FAMILY CYBERSECURITY AND PRIVACY PROTECTION

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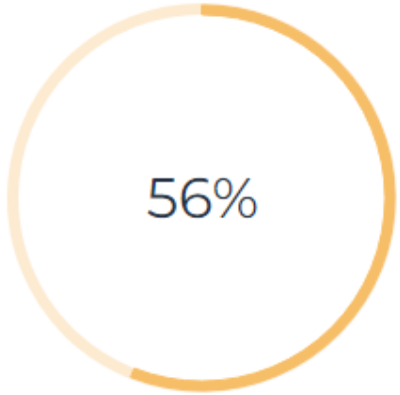
WHAT TECHNOLOGY CAN'T DO

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

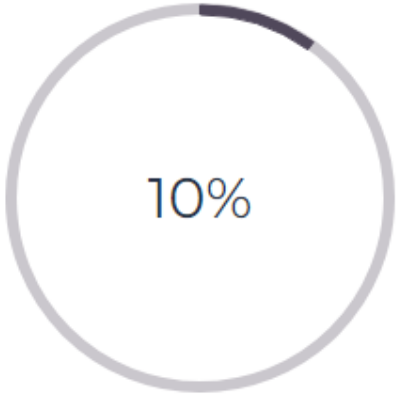
Layers to an Onion

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

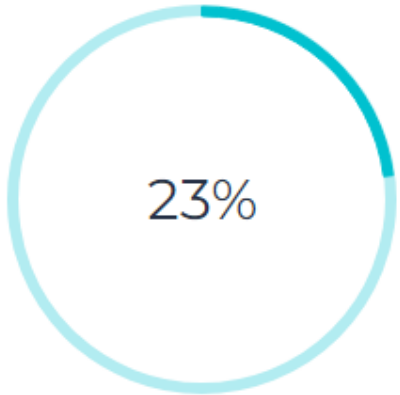
Inappropriate content facts and statistics



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

ISP
- CentryLink
- Allo
- Xfinity

Netflix.com

Amazon.com

Bad Guys

UNPROTECTED HOME NETWORKS

Modem

Router / Wi-Fi

ISP
- CentryLink
- Allo
- Xfinity

All in one

PROTECTED HOME NETWORKS

Modem

ISP
- CentryLink
- Allo
- Xfinity

Router/ Firewall

Modem

ISP All in one

All in one security
Router/ Firewall/ WI-FI

Wi-Fi

Monitor

ROUTER (TRAFFIC COP) OPTIONS

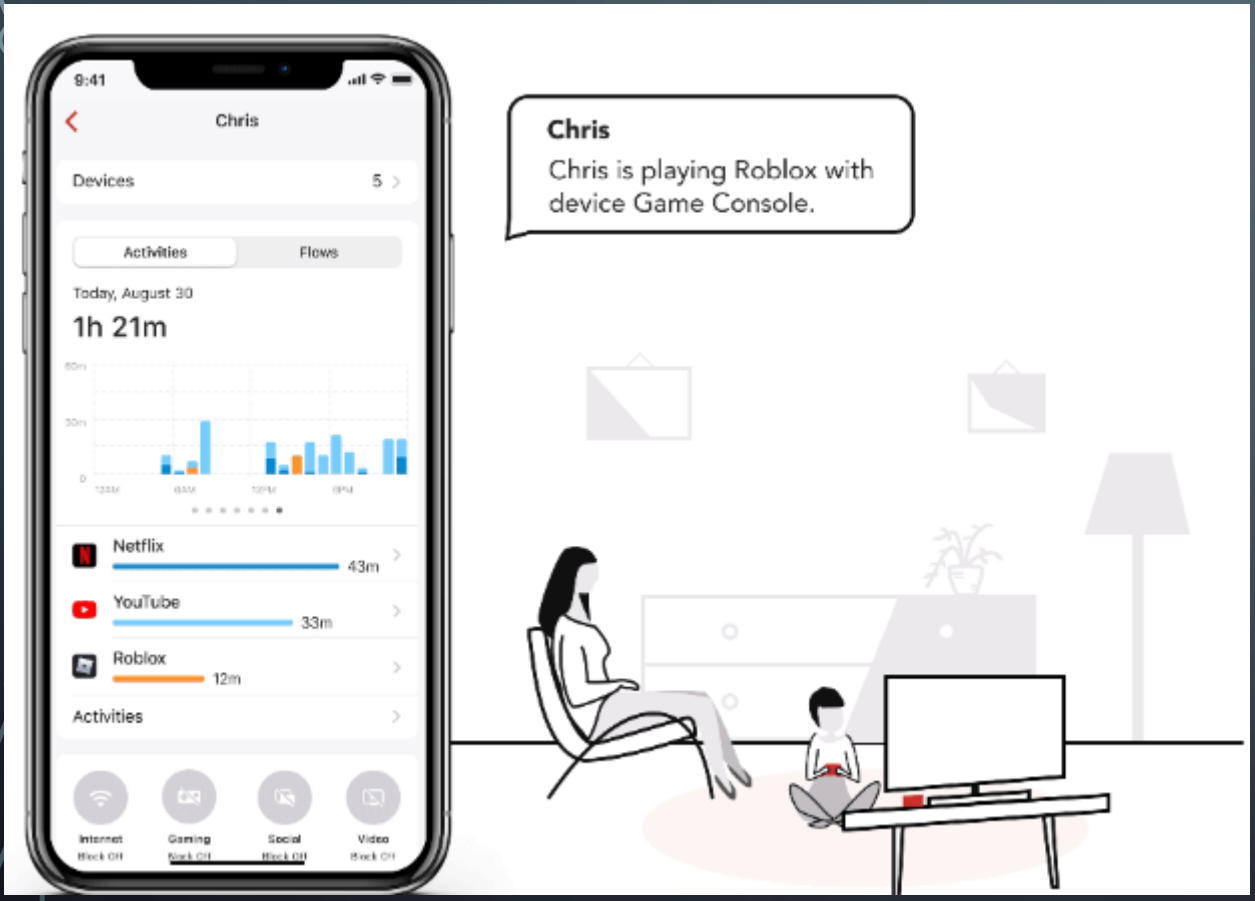
- Concepts achieved different ways
- Use what you have
- Upgrade when you need to

Firewalla	Ubiquity 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)

