

Open Wireless:

Join the Movement



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fifteen networks

BigBlueHouse-guest

Guest access +

192.168.33.1/login.asp

Google

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Guest access

Enter the guest access password to access the Internet. Ask the owner if you don't know the password. The guest access password can be found using Cisco Connect.

Password:

LOGIN

An aerial, black-and-white photograph of a large, circular, sandy area. The center of the image features a prominent, multi-layered vortex-like structure, resembling a sand dune or a large-scale erosion feature. The surrounding terrain is textured and uneven, with various shades of gray and black, suggesting different soil compositions or erosion patterns. The word "Sandy" is overlaid in white text in the center of the image.

Sandy



Alex Leavitt

@alexleavitt



Following

Awesome picture of internet infrastructure:
New Yorkers idling for free, working WiFi
outside of a Starbucks.

pic.twitter.com/24LOluf9



Reply



Retweet



Favorite



More



Pocket

STARBUCKS COFFEE

STARBUCKS COFFEE



Open Wireless Movement

Using a network named "openwireless.org"? Check out [important information about this network.](#) [close]



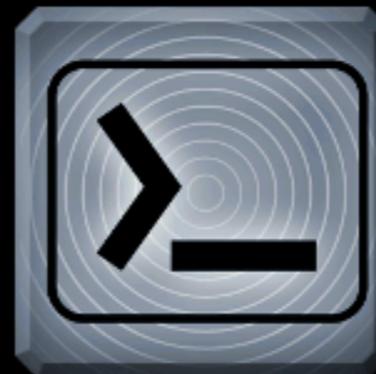
Users



Small Businesses



ISPs



Developers



Blog

[What is the Open Wireless Movement?](#)

openwireless.org

Imagine a future with
ubiquitous open
Internet.

Sharing

even a little bit



To me, it's basic politeness. Providing internet access to guests is kind of like providing heat and electricity, or a hot cup of tea.

Bruce Schneier

Besides access...

why Open Wireless?

PRIVACY

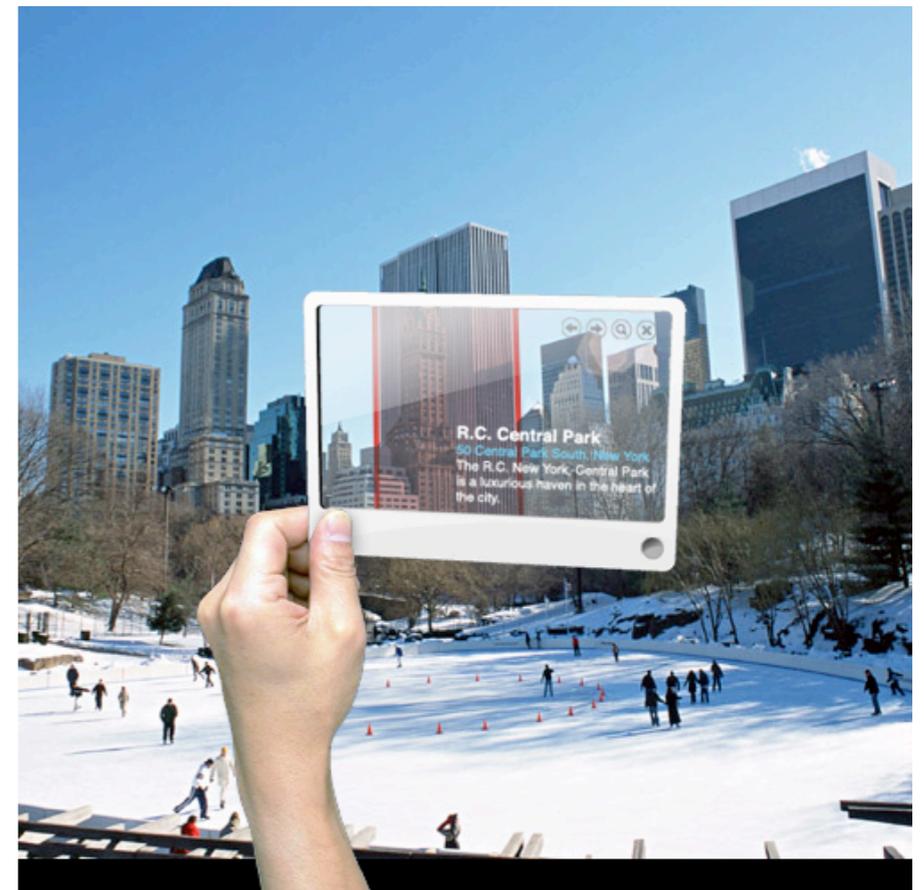




at&t



INNOVATION



Doesn't opening my wireless network
reward "freeloaders"?

NO

[lawyerstuff]

Copyright?

Copyright

Secondary liability:

- Contributory
 - Knowledge and inducement
- Vicarious
 - Right & ability to control
 - Direct financial benefit

DMCA Safe Harbor

17 U.S.C. § 512

This is optional, but often a good idea.

(We have a plan!)

Safe Harbor

The policy is at openwireless.org

- Terminate repeat infringers
- Must accommodate rights holders' technical measures (must be “jointly agreed upon”... which has never happened)

Safe Harbor

Note: You do NOT need to affirmatively monitor your network to qualify!

17 U.S.C. § 512(m)

Negligence?

Open Wireless is Not Negligence

At least in the view of the two courts that have addressed it.

See Liberty Media Holdings, LLC v. Tabora, 2012 WL 2711381 (S.D.N.Y. July 9, 2012); *AF Holdings, LLC v. Doe*, 2012 WL 3835102 (N.D. Cal. Sept. 4, 2012).

Risk?

Mitigation of Risk

VPN / Tor for the guest network is a planned feature

[/lawyerstuff]

Open Wireless Router

Security, Speed, and Sharing

openwireless.org/router/download

Security

- SOHO router security hopelessly broken
- Developing new Web-UI as number of attacks use XSS and CSRF vulnerabilities in Web-UI
- Working with leading security firms, researchers to create secure design and have it audited
- A secure software auto-update mechanism via Tor to make targeted update attacks very difficult.
- Use platform that can work with free software with no binary blobs

Speed

- Bufferbloat and ISPs can slow down internet
- Use advanced queue management from CeroWRT to fix Bufferbloat
- This improves latency for voice, gaming traffic significantly
- Looking into incorporating ISP bandwidth measurement, increase ISP transparency and support censorship detection

Sharing

- Will I exceed monthly BW cap ?
- Will my Internet experience suffer ?
- Allow hosts to set BW cap/BW fraction allocated to guest users
- Provide easy way to monitor BW usage

Where are we ?

Router design

- OpenWRT/CeroWRT based
- Launch hardware is Netgear WNDR 3800
- 802.11n router (vintage 2011)
- In future plan to move to more capable hardware with dual core 1 Ghz ARM processor. This will be basis of a “Consumer” release.

DEMO !

Summary

- This is a hacker release == pre alpha. The purpose of the release is
 - Draw in developers – we have made the project very developer friendly
 - We can now begin process of security hardening the platform
- Hardware platform will change
 - This hardware platform will stop being supported at some point to a more modern platform

How can you help?

- Secure
 - Audit/pentest OpenWRT
- Extend
 - Open Wireless -WebUI
 - OpenWRT
- Build
 - Open wireless map / registration data base
 - Openwireless app
- Deploy
 - Community organizing to create OW “hot” neighborhoods

Open Wireless:

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