Turn Down The Noise: Blocking Ads On Your Home Network

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Nerd Nite Buffalo
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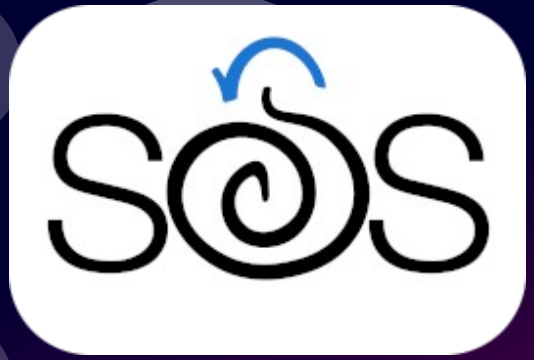
Who am I and what am I talking about?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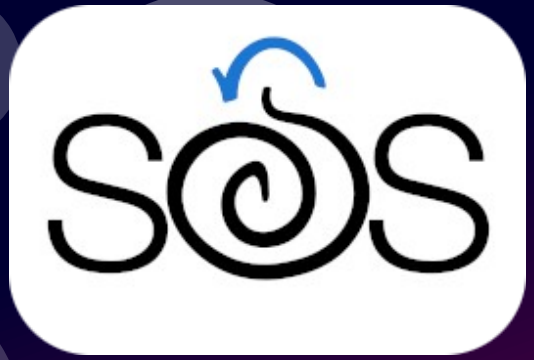
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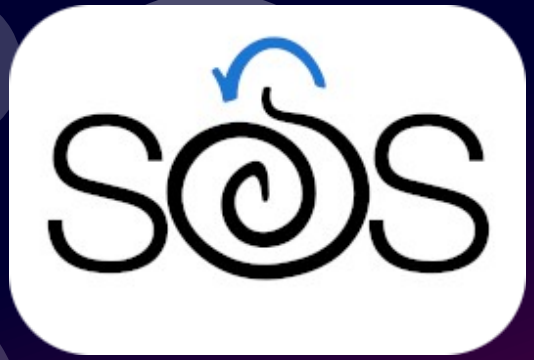
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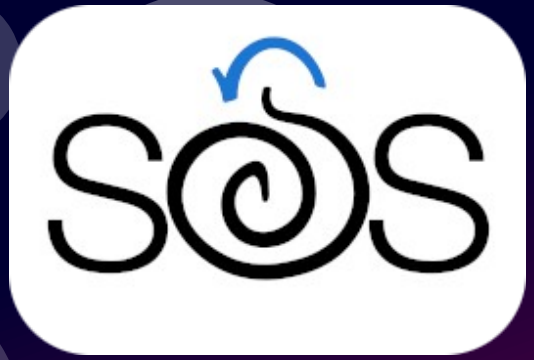
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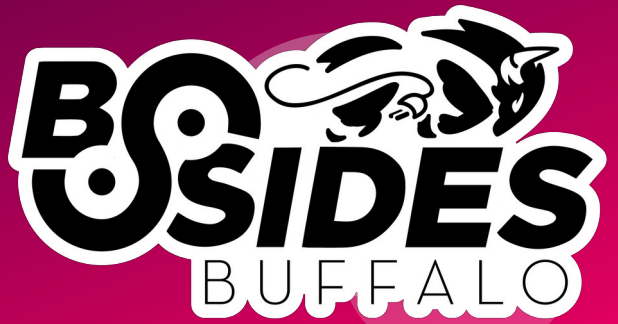
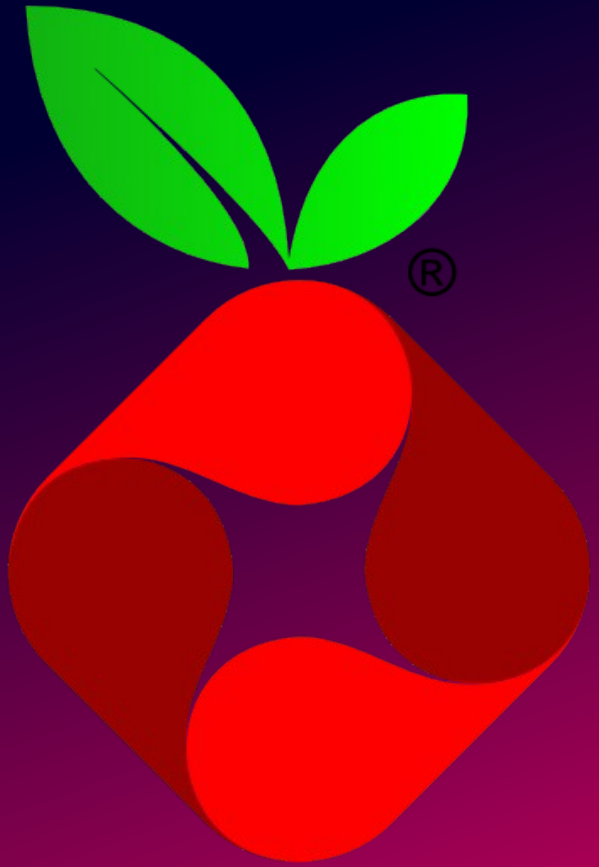