PARENTAL CONTROL

Parental Control

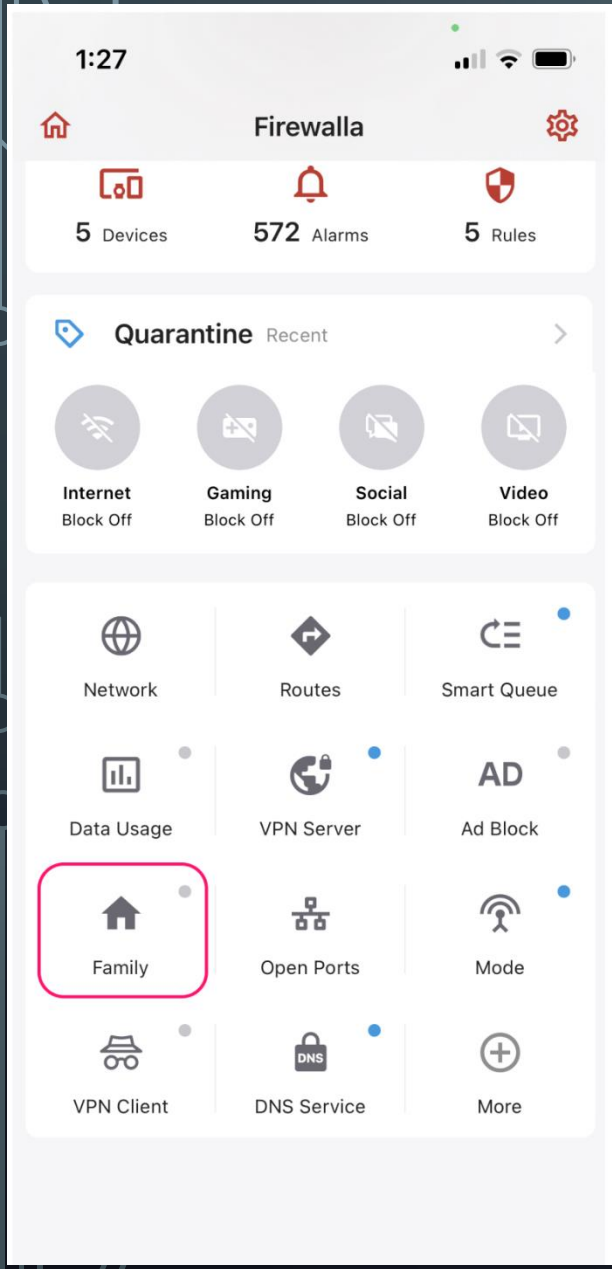


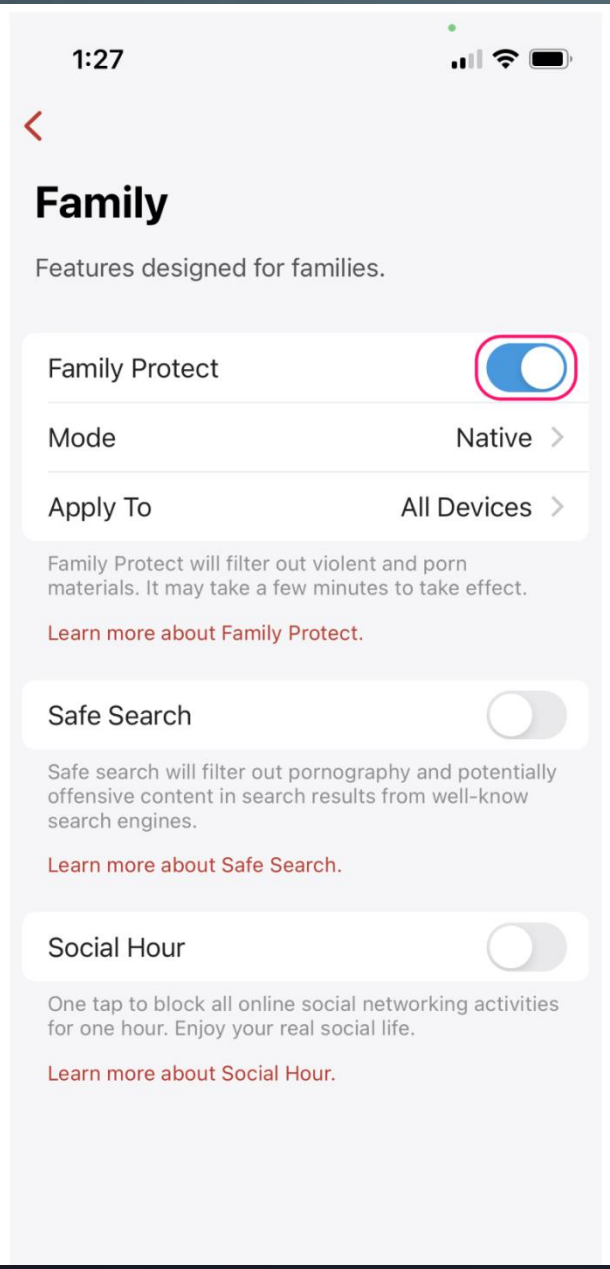
Parenting is a tough job, but Firewalla makes things easier. With a simple tap of a button, you can:

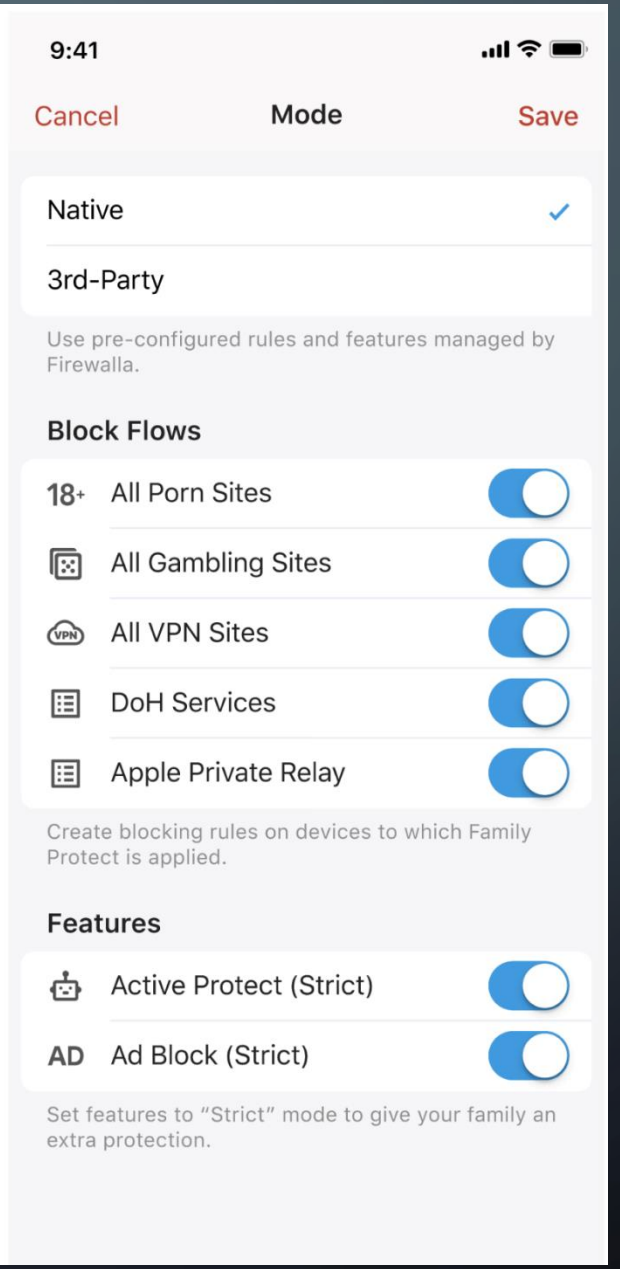
- Restrict internet access
- Stop any devices from playing online games
- Block social networking
- Monitor online activity
- Receive online activity alerts
- Block malicious and adult content
- Block popular applications
- **Automatically schedule any of the rules above**

