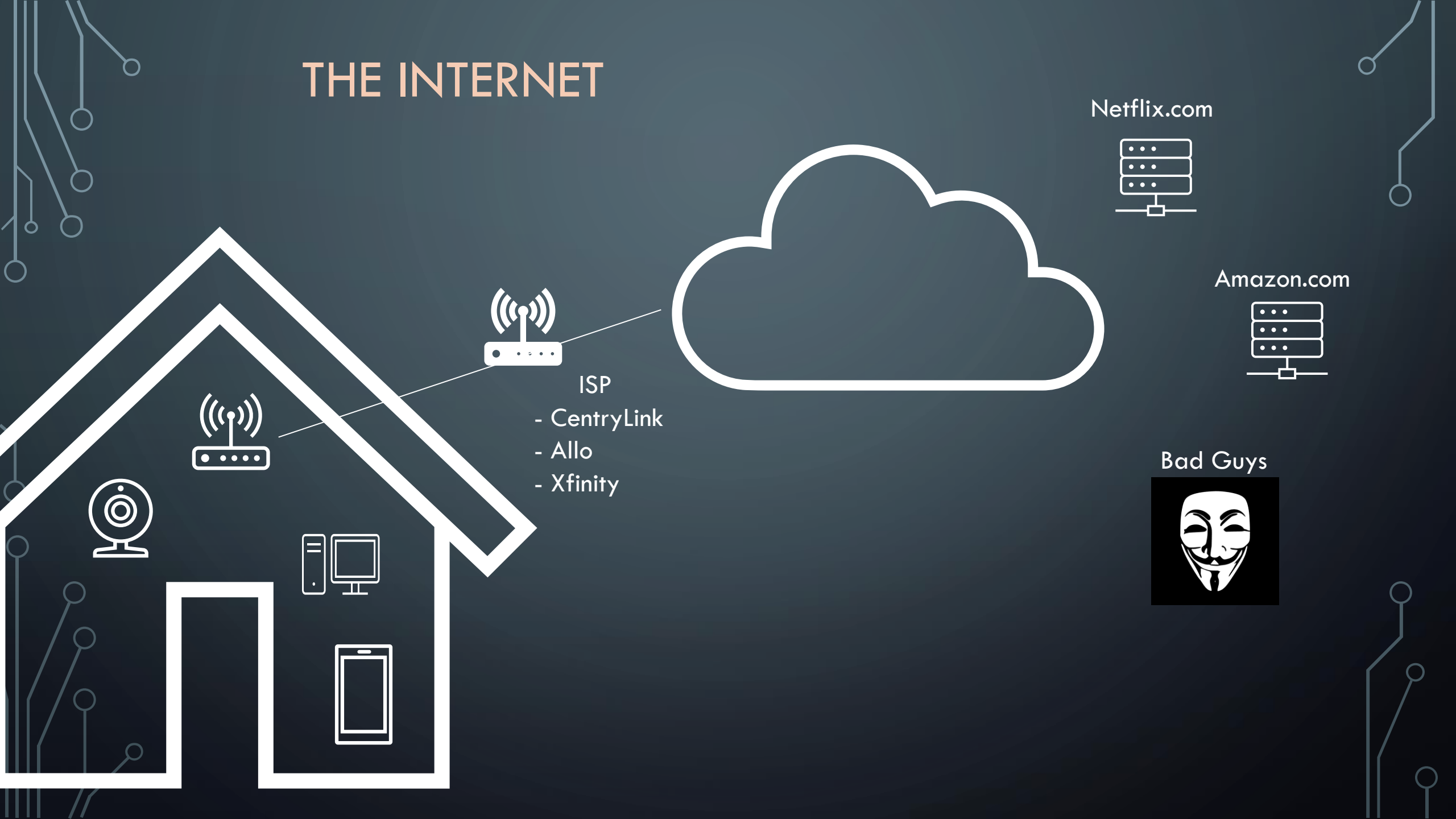
Our research shows that over 23% of children have been exposed to hate speech online. While only 9% of parents are aware of their child's experience

We CAN do better!

