

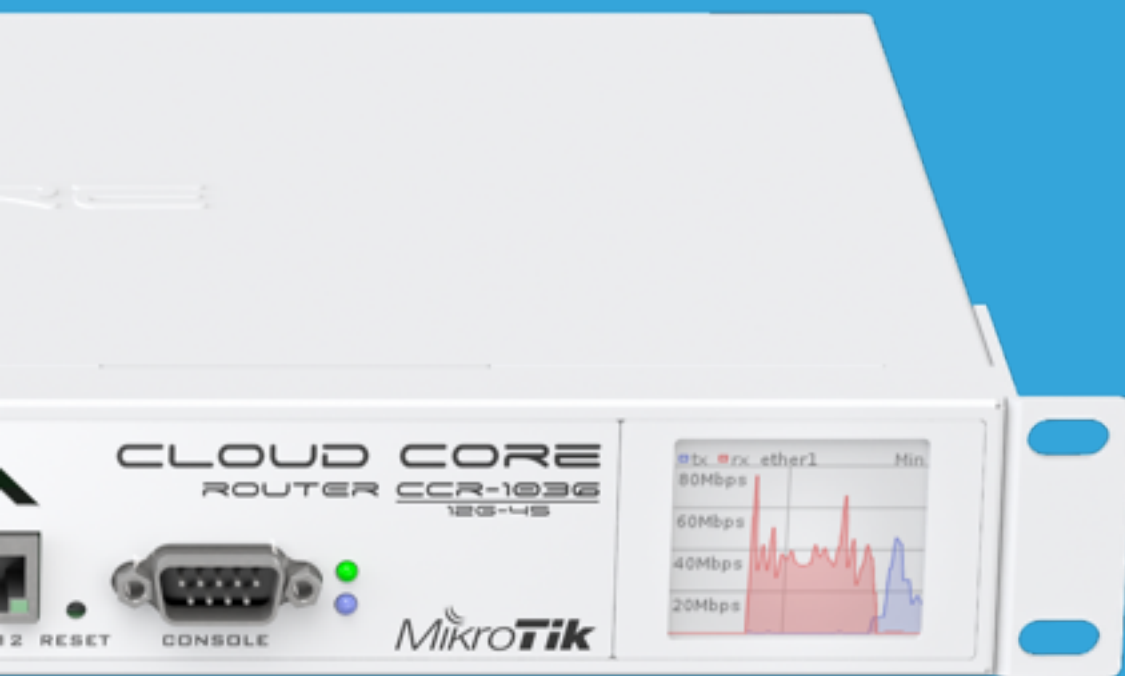


ROMON VS MANAGEMENT VLAN

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**WISPCASTS.COM**

# MANAGING ROUTERS



**How do We do it**

# ROUTER MANAGEMENT

- ▶ Only via Management Port (really?)
- ▶ via Data Port
- ▶ Most of the time Discovery is not disabled on L2 Networks
- ▶ Mac-Winbox can be a life saver !

**“IF YOU WANT TOTAL SECURITY, GO TO PRISON. THERE YOU'RE FED, CLOTHED, GIVEN MEDICAL CARE AND SO ON. THE ONLY THING LACKING... IS FREEDOM.”**

**Dwight D. Eisenhower**



WHAT IF NETWORK IS LARGER ?

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**MANAGEMENT IN LARGE  
SCALE**