PARENTAL CONTROL

Parental Control







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

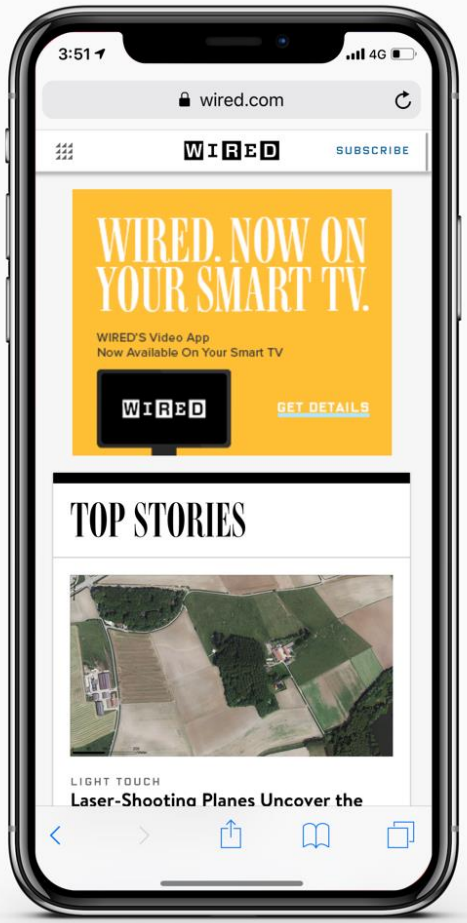
Turn it on by tapping the **Family** button on your Firewalla's main page or in the Features list, then toggling **Family Protect** on. You can choose which devices you apply it to.

AD - BLOCK

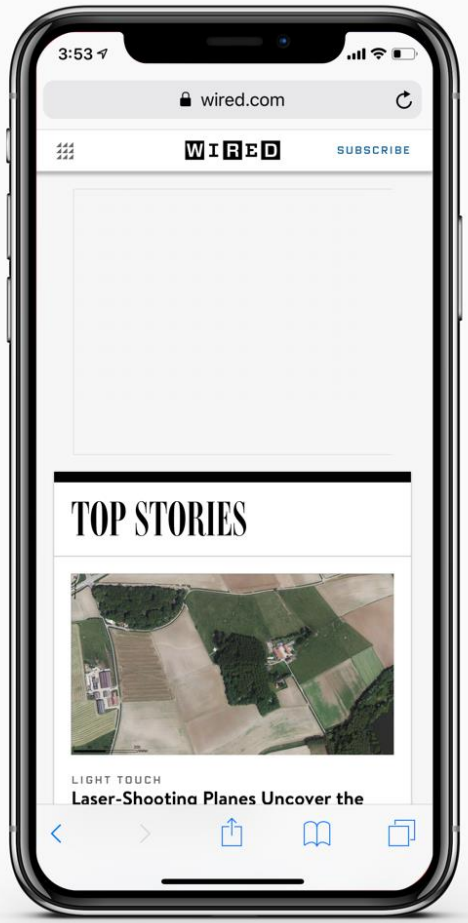
Privacy Protection

Cyber Security

Parental Control



AdBlock Off



AdBlock On

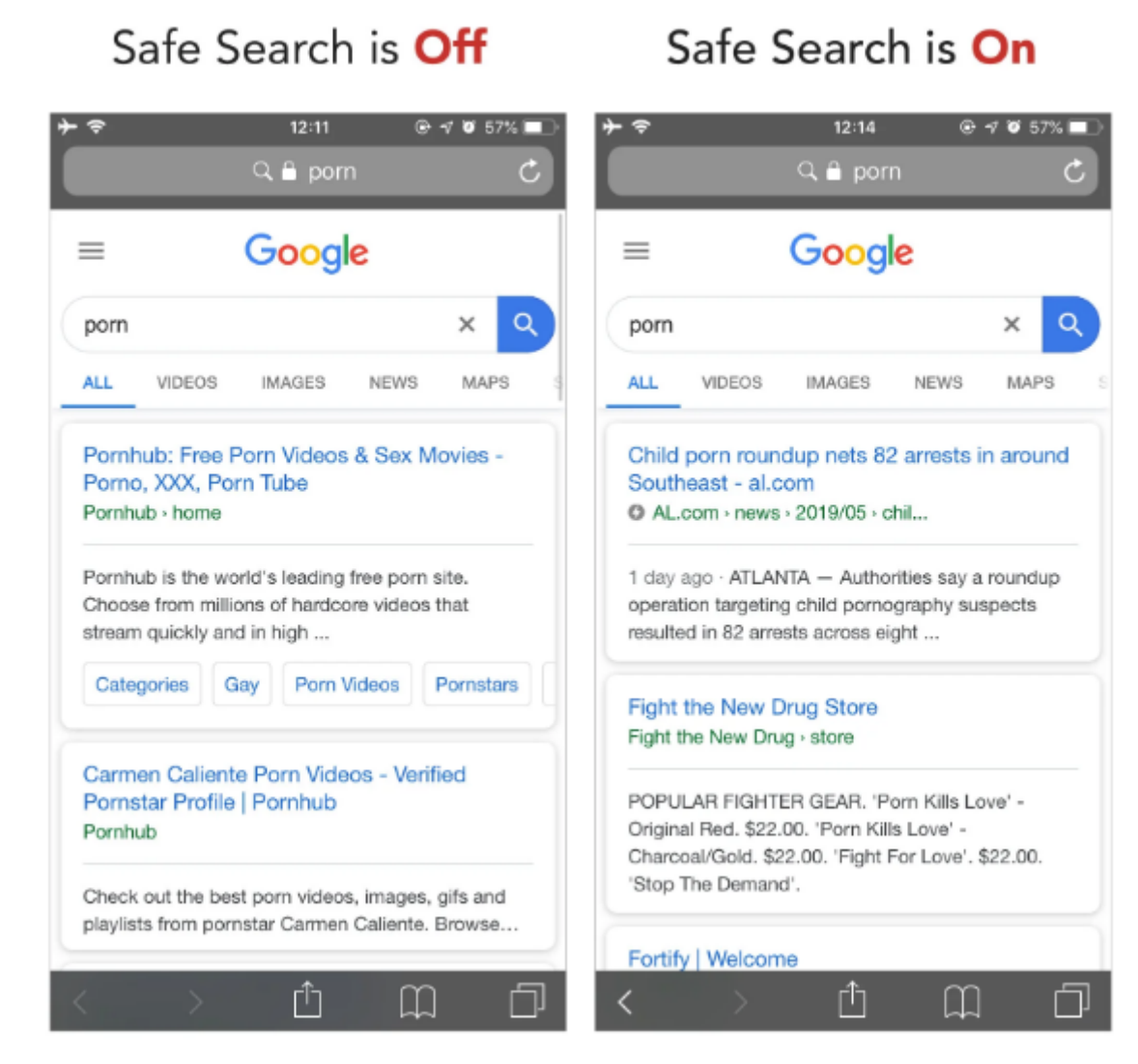
Website ads and trackers have been frustrating internet users for years