WHAT TECHNOLOGY CAN DO

*stats from <https://www.internetmatters.org/>

THE INTERNET



Netflix.com



Amazon.com



ISP

- CentryLink
- Allo
- Xfinity



Bad Guys



UNPROTECTED HOME NETWORKS

Modem



Router / Wi-Fi



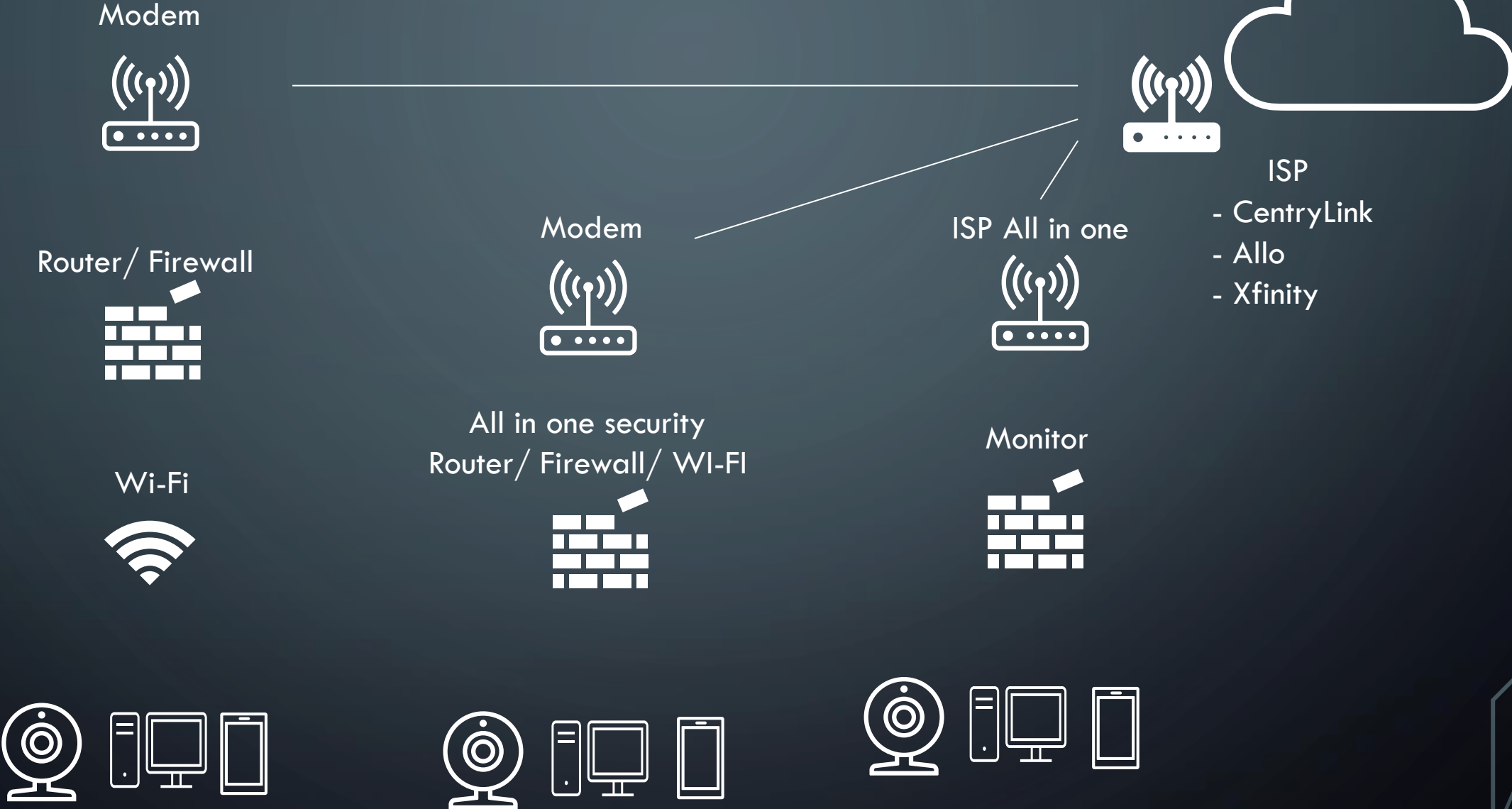
All in one



ISP

- CentryLink
- Allo
- Xfinity

PROTECTED HOME NETWORKS



ROUTER (TRAFFIC COP) OPTIONS

- Concepts achieved different ways
- Use what you have
- Upgrade when you need to

Firewalla	Ubiquiti Dream router	What you already own
\$200-\$600	\$200-300	\$0
400 – 10 gig	700 mbs	??
3 devices	All in one	??



MAGIC AT ROUTER (TRAFFIC COP)



Privacy Protection



Cyber Security



Parental Control



Ad Block



Firewall



Parental Control



DNS over HTTPS



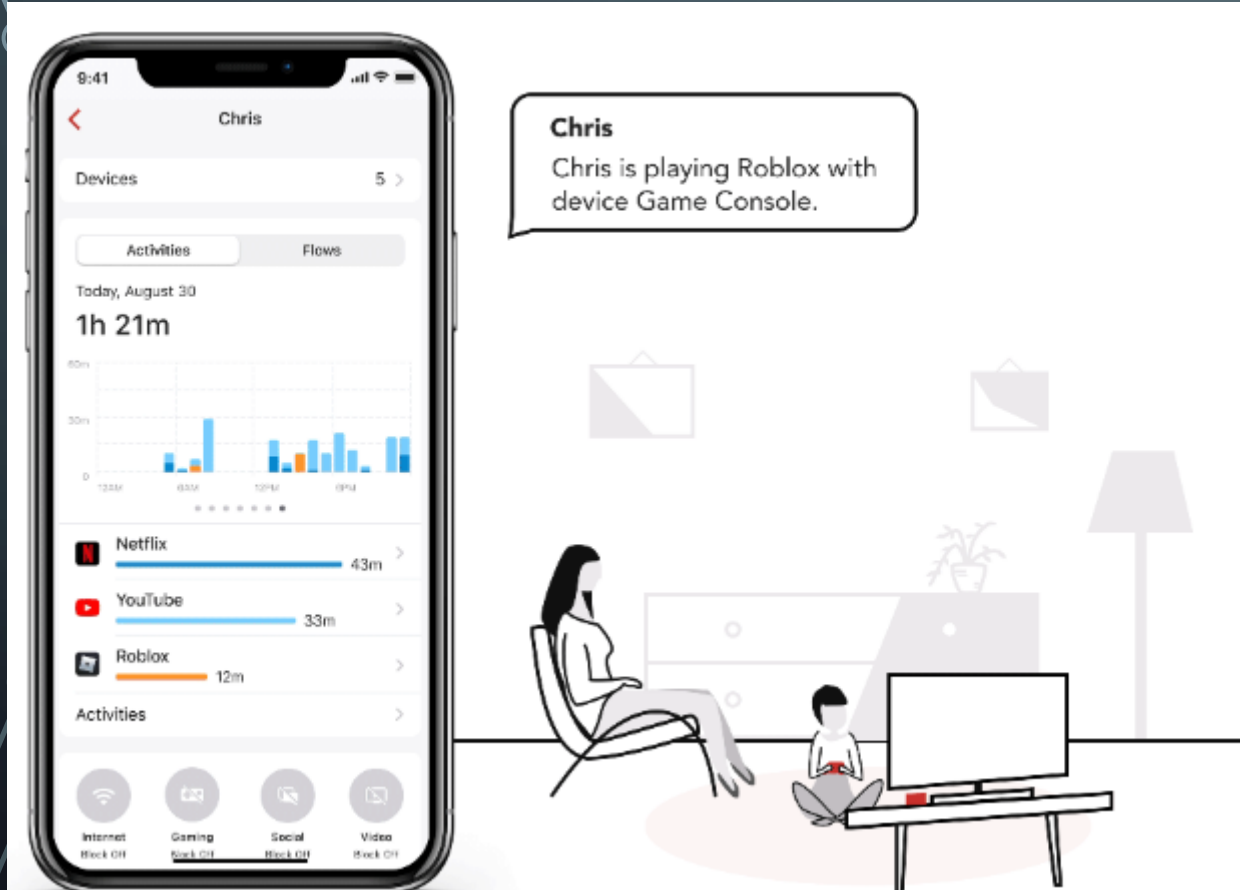
VPN Server + Client



Intrusion Prevention



PARENTAL CONTROL



Parenting is a tough job, but Firewalla makes things easier. With a simple tap of a button, you can:

- Restrict internet access
- Stop any devices from playing online games
- Block social networking
- Monitor online activity
- Receive online activity alerts
- Block malicious and adult content
- Block popular applications
- **Automatically schedule any of the rules above**

PARENTAL CONTROL



Parental Control

1:27

Firewalla

5 Devices 572 Alarms 5 Rules

Quarantine Recent

Internet Block Off Gaming Block Off Social Block Off Video Block Off

Network Routes Smart Queue

Data Usage VPN Server AD

Family Open Ports Mode

VPN Client DNS Service More

1:27

Family

Features designed for families.

