

Nantes 2009 :
Rendez-vous Libres!



POLARIS

A free open platform
for mesh networks and
hot spot access

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President of
France Wireless Federation

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- France Wireless Federation is a non-profit association whose purpose is the development of a vast wireless free network.
- To create this MAN (Metropolitan Area Network) we use different wireless systems. This network enables the sharing of digital content at high speeds between neighbours : films, music, video, telephony, etc ...

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POLARIS is a solution for WiFi mesh network to share or not internet connection via a captive portal.

This free network is open to all, combining the Internet and free wireless citizens networks.

POLARIS uses the captive portal system Wifidog and firmware based on OpenWRT Freifunk.

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- Components of POLARIS

- A OpenWRT compatible router

- <http://oldwiki.openwrt.org/TableOfHardware.html>

- Firmware based on FreiFunk Projet

- <http://start.freifunk.net/>

- And added softwares (ipk files) :

- Wifidog : captive portal from ISF Montreal

- <http://dev.wifidog.org/>

- Tinyproxy : web logger

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- Advantages :

- Create high speed mesh networks with private or public Ips.
- Dynamic routing.
- Share contents and applications, and different internet connections or not.
- Customized portal.
- Provide all legal stuff needed for authorities.

- Inconvenients

- Special version of Wifidog for mesh networks.
- Small router memory size.

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- Most Hardware used :
 - Based on Broadcom5352 or 4710 chipset
 - Linksys WRT54GL/GS/G (version <5 or >7)
 - Buffalo WHR-HP-54G
 - Motorola WR850G
 - Work in progress for Atheros AR2315
 - Fonera
 - Ubiquity [Nano|Loco|Pico]Station2
 - Ubiquity [Nano|Loco]Station5, 5GHz WiFi