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

Parental Control

SAFE SEARCH

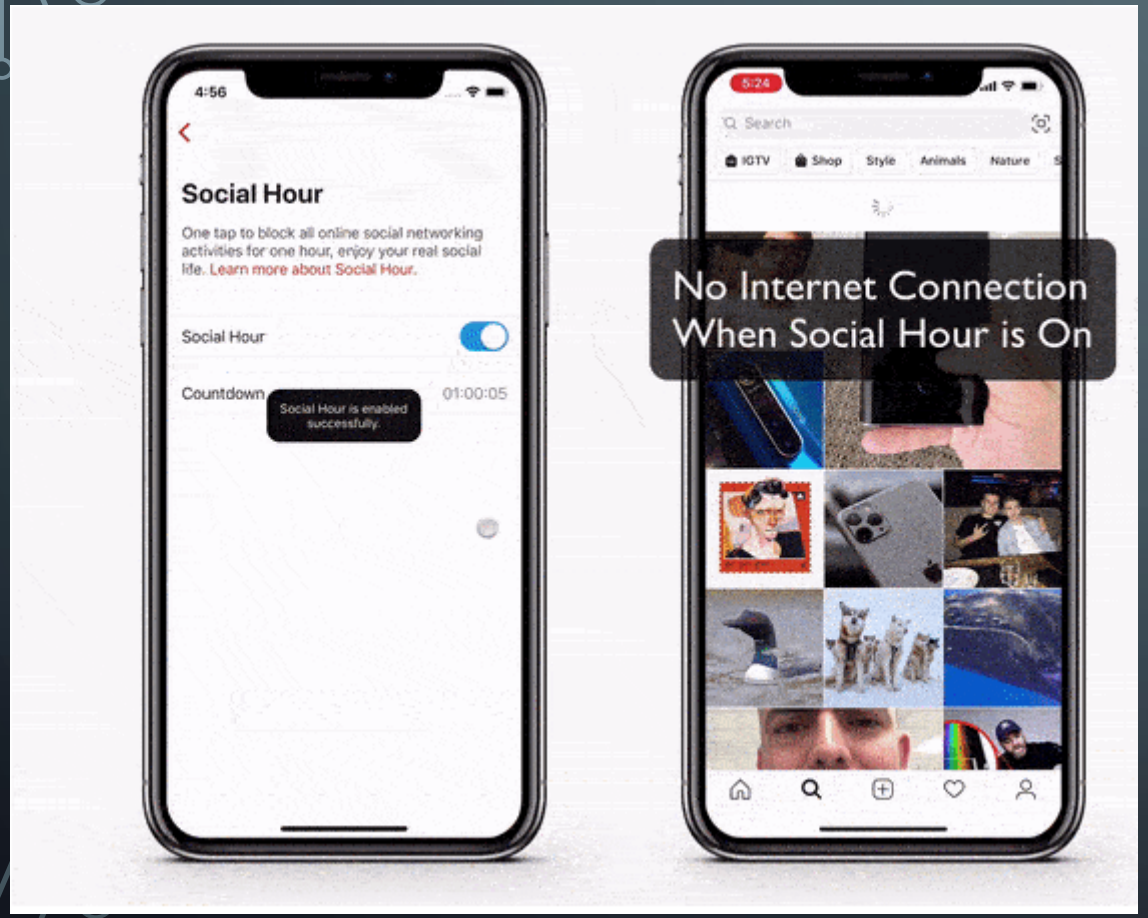


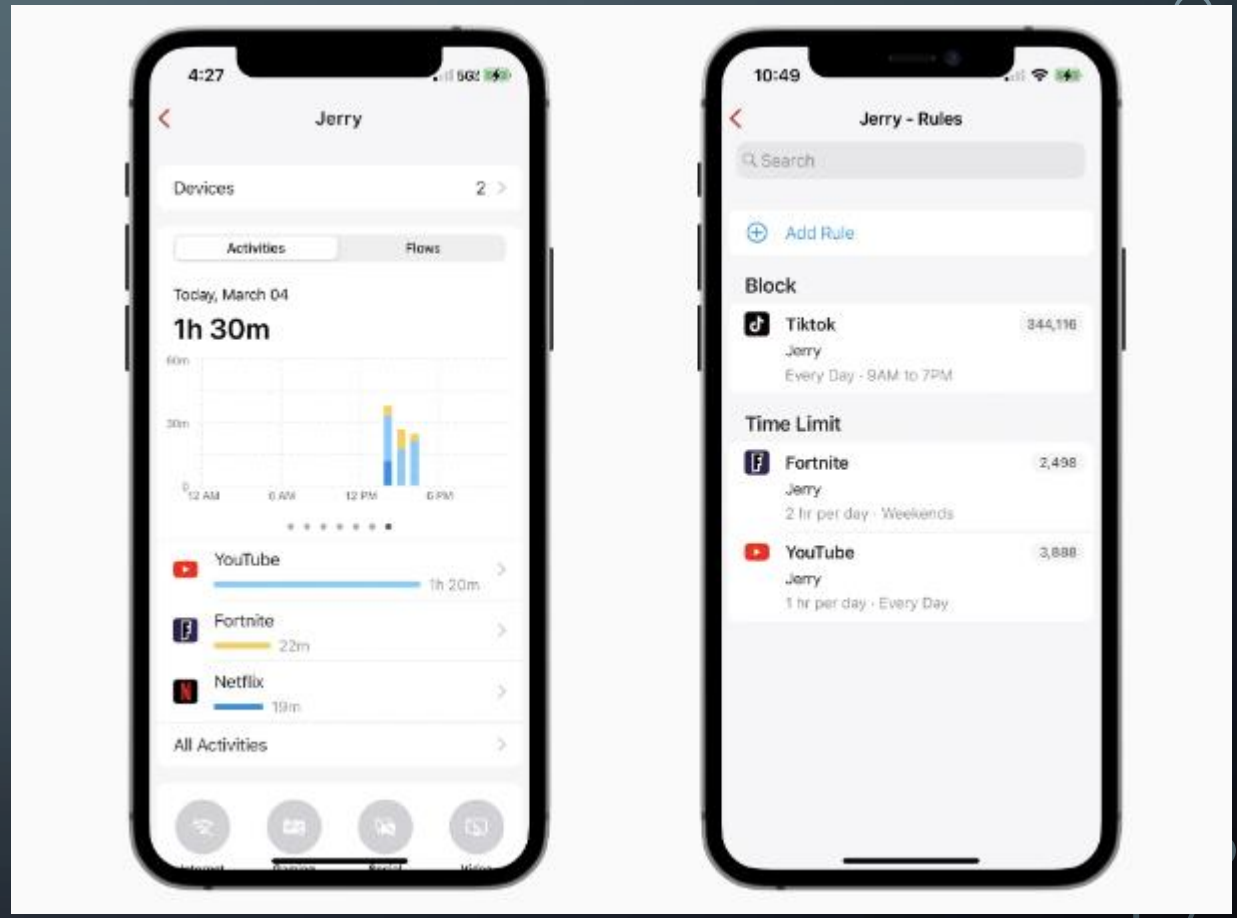
Safe Search is a feature used by major search engines like Google Search, YouTube, Bing, and DuckDuckGo to filter adult content out of search results.