Family Protect

Mode Native >

Apply To All Devices >

Family Protect will filter out violent and porn materials. It may take a few minutes to take effect.

[Learn more about Family Protect.](#)

Safe Search

Safe search will filter out pornography and potentially offensive content in search results from well-know search engines.

[Learn more about Safe Search.](#)

Social Hour

One tap to block all online social networking activities for one hour. Enjoy your real social life.

[Learn more about Social Hour.](#)

9:41

Cancel Mode Save

Native

3rd-Party

Use pre-configured rules and features managed by Firewalla.

Block Flows

18+ All Porn Sites

All Gambling Sites

All VPN Sites

DoH Services

Apple Private Relay

Create blocking rules on devices to which Family Protect is applied.

Features

Active Protect (Strict)

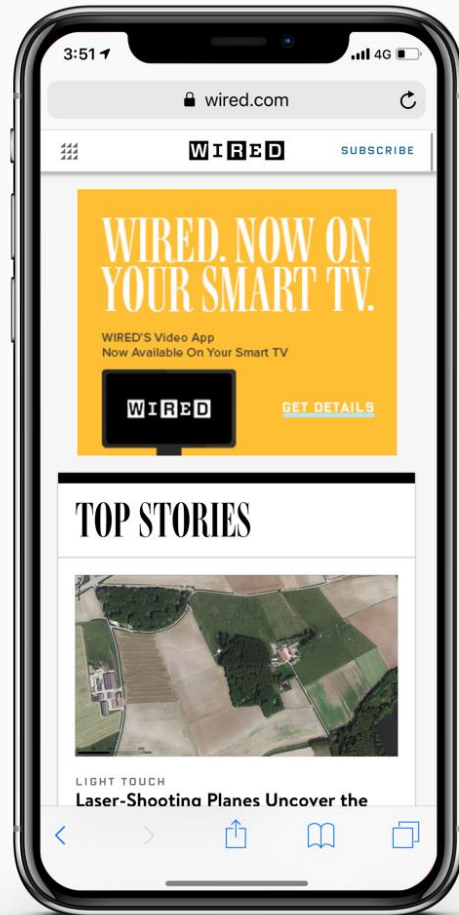
AD Ad Block (Strict)

Set features to "Strict" mode to give your family an extra protection.

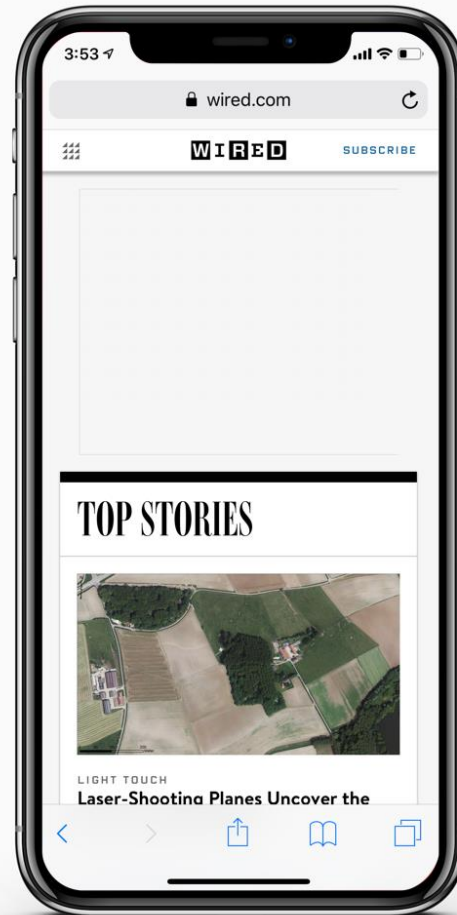
Family Protect automatically blocks access to sites with pornographic and violent content.

Turn it on by tapping the **Family** button on your Firewalla's main page or in the Features list, then toggling **Family Protect** on. You can choose which devices you apply it to.

