

Building Revenue with Hotspots

Presented by Dennis Burgess

Link Technologies, Inc.

Dennis M. Burgess

- Partner with Link Technologies, Inc
- Mikrotik Certified Trainer / Consultant
- Cisco Certified
- Microsoft Certified
- Consulting for over 10 years
- WISP Owner
- Mange Countless Mikrotik Hotspots / Billing Solutions / Ad Systems

Link Technologies, Inc

- Link Technologies, Inc
 - US Based – One of the Primer Mikrotik Consulting Companies
 - World Wide Customer Base
 - Hotspot Solutions

Topics

- What Are Hotspots
- Where They are Installed
- What Types of Hotspots Are There...
 - The Business of Hotspots
 - Hotspot Business Models
- How to Make Money with Hotspots
 - Ways to Generate Revenue
 - Configuration Time
 - How to Make a Limited Hotspot

What are Hotspots?

- Place where Internet Access is Controlled either by paid subscription or by free access by a business or company.
 - Can be
 - Wired
 - Wireless
 - In-Building
 - On-Campus

What are Hotspots?

- What Types of Hotspots Are There?
 - Paid Hotspot
 - End User Pays for Internet Access
 - Free Hotspots
 - Business Sponsored Hotspots
 - Internet Access is a Value Added Service to augment the business's existing product.
 - Ad Supported
 - Hotspot services are paid by Ads
 - End User has NO cost.
 - Usage Restricted Free Hotspots
 - Basic Internet Access is Free
 - Combination of Ad's as well as Paid Services pay for the Hotspot System

Where are Hotspots?

- Where Should you Put a Hotspot?
 - LOCATION, LOCATION, LOCATION

Where are Hotspots?



Where are Hotspots?



Where are Hotspots?



Where are Hotspots?



Where are Hotspots?



- Muni-Wi-Fi
 - Coverage
 - Why Cover Areas That Don't Need It?
 - Do You Think You Need Coverage Here?
 - Large Expense Covering Areas that will get little Usage
 - Cover Good Locations Well!
 - Usage
 - Subscribers will get DSL / Cable before a week penetrating Signal

Coverage & Normal Usage

- Coverage
 - Why Cover Areas That Don't Need It?
 - Do You Think You Need Coverage Here?
 - Large Expense Covering Areas that will get little Usage
 - Cover Good Locations Well!
- Usage
 - Subscribers will get DSL / Cable before a week penetrating Signal
 - Cover these areas where people collect regularly - Bars / Diners / Coffee Shops / Malls

Muni Wi-Fi

- Cons

- The City THINKS, they have the “control” to TELL YOU, what, how and WHERE to do business!
 - Would you go into a business with a partner that says how much, where and how you can sell your product?

- Suggestions

- Pick and Choose Your Coverage
- Use Existing Network
 - (OR BUILD IT FOR ANOTHER PURPOSE)
 - At Full Cost to the City just like Any other Business!
- Business Model MUST MAKE REVENUE!

Types of Hotspots

Fee Based Hotspots

- Paid Services
 - Customer Pays with Credit Card
 - Gets Internet
 - Multiple Levels of Speed?
 - Confusion on What the End User Needs?
 - Sometimes KISS is the best way
 - KEEP IT STUPID SIMPLE
 - One Price

Ad's and Hotspots

- Methods of Delivering Ads
 - Splash Page
 - Advantages of Mikrotik RouterOS and these Splash Pages!
 - Mall Locations
 - Many Splash Pages depending on the Access point
 - Hotel / Conference Centers
 - One Splash Page

Ad's and Hotspots

- Methods of Delivering Ads
 - Sources of Revenue
 - Hotel / Conference Centers
 - Activities – Fitness Centers / Attractions
 - Restaurants -- Local Establishments / Delivery
 - Mall
 - Ads to different locations in the Mall
 - Rotation
 - Ad Software
 - Rotates Ads based on many different Criteria
 - Drop ads onto Mikrotik Splash Pages without changing the Router!

Ad's and Revenue

- Ads Generate Lots of Revenue
 - Can sometimes Exceed the Monthly Subscribers Revenue
 - Most Ads Are Contract Based
 - This = Monthly Reoccurring Revenue

Usage Restricted Hotspots

- Usage Restricted Free Hotspots
 - Working Business Model for Internet Access
 - Provide Internet to City or Business Park
 - Limited Services for Free
 - You can Surf the Internet, look at News sites etc.
 - You can not shop on-line, or do business on-line.
 - No Business VPN Connections
 - Maybe Secure Websites
 - E-Mail Protocols as well as common E-Mail sites may be blocked
 - This one is debatable and changes between customers/vendors.