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

Parental Control

SCHEDULED RULES PER DEVICE

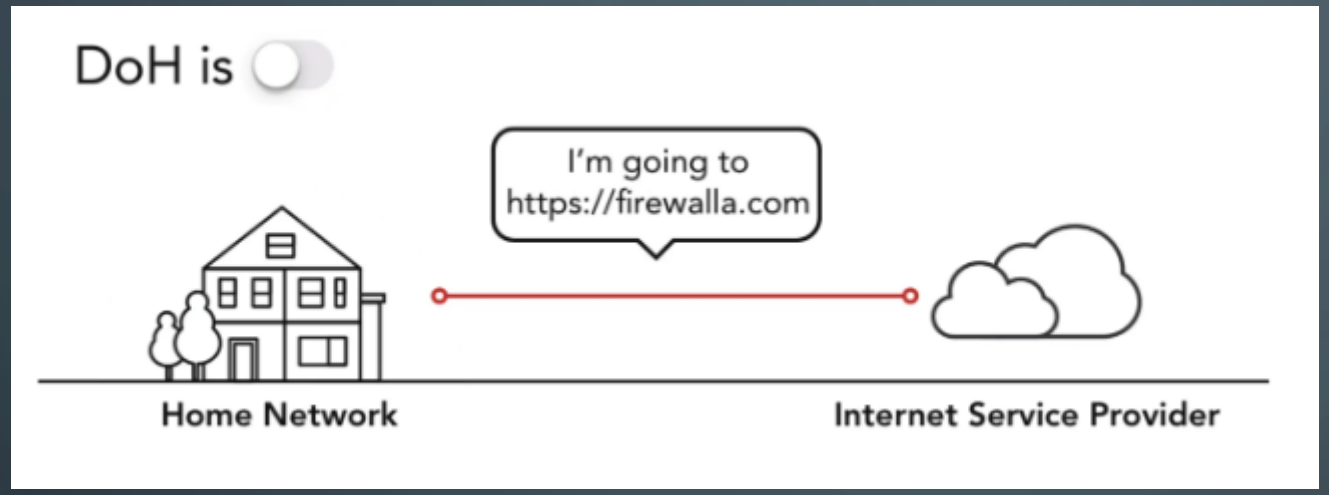


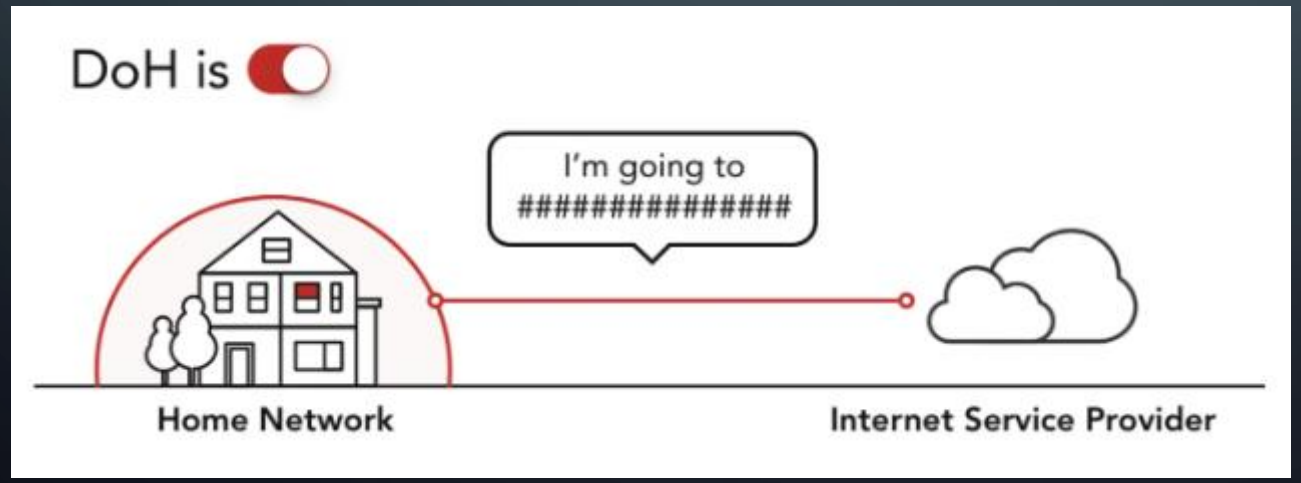


Privacy Protection

Cyber Security

DNS OVER HTTPS



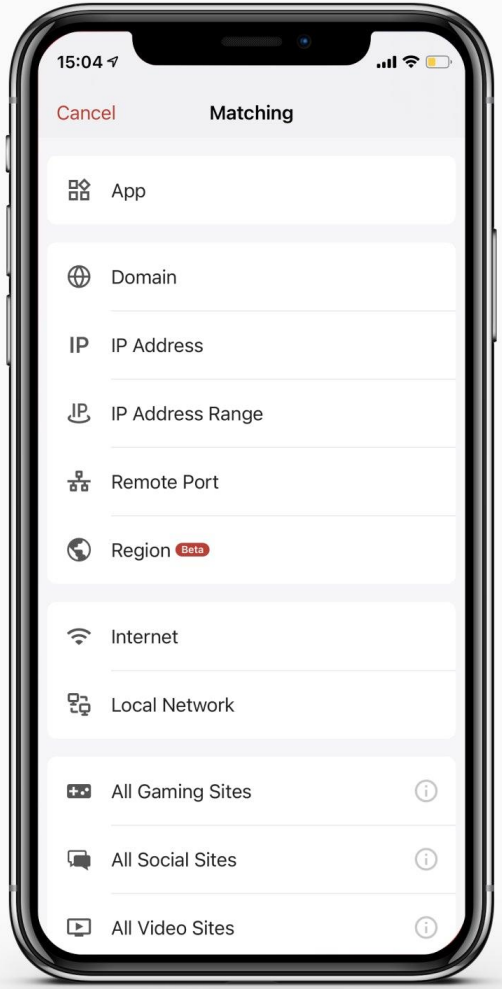


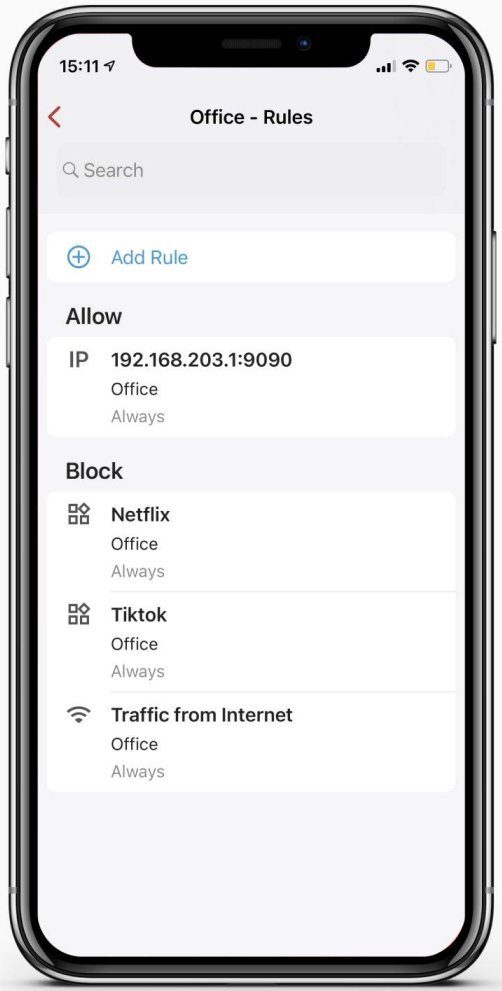
Traditionally, DNS requests are sent in plain text between the client and the DNS server.

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