AD - BLOCK



AdBlock Off



AdBlock On



Privacy Protection



Cyber Security



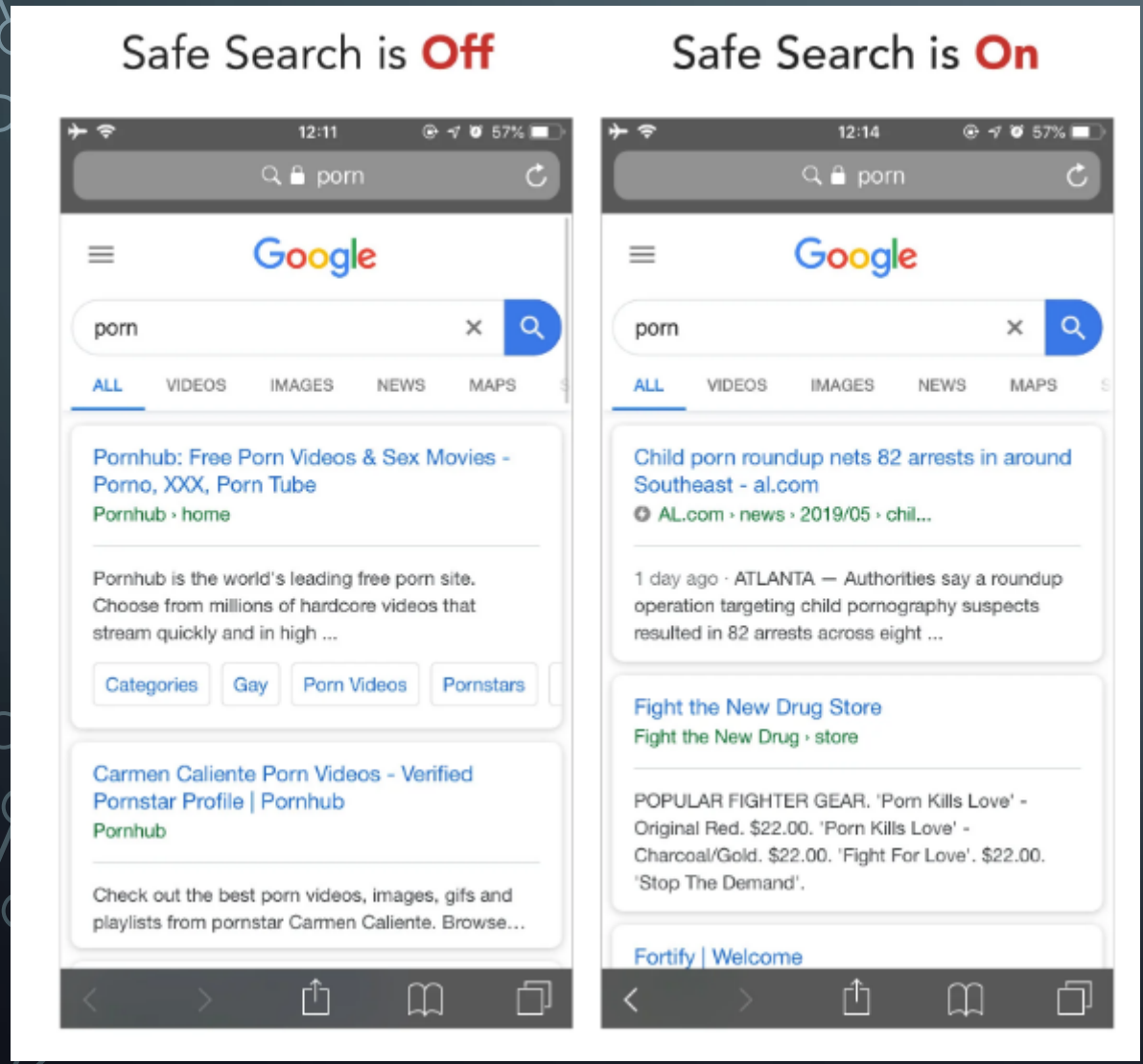
Parental Control

Website ads and trackers have been frustrating internet users for years

Firewalla's built-in ad blocker makes sure you don't see ads and the ads don't see you.

- Block ads across all devices

SAFE SEARCH

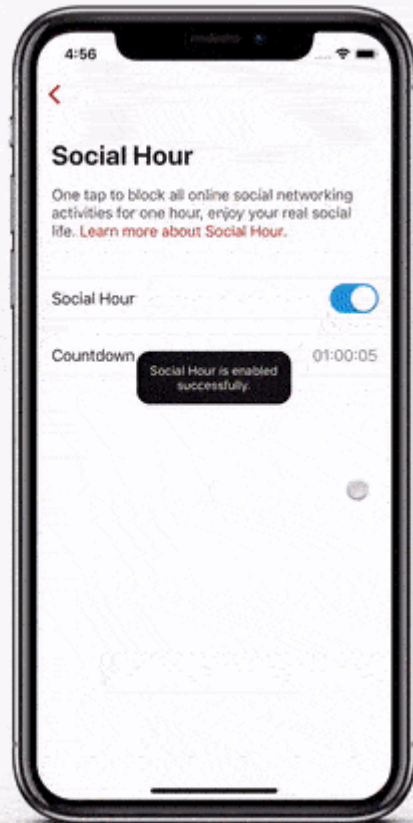


Safe Search is a feature used by major search engines like Google Search, YouTube, Bing, and DuckDuckGo to filter adult content out of search results.

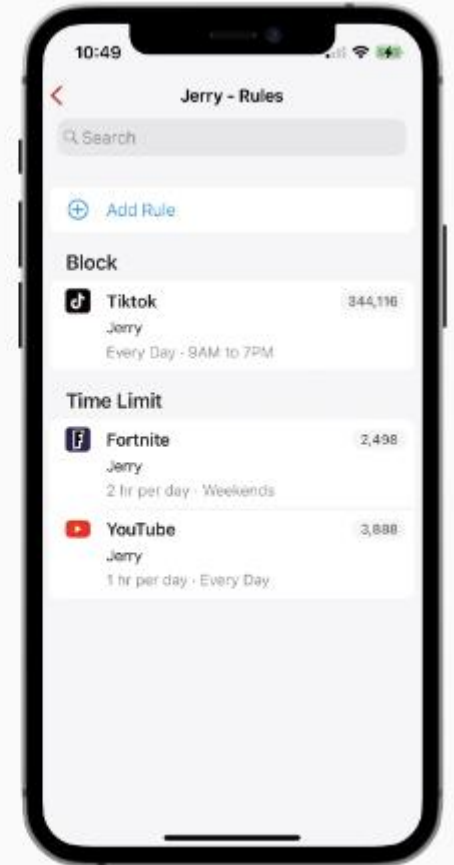
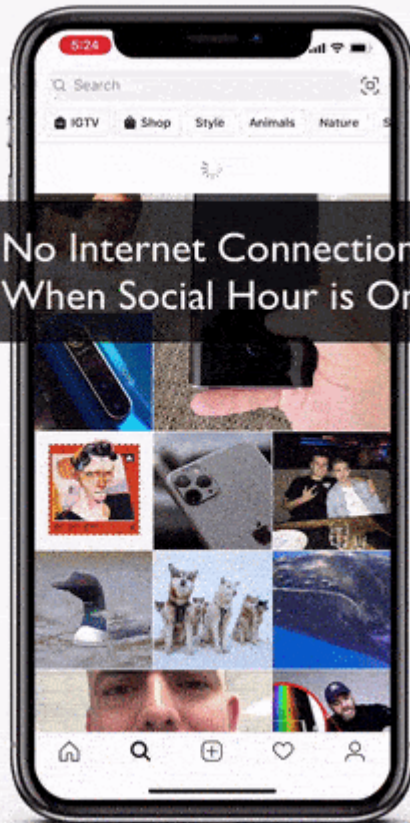
If anyone enters an inappropriate or suggestive phrase in the search bar, the results will be filtered for offensive content.