Almost Free Hotspots

- Why does this Business Model Work?
 - People want to have Free Internet
 - News
 - Weather
 - E-Mail
 - People will pay for...
 - Access to VPN connections
 - Access to Higher Speeds
 - Ability to do Business on it!

Limiting Access

- Usage of Trail User
 - Filter Rules applied to Trail Profile
 - Blocks most Internet Access
 - Typically Deny All At the Bottom
 - Allow Port TCP 80 and UDP 53
 - Have to have DNS!
 - Maybe Block Websites such as Hotmail, yahoo?
 - Provide Redirect for other sites such to direct them to an Upgrade page!
 - List reasons to Upgrade, and have the ability to upgrade!

Upgrades

- The End Goal is to Make Revenue
 - Upgrades give you that Revenue
 - Proven Business Model
 - Allows The “FREE” Access that Companies or City's wish to Have.
 - Allows the builder of the network income to Maintain Network.
 - WIN / WIN – If everyone WINS, it’s a great solution.

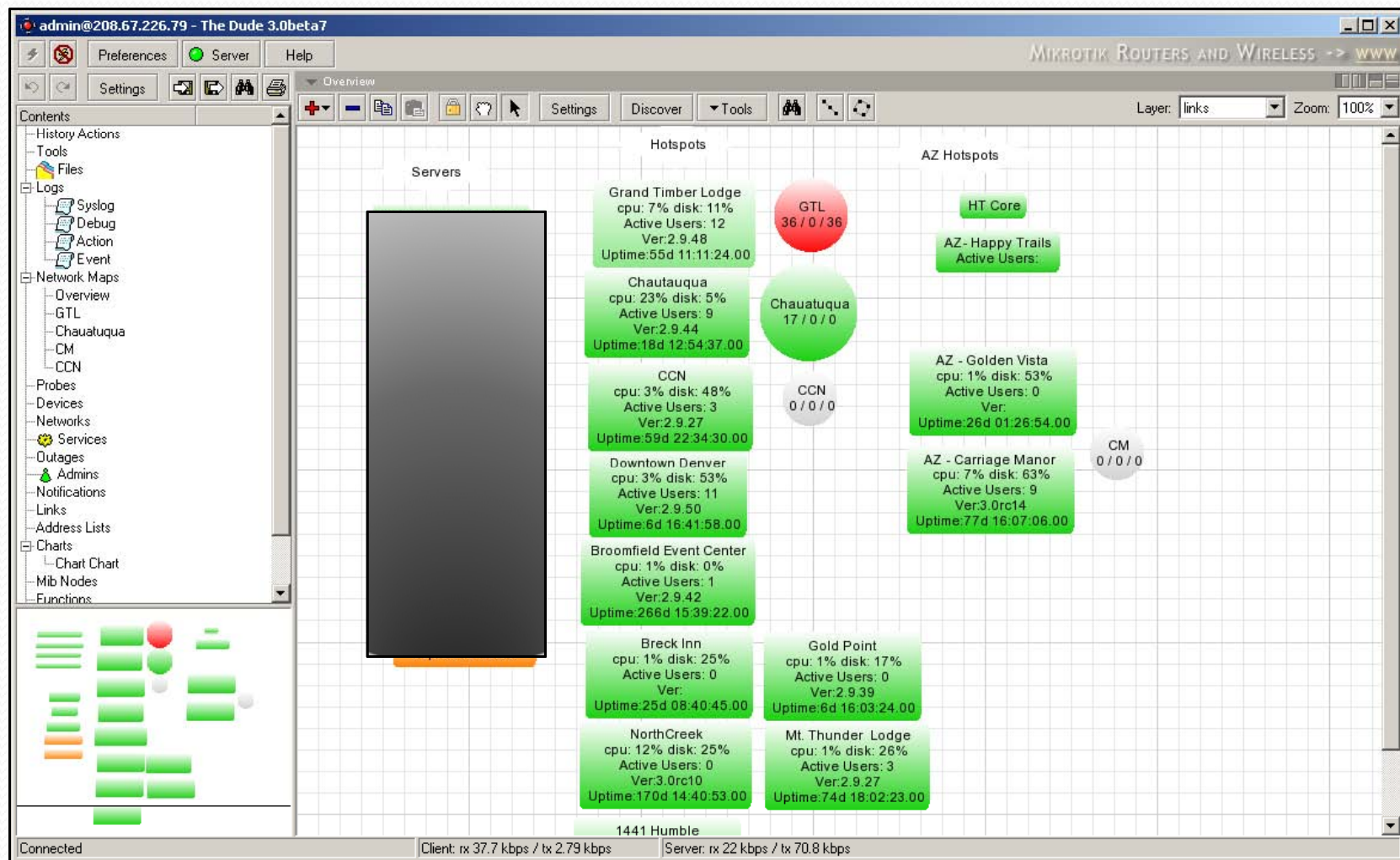
Actual Deployment

- We have Deployed the “Almost Free” WiFi
 - Once we switched to the Almost Free Business Model the ISP tripled its monthly subscriptions
 - Free Access is still Available on a limited Basis
 - Makes the City Happy
 - They can say they have a “Free Hotspot” in their City