ROMON

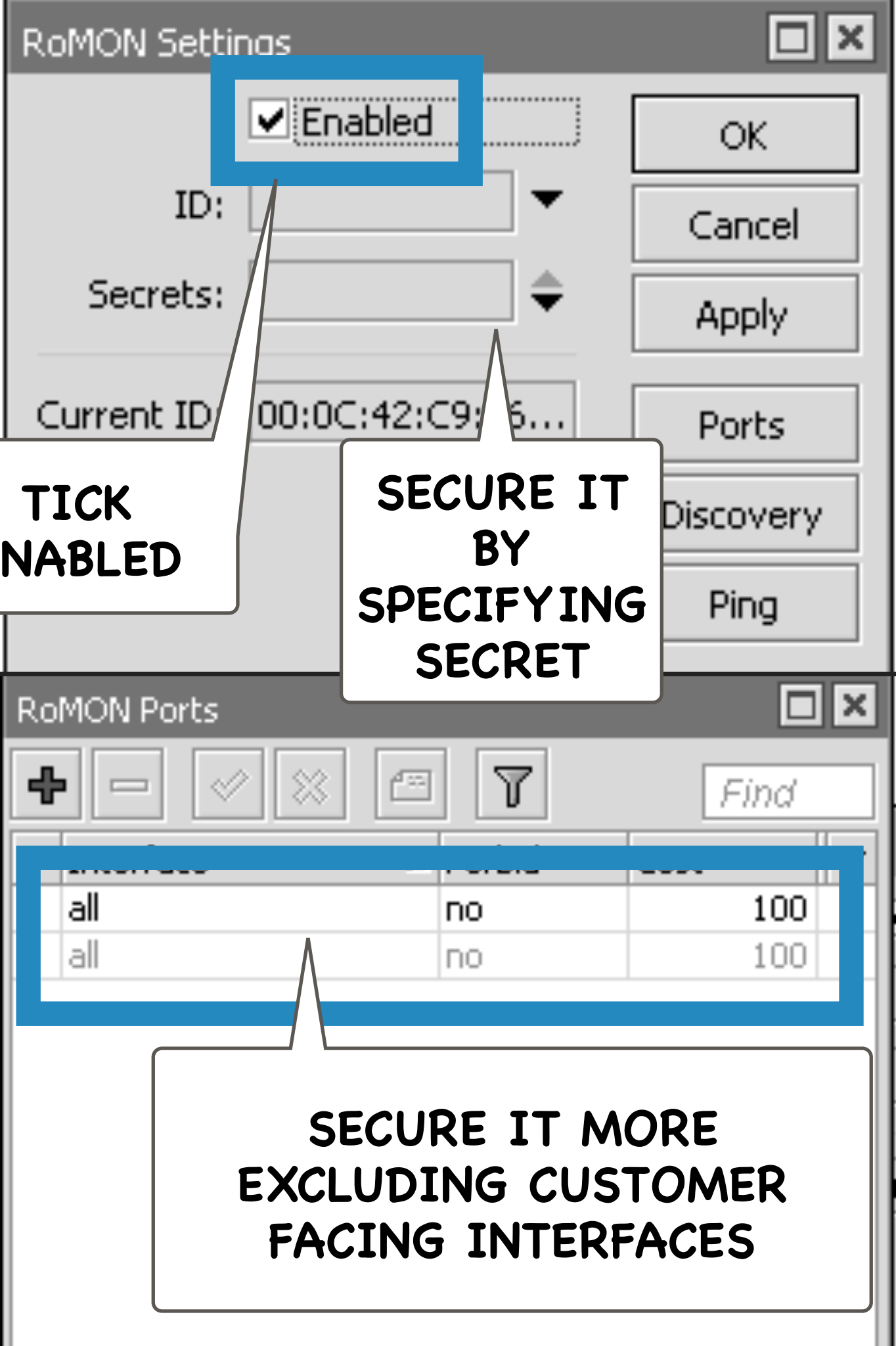
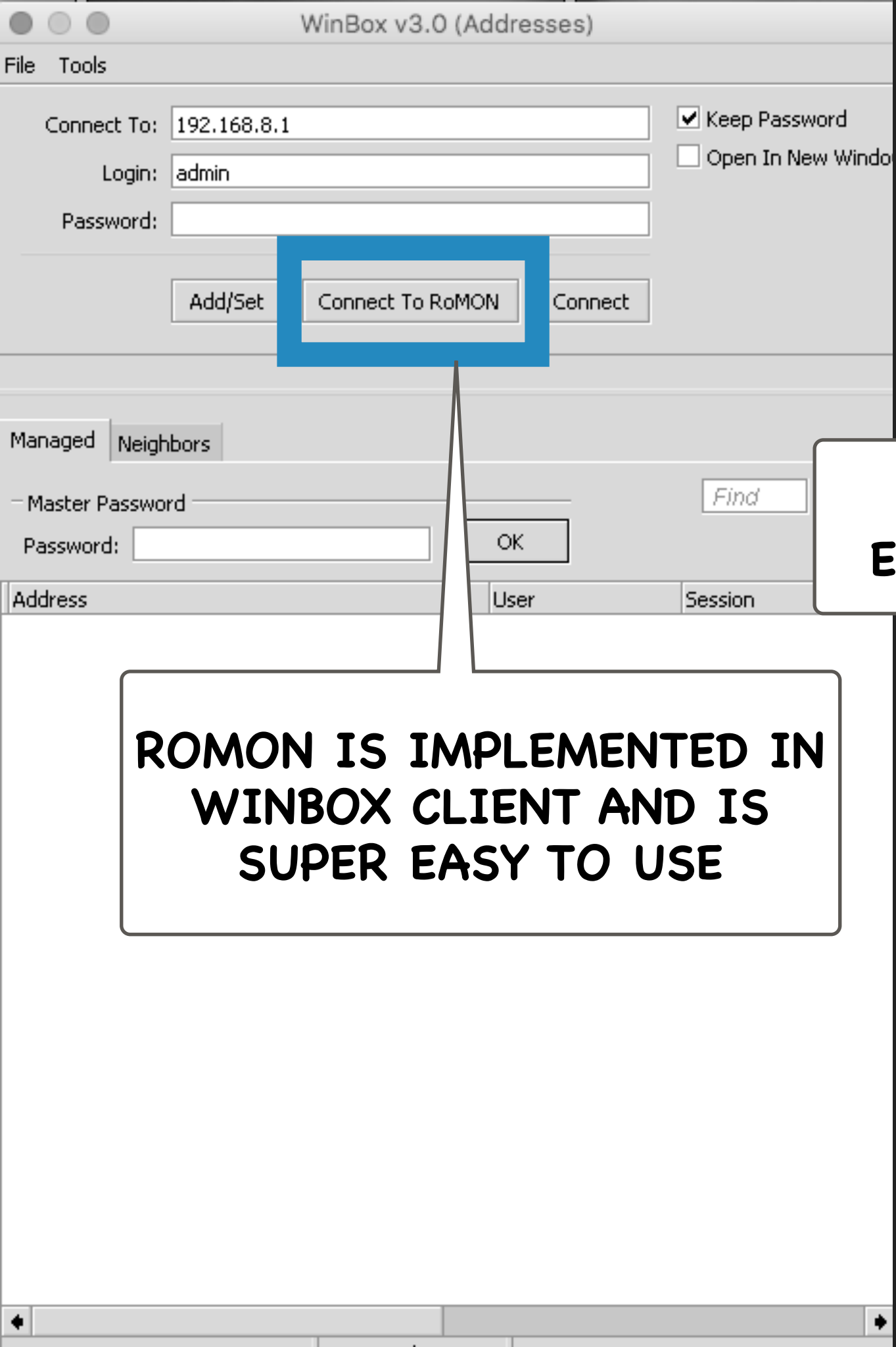
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**ONE EXTRA  
LAYER ?**