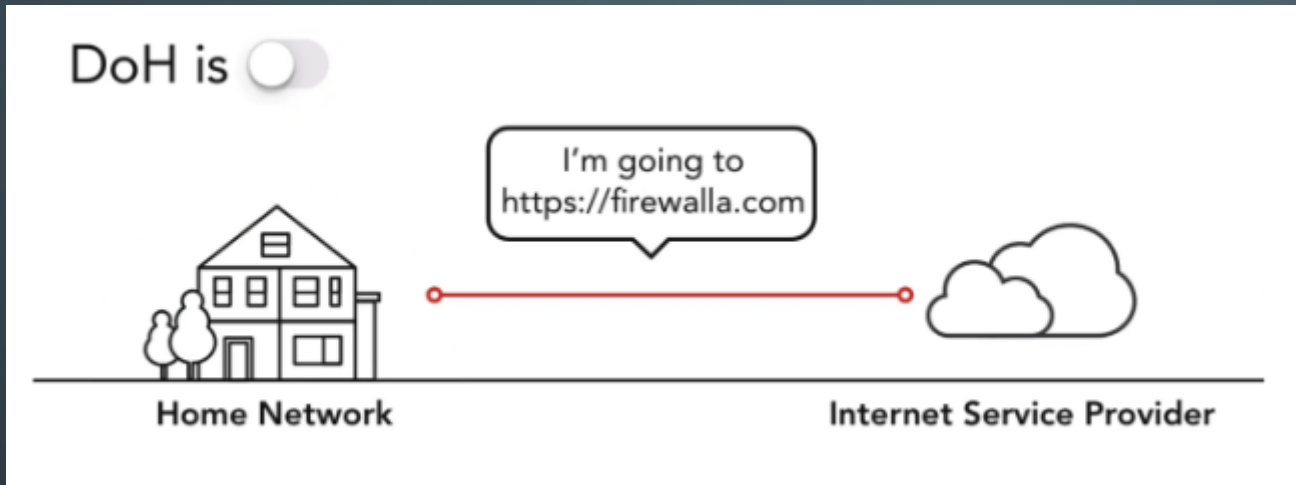
SCHEDULED RULES PER DEVICE



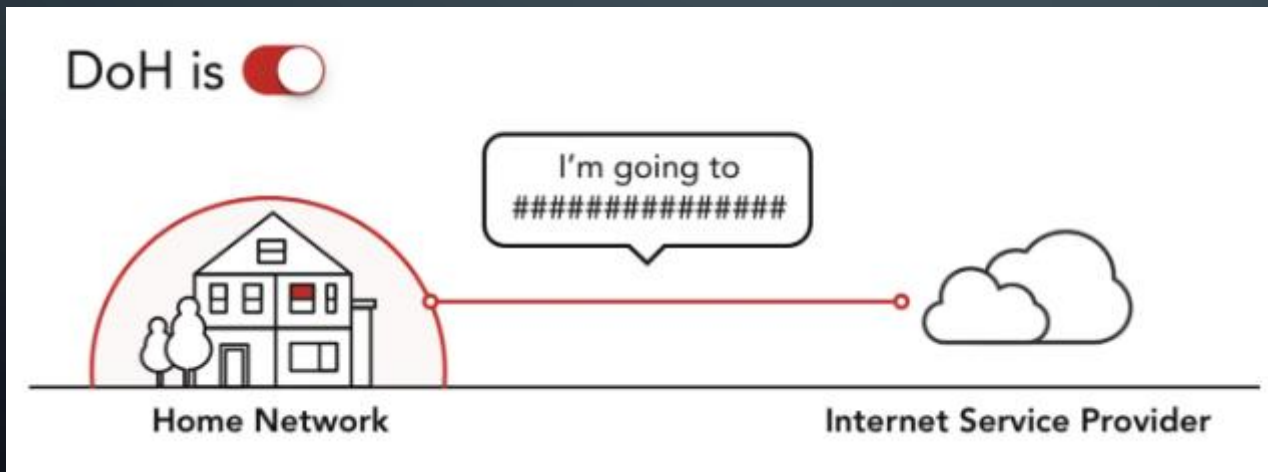
No Internet Connection
When Social Hour is On



DNS OVER HTTPS



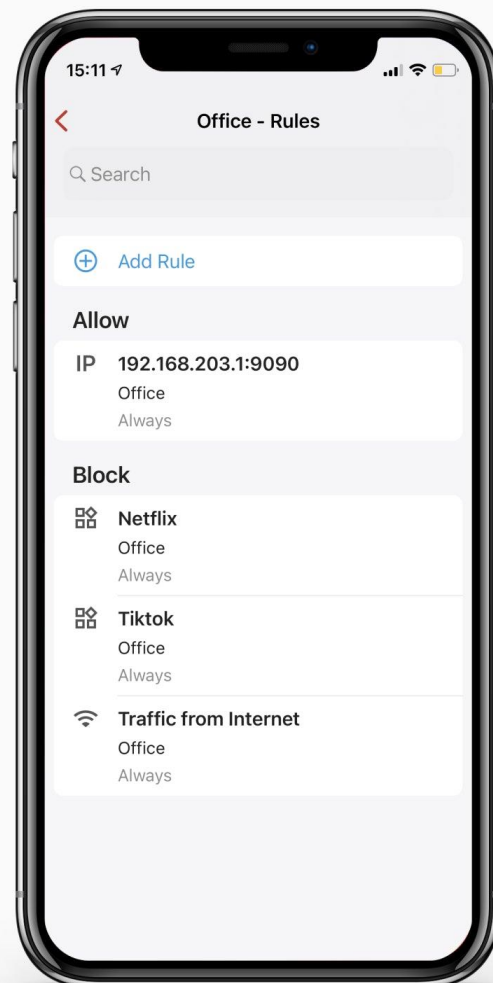
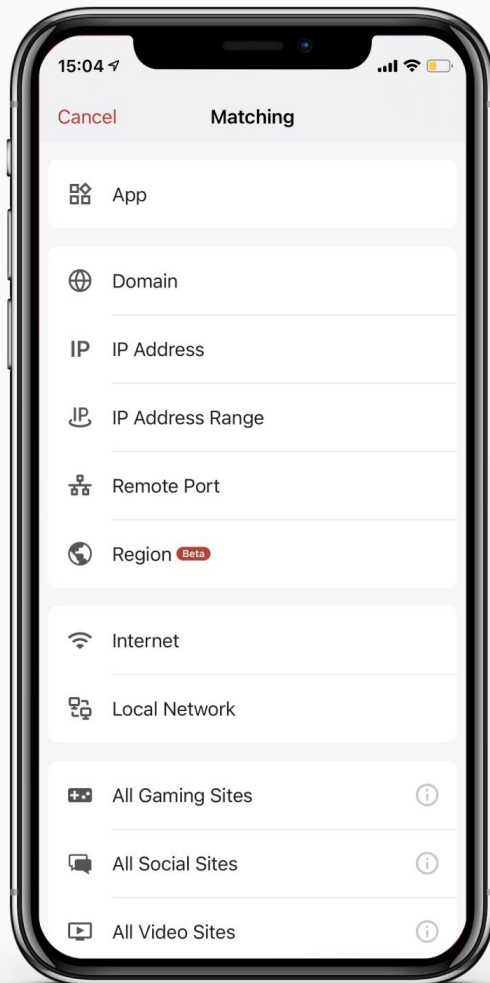
Traditionally, DNS requests are sent in plain text between the client and the DNS server.