 - Attracts more business’s that this service is something they don’t have to spend their capital on.
 - Makes the ISP Happy
 - Higher Subscription Rates
 - Lower Bandwidth Usage on Free Accounts

Monitoring Your Hotspot

- **DUDE! USE THE DUDE!**
 - Free Mikrotik NMS
 - Ability to Monitor Hotspot and Access Point Status
 - Can Monitor from Internet Though NAT with Agents
 - Graph Bandwidth Usage of Hotspot and Access Points
 - Graph Active Hotspot Users for Tracking
 - At-A-Glance Hotspot Stats Right on The Device

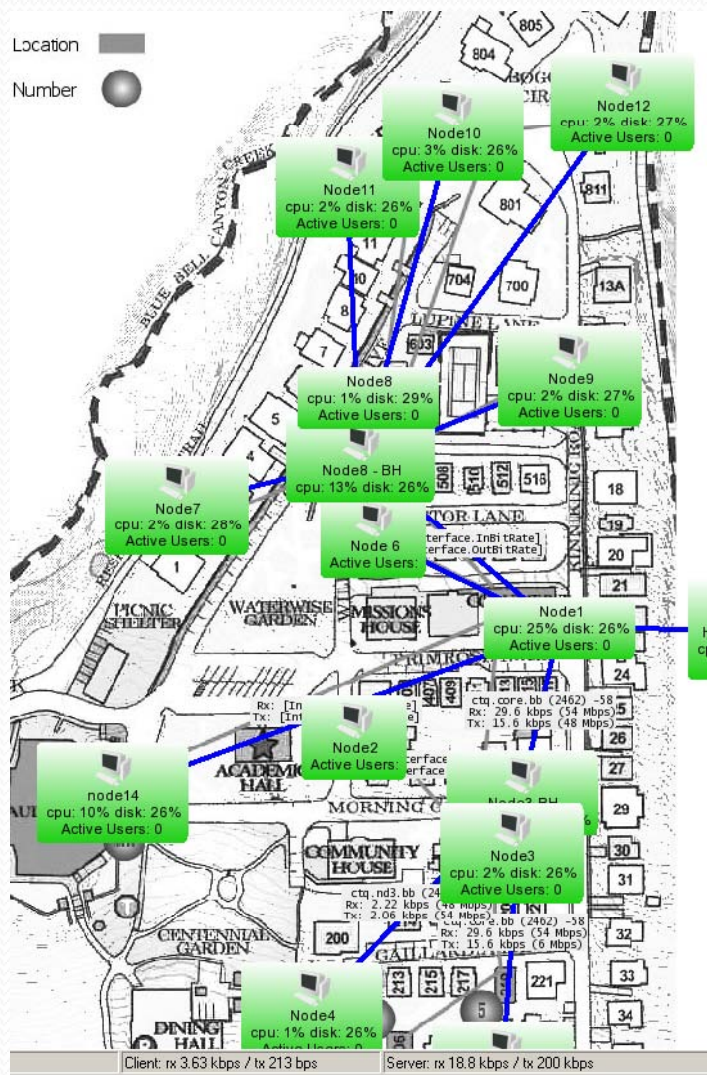
Monitoring Your Hotspot



Monitoring Your Hotspot

```
-----  
cpu: 7% disk: 11%  
Active Users: 12  
Ver:2.9.48  
Uptime:55d 11:11:24.00
```

Monitoring Your Hotspot



- Monitor Your Network
- Bandwidth to Each Node
- GRAPHIC LAYOUT of Network!

Conclusion

- Hotspots Can Generate Revenue
 - Paid Services Can be Used for Fixed Wireless Installations as well as “Hotspots”
 - You Must Give the End Users Reasons to Pay for a Subscription.
 - Internet Access
 - Faster / Unrestricted Access
 - Location / Location / Location
 - Makes / Breaks a Hotspot Installation
 - Muni Waif Is Not Bad – But LEARN from existing large deployments!



Thanks

Thank You for your Time

For More Information
Or Assistance In Deploying Mikrotik Based
Hotspot Networks

Contact Us at :

www.linktechs.net