## LAYER 2 ACCESS ACROSS LAYER3 NETWORK

- ▶ Allow Discovery and Management
- ▶ Works across multiple hops
- ▶ Dead easy to configure
- ▶ Dead easy to use with latest Winbox (3.x) version

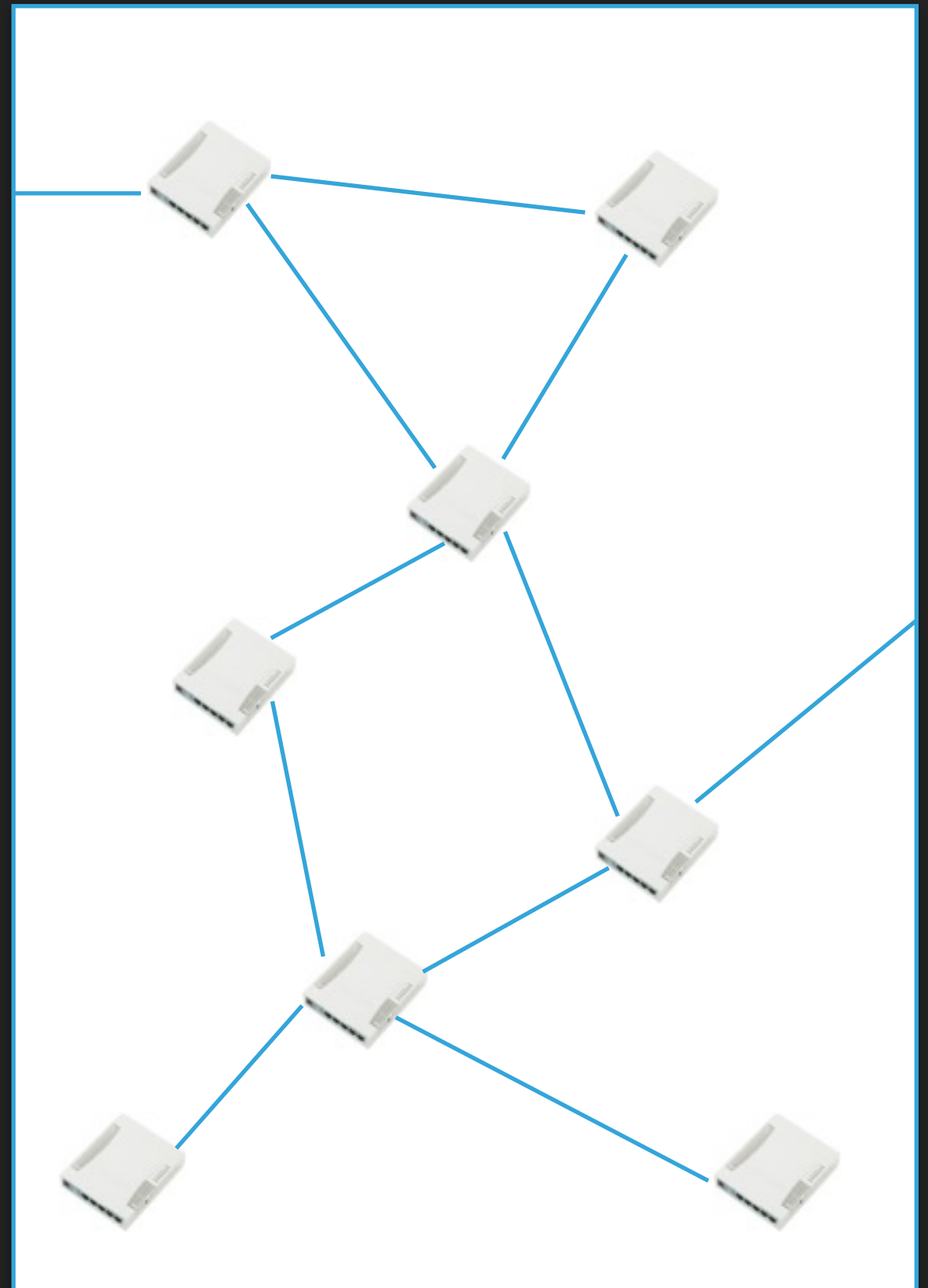






## WITH ROMON YOU CAN:

- ▶ Discover devices many hops away
- ▶ Have a emergency access if your OSPF (or you) will fail
- ▶ No need for big layer two network !



THERE IS ONLY ONE "BUT"

