BGP/Bird integration with OpenWRT and QMP



GSoC 2014 - Freifunk

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Index

- About me
- About the project
 - Brief description
 - Main objectives

About me

Computer Science student from the UPC

 Currently working on my degree project with the Wibed Platform

Tutors: Axel, Roger and Pau

Brief description of the problem

 Some community networks run dynamic routing protocols as well as non-dynamic ones

Metric and route exports are hard to automate

 Most communities using BGP are using Quagga

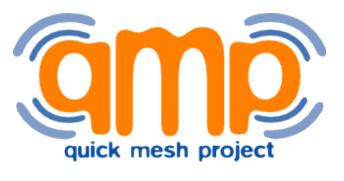
Guifi.net and QMP Project

Guifi.net uses Quagga for BGP Routing

QMP uses BMX6 as its routing protocol

Currently route exports are configured manually





Main objectives of the project (I)

- Give Bird integration with UCI configuration
 - OpenWRT

- Give Bird integration with LUCI configuration
 - OpenWRT

Adapt Bird to Guifi.net / QMP Project needs

Main objectives of the project (II)

 Create a system to automate the translation of routes and metrics (BGP-BMX6)

(Make it user friendly → UCI+LUCI)

Put the system to work in the community

Thanks for your attention