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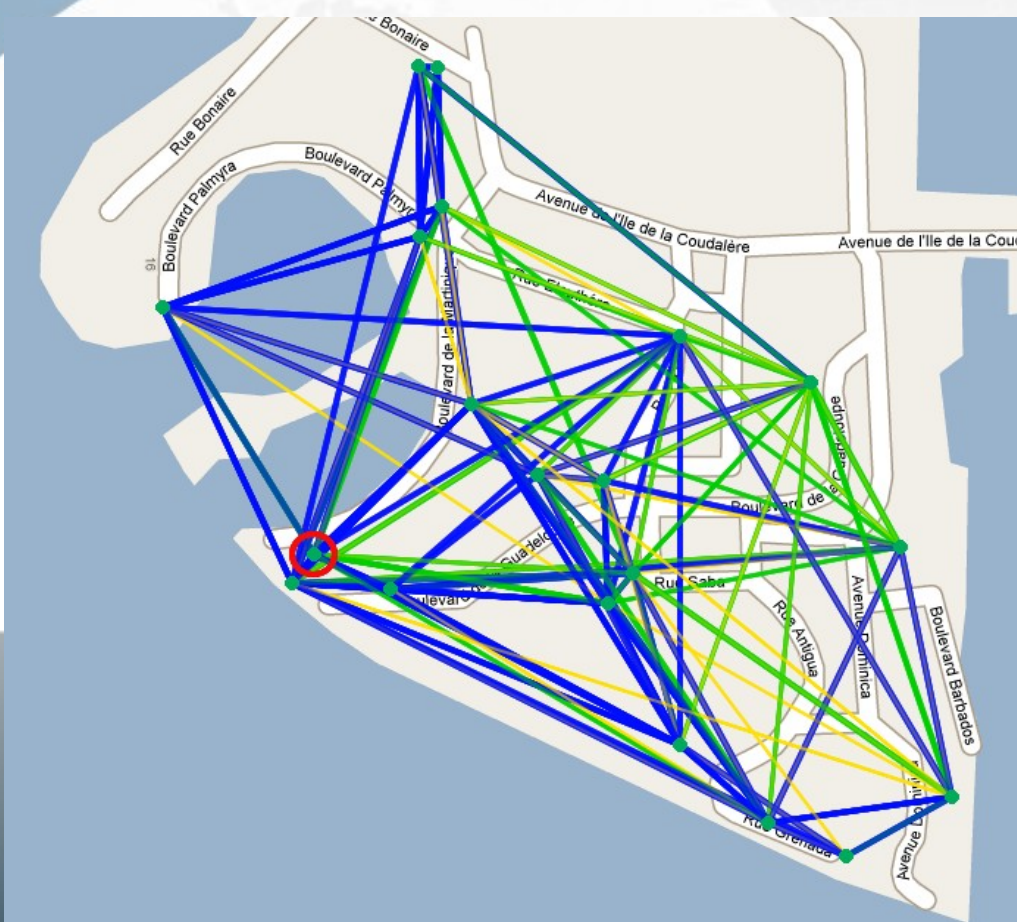
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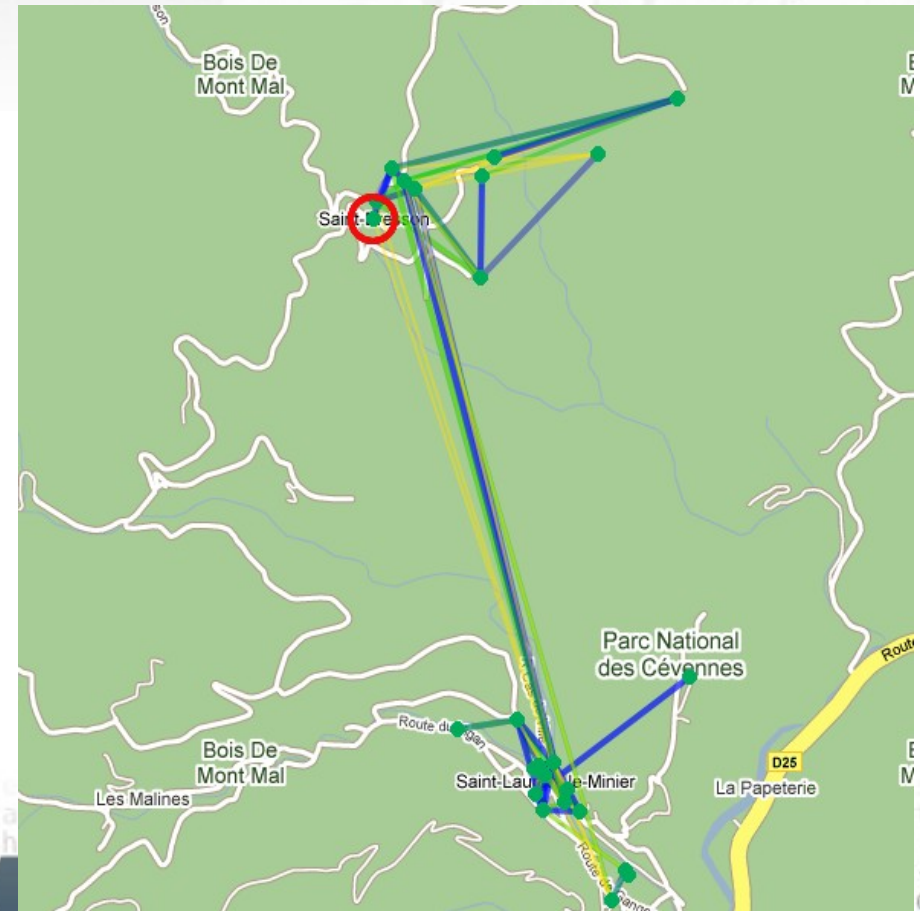
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Some mesh network examples



Cap Coudalère



Saint-Laurent Le Minier

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Any questions ?

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For more informations, please visit
<http://polaris-net.org/>

Thanks for your attention.