DNS over HTTPS (DoH) sends DNS requests encrypted over HTTPS. It makes DNS exchange more secure and protects user privacy.



BLOCK INCOMING BAD TRAFFIC

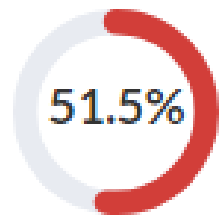


- Block domains or domains with wildcards.
- Block IP addresses and subnets
- Block activities such as
 - gaming,
 - social,
 - video,
 - porn,
 - gambling
- Block based on location and region
- Block any port
- Get notified when devices are online or offline
- Give exceptions to blocking rules



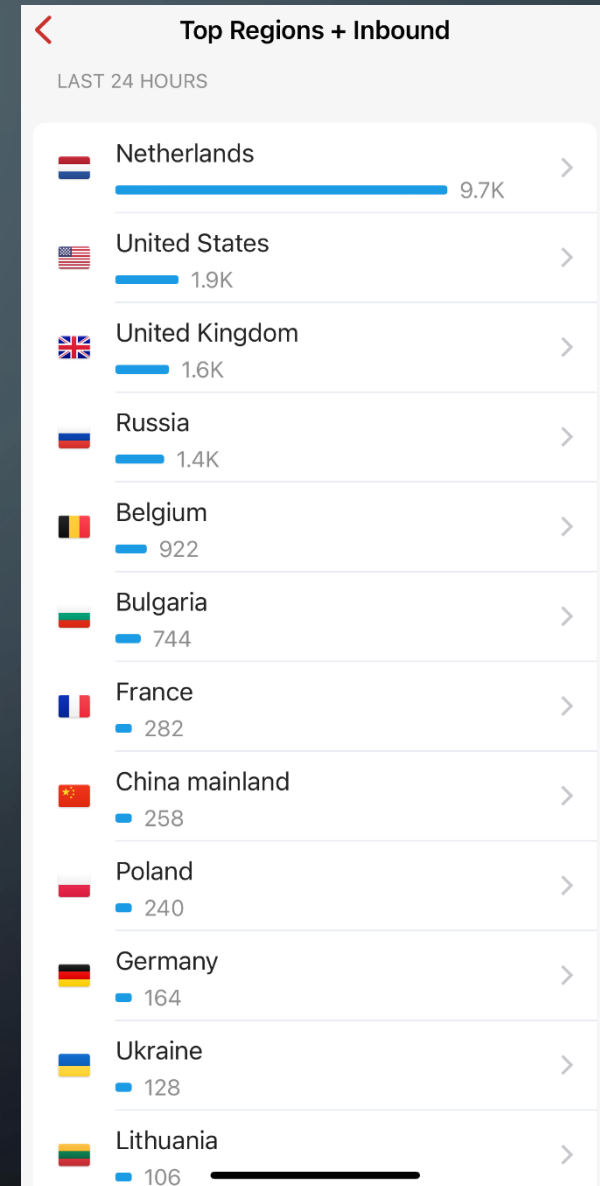
BAD TRAFFIC - RESULTS

Blocked Flows



● 112,756 Blocked

● 218,789 All Flows



LOGGING AND MONITORING

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Alarms



Video Activity



Mar 16, 2022 at 7:20 PM

Kid's iPhone is watching video on r3---sn-4mekns.googlevideo.com

Archive

Mute

Block

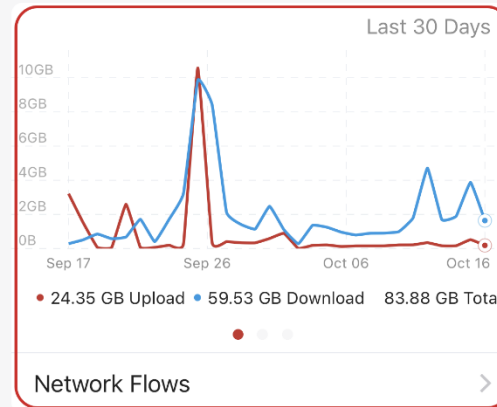
11:26



Jerrys-Mini-767

Flows in last 24hrs
45,961

Blocked
6,919



Live Throughput



0 kb/s Upload

0 kb/s Download



Internet
Block Off



Gaming
Block Off



Social
Block Off



Video
Block Off

11:26



Jerrys-Mini-767

Last 24 Hours

View Blocked

All Flows

45,961

Apps | Upload | Download | History

Exclude | Gaming | Social | Video | Por

- 11:26 AM ...ub-shard2-19-3.zendesk.com
- 11:26 AM fonts.gstatic.com
- 11:26 AM play.google.com
- 11:26 AM ...ub-shard2-19-4.zendesk.com
- 11:26 AM ...ub-shard2-19-3.zendesk.com
- 11:26 AM ...ub-shard2-19-4.zendesk.com
- 11:26 AM analytics.yopify.com
- 11:26 AM stats.g.doubleclick.net
- 11:26 AM ...ub-shard2-19-4.zendesk.com
- 11:26 AM mtalk.google.com
- 11:26 AM ...ub-shard2-19-3.zendesk.com
- 11:26 AM app.omnisend.com
- 11:26 AM argus.shopifycloud.com
- 11:26 AM config.extension.grammarly.com
- 11:26 AM capi.grammarly.com
- 11:26 AM config.extension.grammarly.com
- 11:26 AM ...ub-shard2-19-3.zendesk.com
- 11:26 AM nexus-websocket-a.intercom.io
- 11:26 AM app.omnisend.com
- 11:26 AM adsmanager.facebook.com