BLOCK INCOMING BAD TRAFFIC

Cyber Security

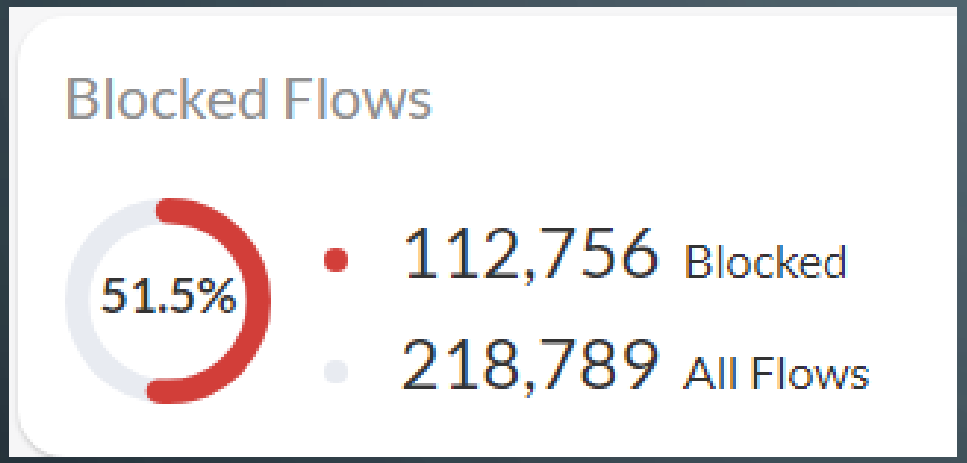


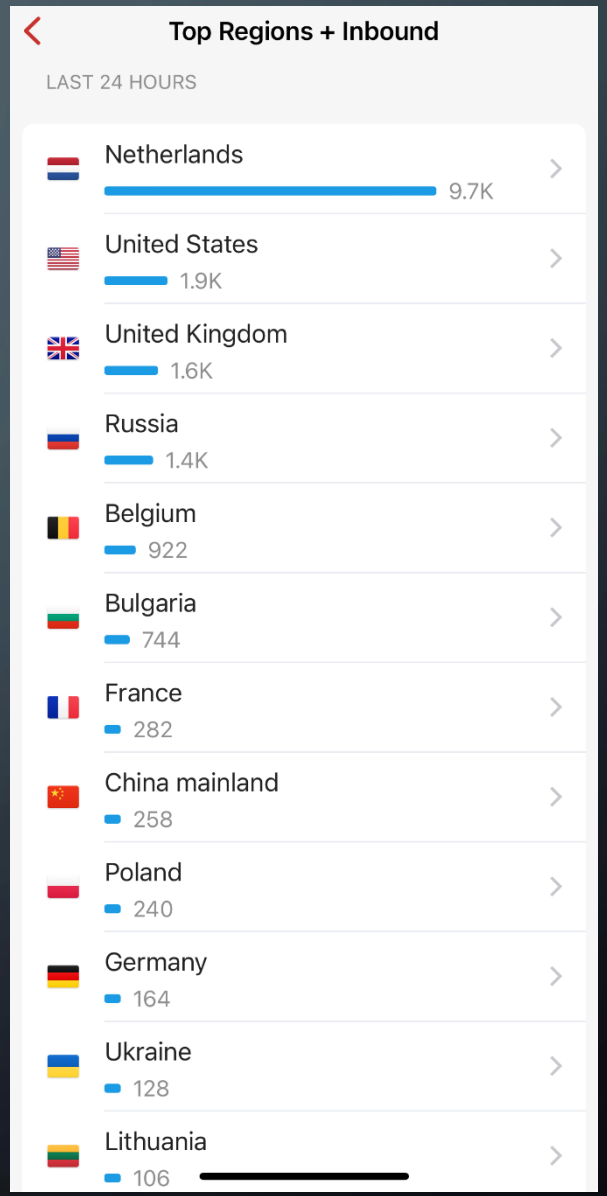


- Block domains or domains with wildcards.
- Block IP addresses and subnets
- Block activities such as
  - gaming,
  - social,
  - video,
  - porn,
  - gambling
- Block based on location and region
- Block any port
- Get notified when devices are online or offline
- Give exceptions to blocking rules

