

Mikrotik for Public/Open Access Deployments

(ALTERNATIVE TITLE: HOW I OPENED MY MODEM TO EVERYONE)



What was the project?

- Build a Public Wireless Network
- Cover a small metro space
- Work with/work around buildings
- Support the widest variety of client devices



Challenges

- Clients need to roam from AP-to-AP
- Hand out portable addresses
- Clients need to hit a landing page before getting their access



Who was the target customer?

- BIAs

Buisness Improvement Areas (i.e. downtown city environments)

Wanting to offer free wireless access to visitors.



Deployment Technologies

- Mikrotik devices
- Tubes which include a pair of groove ap's, joined together, one in 5ghz and one in 2ghz.



Deployment Technologies (cont..)

- WDS on the 5ghz radios work together for backhaul.
- WDS on the 2ghz radio to allow client roaming



Unexpected outcomes

- It worked

(That was expected!)

Other customers wanted to
deploy their on similar
networks in the same
coverage area



How to create multiple visible networks

- Mikrotik Groove AP's supported VirtualAP mode.
- Combined with vlan and smart bridging, we're able to deploy virtual SSID's which present completely independent network addressing/rules.



Bringing it all together

- A key component of the initial access network deployment was using the right device(s).
- Cloud core networks serve to filter and manage all of the access layer traffic.

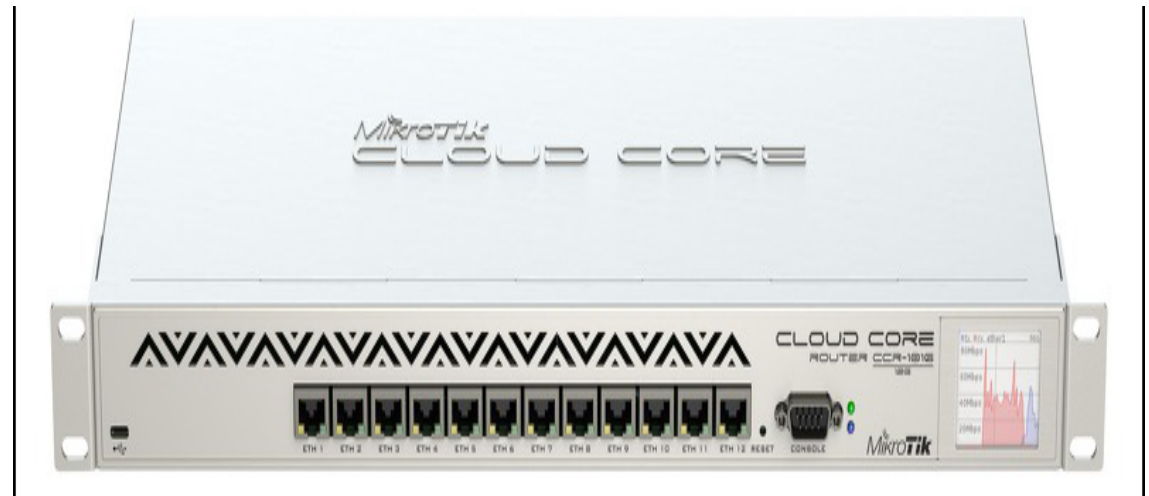


Key points on the first network

- Traffic management. It's a whole, huge subject.

Queues are your best friend, especially when they're in a parent/child configuration.

- Don't be afraid to mark connections & packets.



Questions?

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