11:27



play.google.com

Oct 17, 2023 at 11:26 AM

Device Jerrys-Mini-767 accessed play.google.com.

DEVICE

Name	Jerrys-Mini-767
IP Address	192.168.213.63
Port	55086
MAC Address	XXXXXXXXXX
Vendor	Apple

DESTINATION

Name	play.google.com
IP Address	142.250.191.78
Port	UDP 443 (https)
http protocol over TLS/SSL	

Route

Block

VPN

Chase.com



Starbucks



you

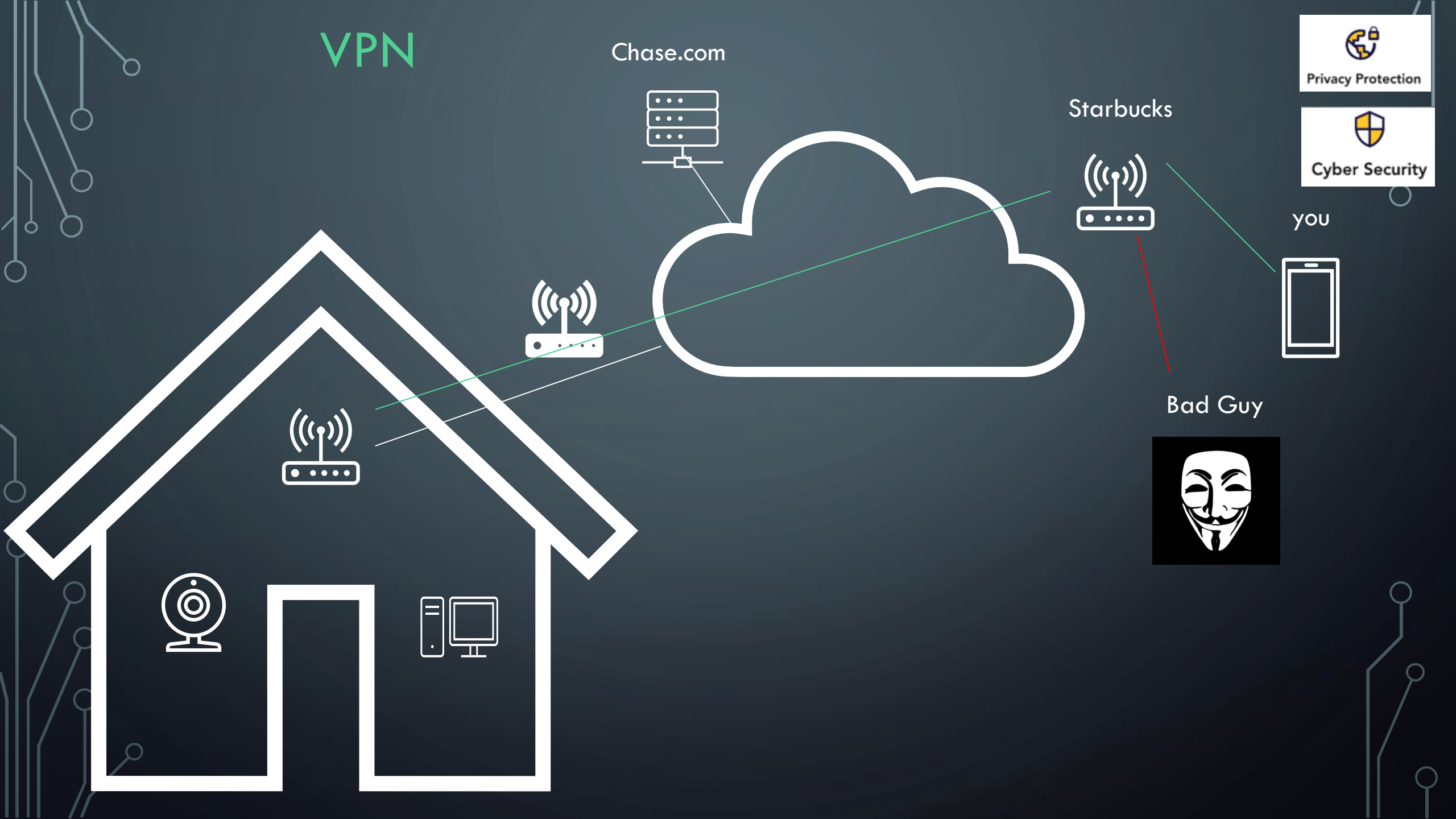