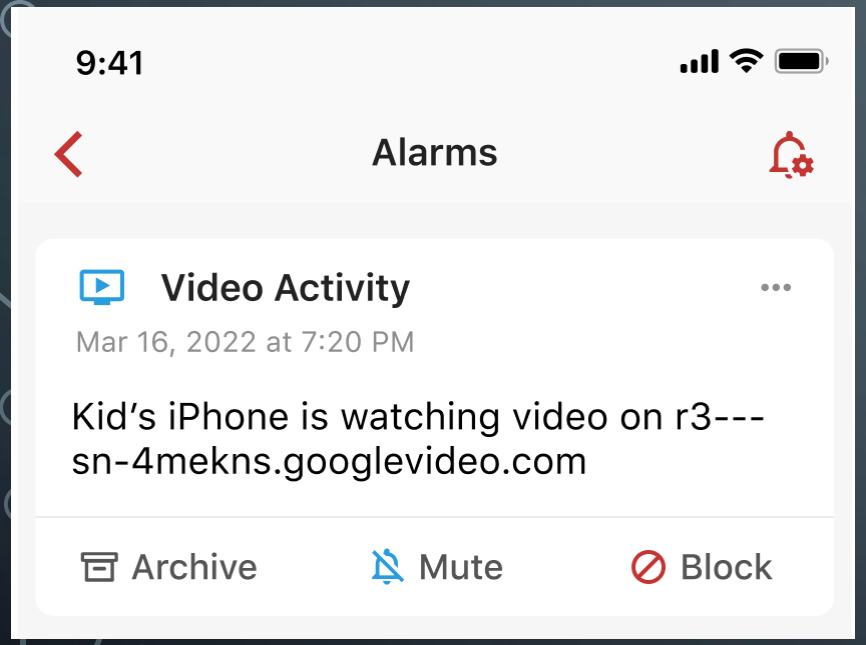
BAD TRAFFIC - RESULTS

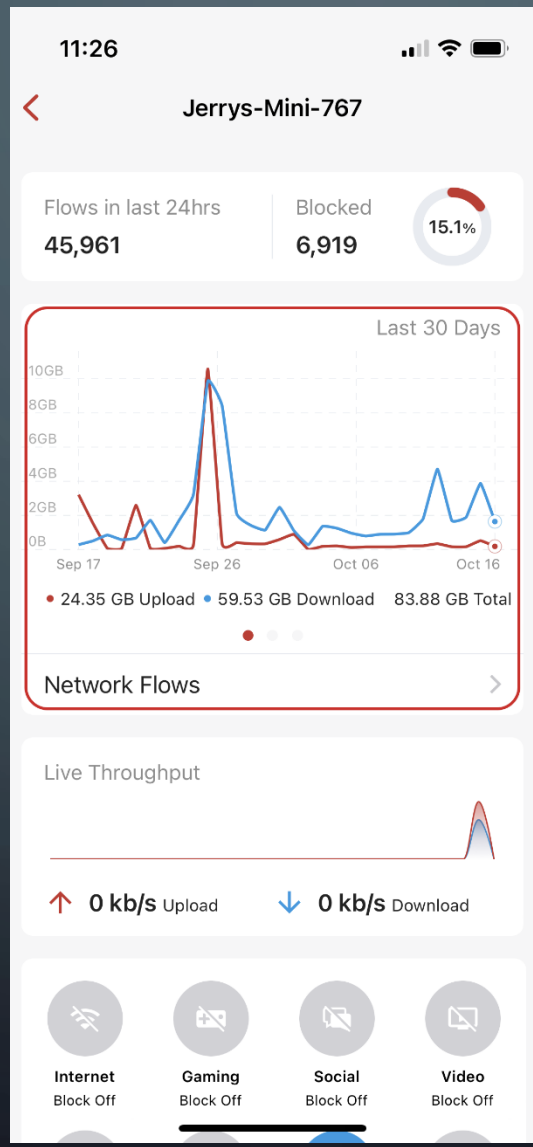
Cyber Security

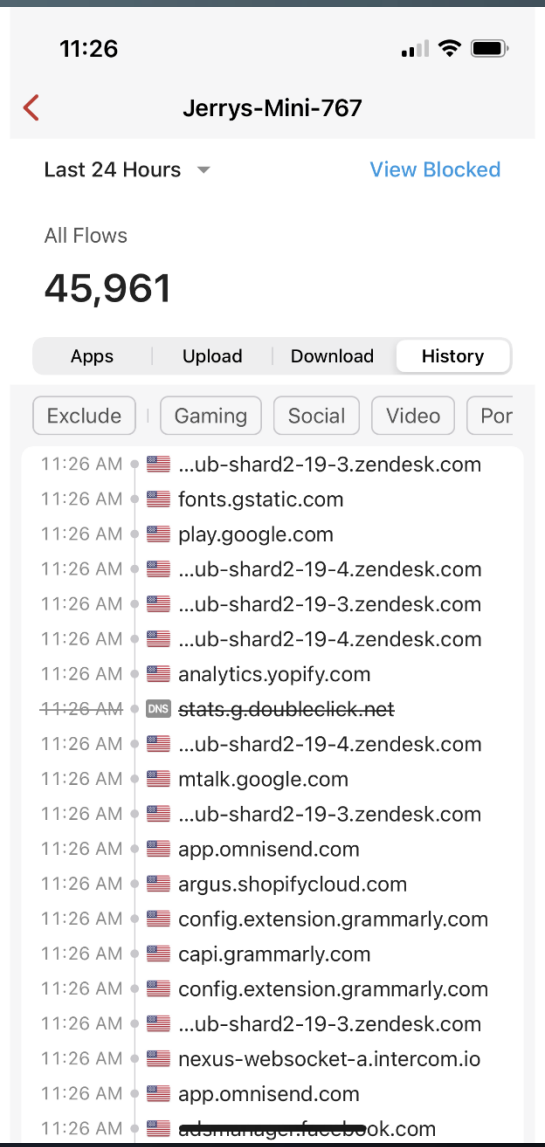


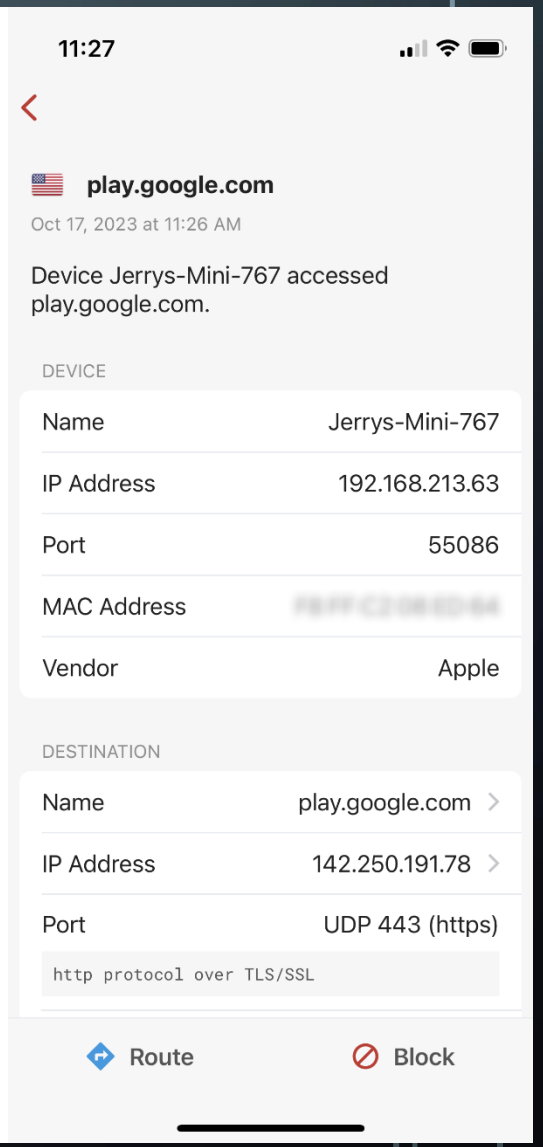


LOGING AND MONITORING

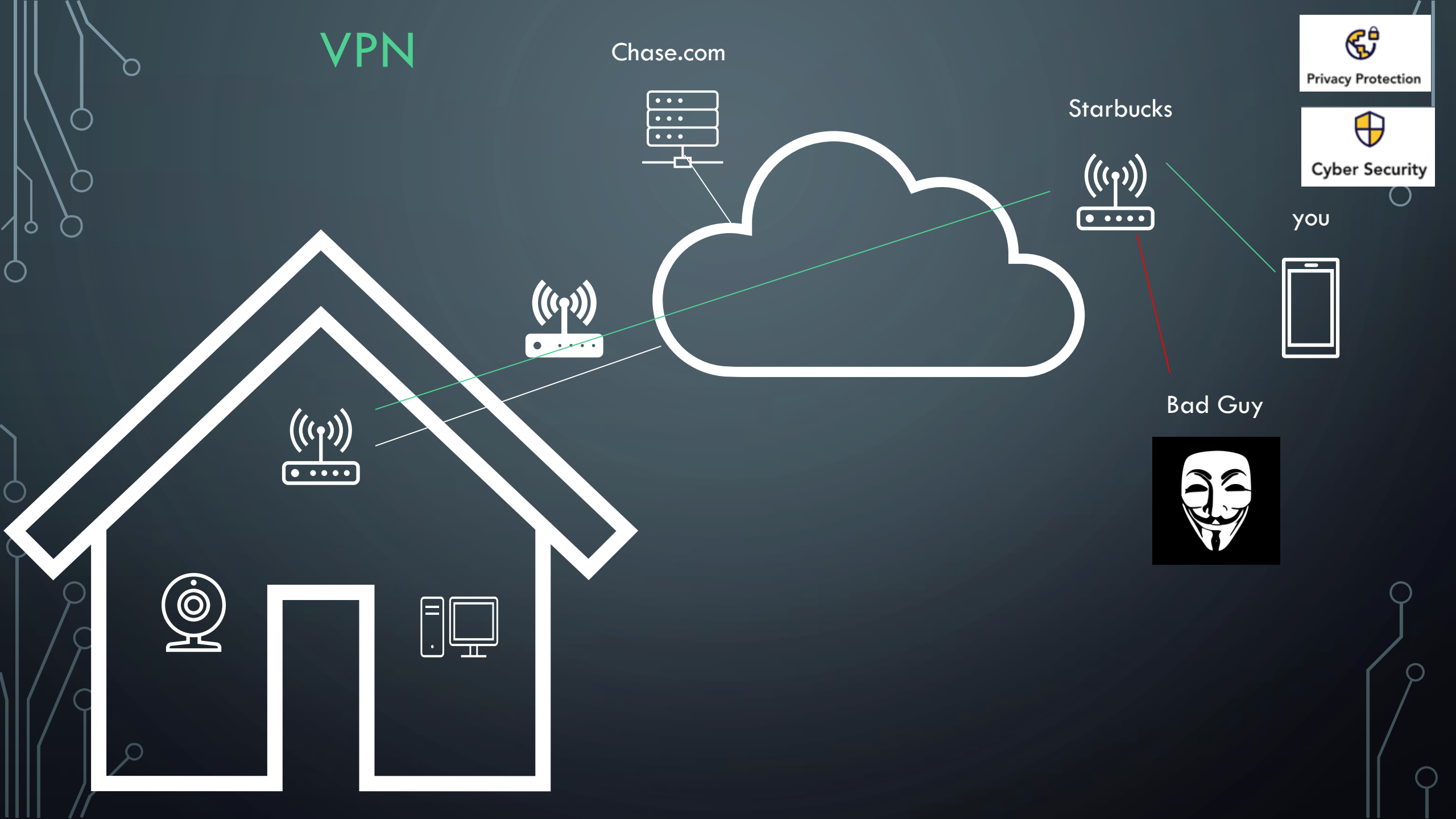








VPN


Chase.com
Starbucks