BSIDES
BUFFALO



Why would I want to block ads on my network?

- Bandwidth preservation
- Privacy
- Security

Why is a network ad blocker a good solution?

Okay, so how does it work?

How network clients are configured.

How network clients are configured.

DHCPDISCOVER

How network clients are configured.

DHCPOFFER

This includes the client IP,
gateway, DNS settings, and more.

How domain names are resolved.

How domain names are resolved.

Where is buffalo.nerdnite.com?

How domain names are resolved.

That is at 104.198.5.36.

How DNS sinkholing works.

Where is buffalo.nerdnite.com?

How DNS sinkholing works.

That is at 104.198.5.36.

How DNS sinkholing works.

Where is tracking.google.com?

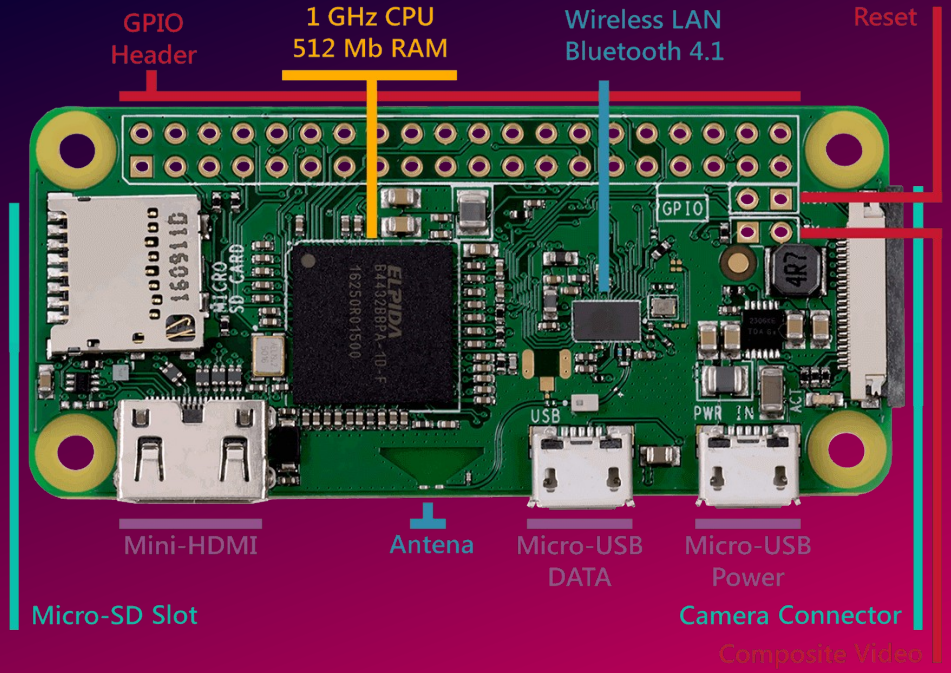
How DNS sinkholing works.

Never heard of it. 0.0.0.0.

The Pihole Project is a preconfigured sinkhole.

- Install the Pihole software on a local computer or device.
- Configure your router to point clients to that DNS server.
- That’s all!

Why is it called Pihole?



Why is it called Pihole?

Other uses for the Pihole.

- Assign DNS names to devices on your network.
- Block domains for some or all endpoints.
- Report on Internet activity.

Demonstration.

Questions?

- Slides available at github.com/InfosecGoon
- Pihole available at pi-hole.net
- Follow me on Twitter @InfosecGoon
- Come learn more cool nerd stuff at BSides Buffalo on June 1