Hot Spot and User Manager

An easy approach to Internet access in tourist places

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- Graduated in Computer Science
- Working with wireless since 2003
- Startup of one of the first Italian WISP
- Mikrotik distributor since 2005
- Microsoft MCP
- Mikrotik Certified in Routing and Wireless
- Mikrotik Certified Trainer
Wi4Net - Totalconn

- Mikrotik Italian distributor
- Training and consulting
- Building Certified Devices for EU market
- Power supply solutions
- Ecommerce Web site [www.wi4net.eu](http://www.wi4net.eu) or .it
Totalconn

• Base Station solution:

• Point-to-Point integrated antennas

• CPEs
Topics

- What are Hotspots?
- Where installed
- Hotspot Quick setup
- User Manager: an easy way to manage centralized access
- Logging and accounting
- SMS approach
- Conclusion
Hotspot

- It is RouterOs tool for Instant Plug-and-Play Internet Access
- HotSpot provides authentication of clients before access to public network
- It also provides User Accounting
- It is very EASY to setup
Hotspot: Where

- Hotel, restaurant, café
- Shopping Mall,
- Public Park and areas,
- Camping, Beach
- Marinas
- Hospital
- Municipal Hotspot
  ... where you want
Hotspot: When

- During meeting in conference room
- In the summer at the beach
- In the winter in ski places
- At the weekend in parks and open spaces

...not all the places need connectivity for all the year round
Hotspot Setup

- Easy wizard tool
- It is similar to DHCP server setup
- Just select the interface and answer to questions
Hotspot: setup wizard
Hotspot: functionality
Hotspot Walled Garden

- Tool to get access to specific resources without HotSpot authorization
- Can be used for Advertising web site
- For Online payment website
Walled garden

HotSpot and UserMan
User Manager

• User Manager is a **Radius** server for processing authentication and for accounting

• Installable as a RouterOs package

• A new version to be released soon
User Manager

• Package

![Package List](image-url)
User Manager: Scalability

- Together in the same gateway machine
- In a separate authentication server (to be connected to the hotspot via radius client)
UserMan: multi-site

• One UserMan installation can control several gateway site
• Local customer can administer their own users

Color = different site
Logging and accounting

• Due to anti-terorrism regulations, many countries now require the WISP or Internet Point to keep information about:
  – Who is connected
  – When they connect to the system
  – Which website users have visited

• User must provide Identity Card or other legal infos to get access to an Hotspot
Logging and accounting

• User Manager supplies logging and accounting informations for the connected users:
  – When they were connected
  – How many time have used
  – How many bandwith

• RouterOS through Firewall or Proxy provides information about websites accessed

ROUTER OS IS COMPLIANT TO ALL OF THE REGULATORY RULES !
User Manager: easy approach

- Mobile phone is used by 110% of people
- SMS is an easy tool to get information about users
- SIM infos are validated by mobile operators before customer gains access to telephone line
Easy approach

- Login Page
  - Registration with **Mobile Phone** number
  - Send SMS

- Payment
  - Prepayment card
  - SMS
  - Credit card

- Access
- Disconnect

- System
  - User Man Radius
  - Receive SMS/mail
    - Generate random pwd
    - Send SMS With **pwd**
  - Log

User

HotSpot and UserMan
Wi4Mobile

• It is a small device that does all these things:
  – Wifi 802.11abg access point
  – GSM/GPRS UMTS/HDSPA modem
  – Hotspot
  – Usermanager
  – Send SMS
  – Provide backup line
  – RouterOs inside
Conclusion

- Hotspot and UserManager are powerful tools to quickly setup an Internet Access infrastructure
- With some tools it will be compliant to all local regulations
- SMS can help to deploy an unattended HotSpot access
Thanks for your attention!

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