you
Bad Guy
Privacy Protection
Cyber Security

VPN OUTBOUND

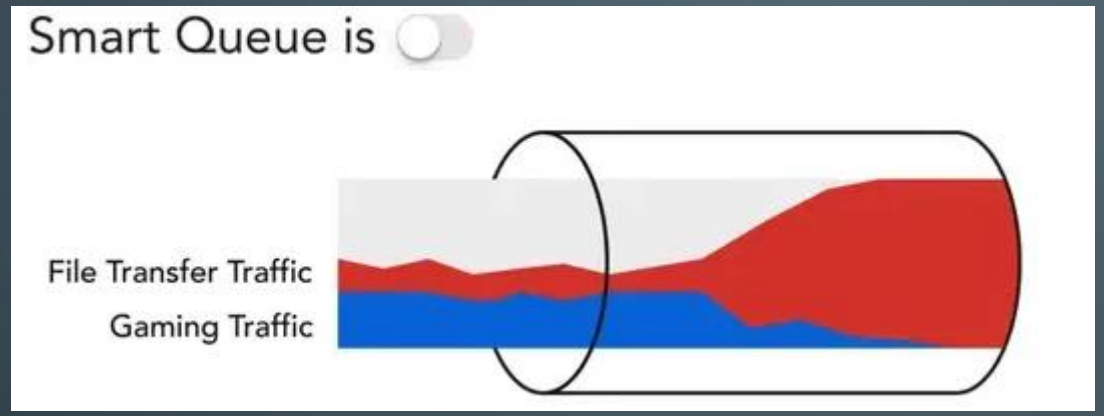
Privacy Protection

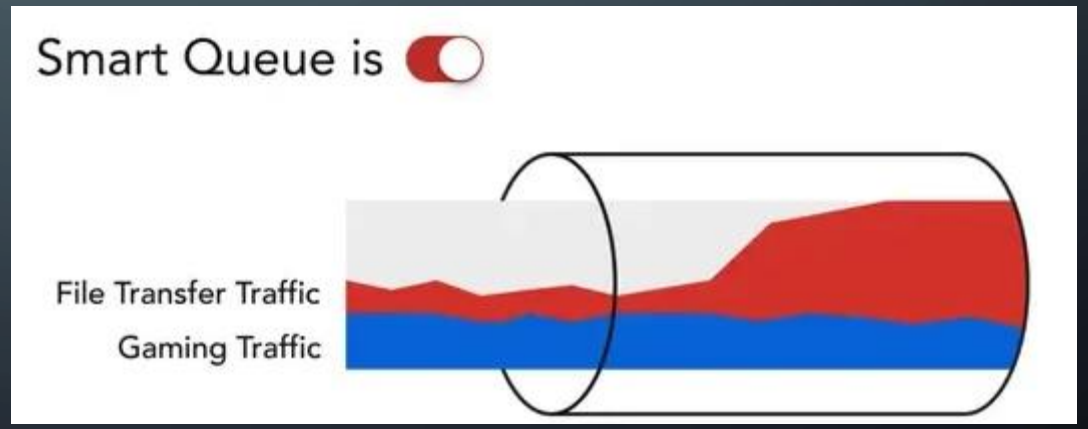
Cyber Security

Netflix.com

VPN service

TRAFFIC SHAPING - THROTTLE





QUESTIONS?

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