Bad Guy



Privacy Protection

Cyber Security



VPN OUTBOUND

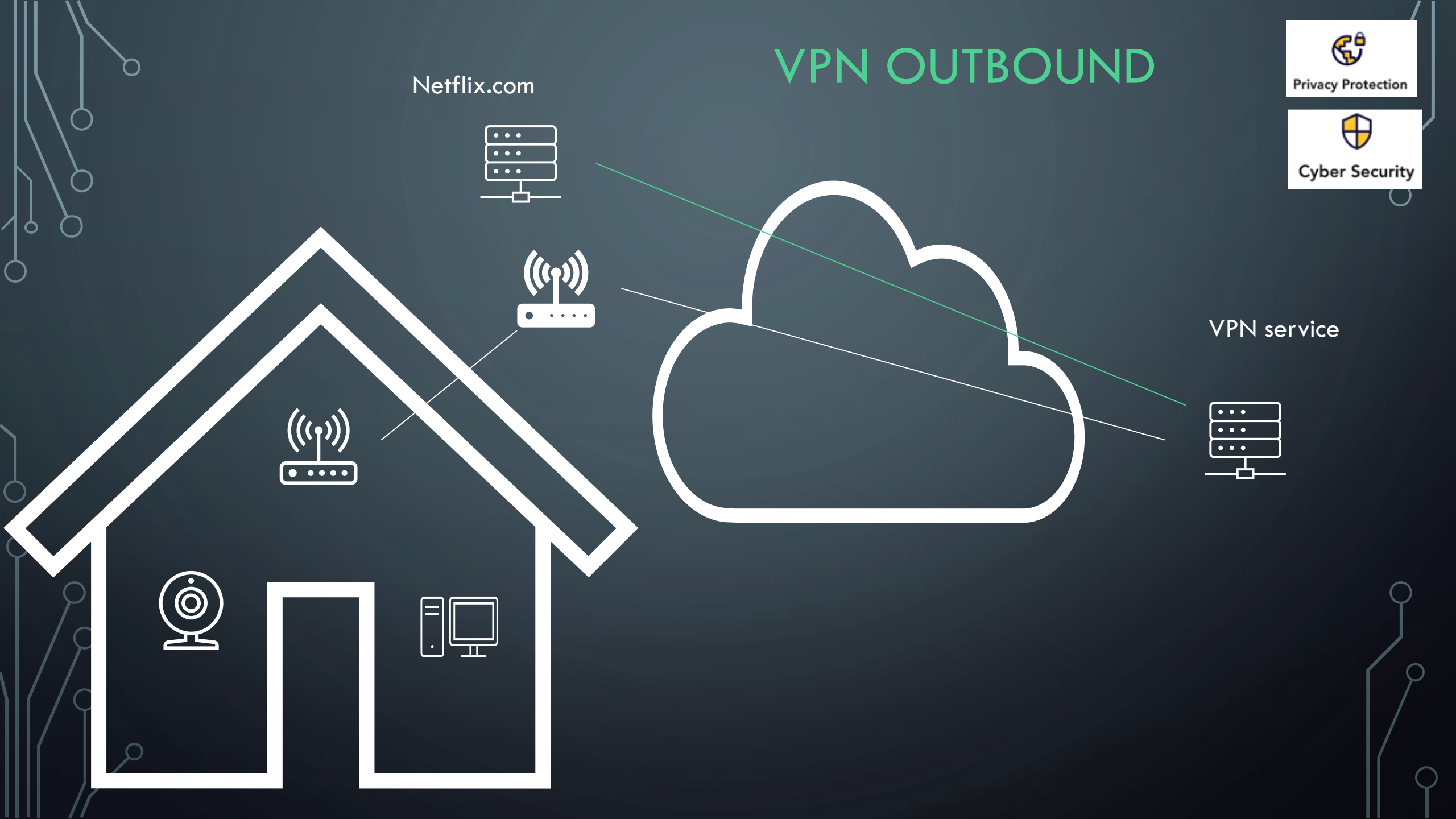

Privacy Protection


Cyber Security

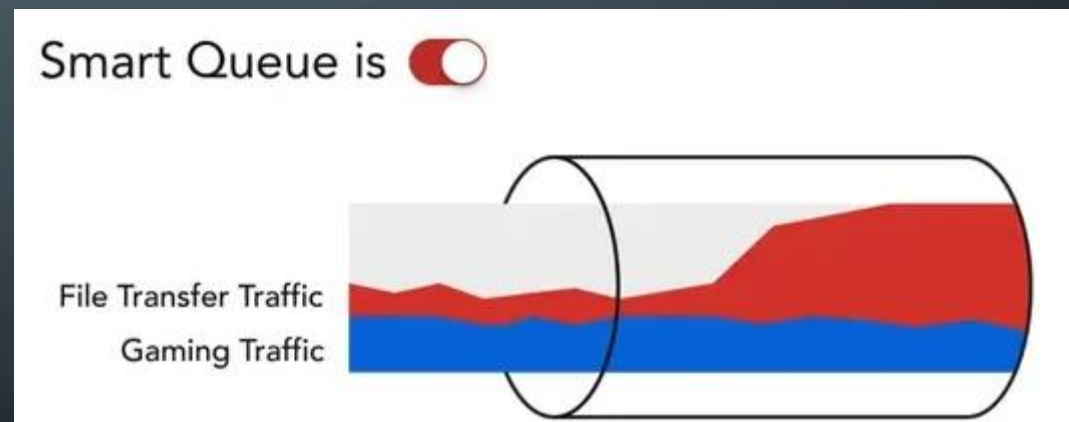
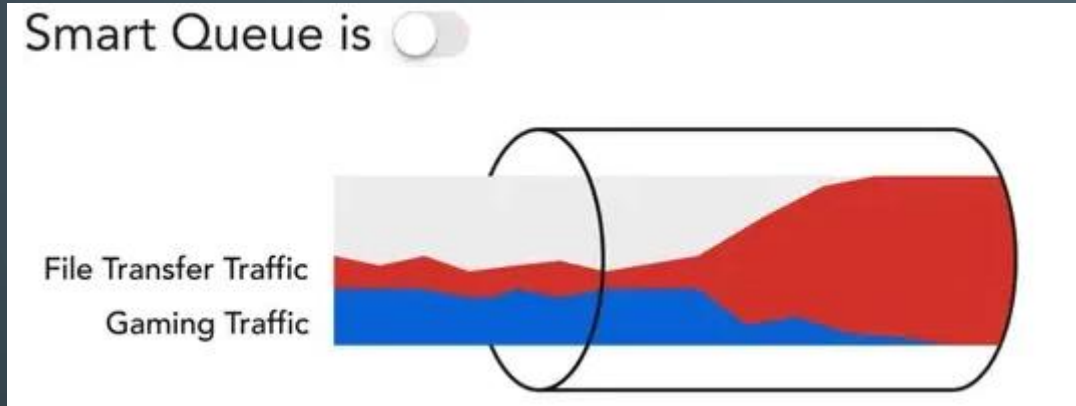
Netflix.com



VPN service



TRAFFIC SHAPING - THROTTLE



QUESTIONS?



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- Thimgantech.com/Firewalla