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## UNFORTUNATELY ROMON IS A PROPRIETARY PROTOCOL

Open source is good for me. Proprietary is evil.  
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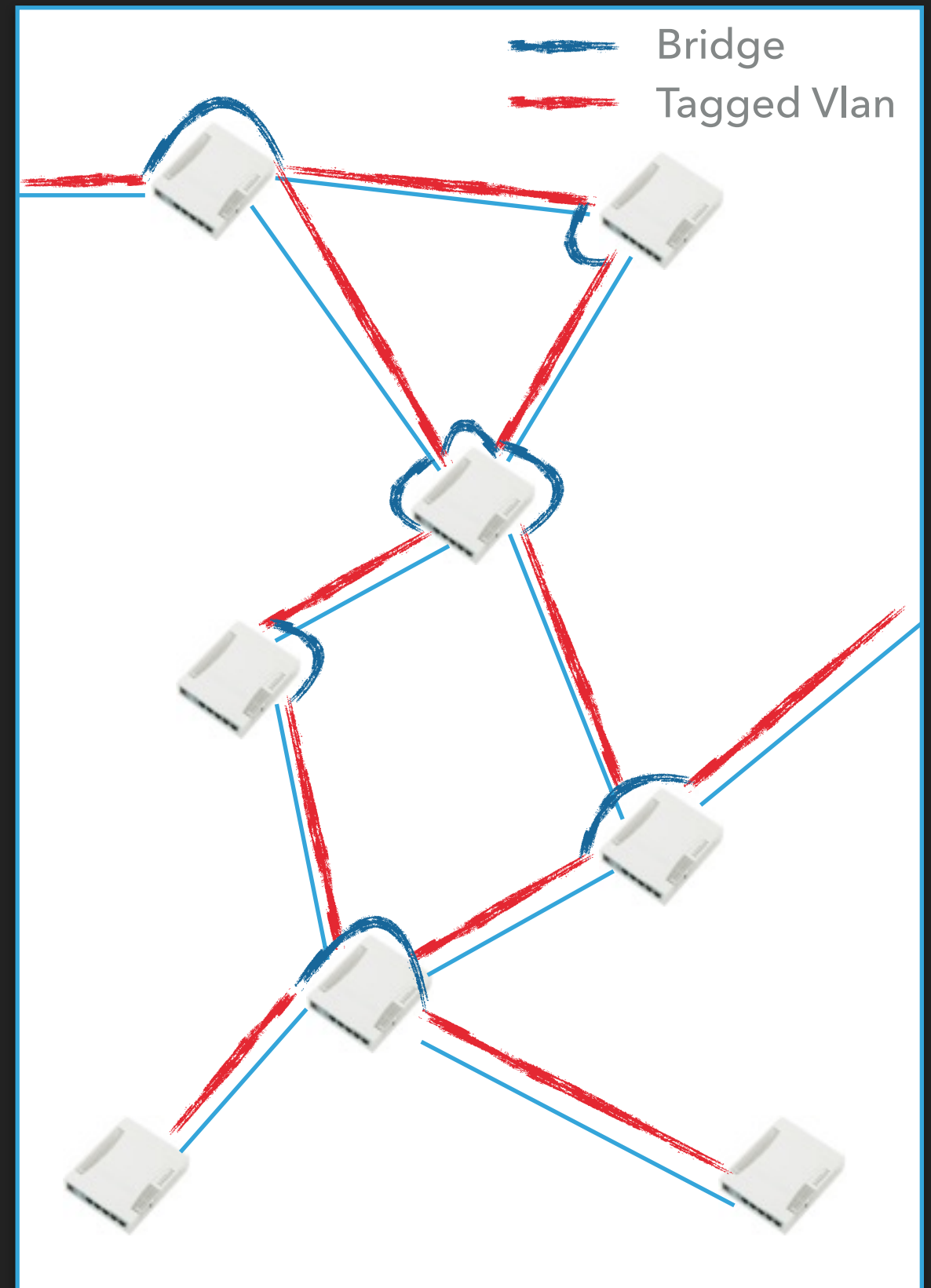
**“HOWEVER, THERE IS  
SOMETHING WE CAN DO ABOUT  
THAT !”**

**Jeremy Clarkson, BBC**

## WHAT IF WE BRIDGE ALL TOGETHER AGAIN ?

### MANAGEMENT VLAN

- ▶ Management layer can be a totally bridged topology
- ▶ Why use vlans ?
- ▶ One Vlan-ID can be used across entire network



### BENEFITS OF MANAGEMENT VLAN

- ▶ Separation of Data (customer) and Management Traffic (better security)
- ▶ VLAN technology is standardised and widely implemented - vendor independent
- ▶ Easy to configure  **EXCEPT CRS SERIES ;)**
- ▶ Ability to access third party devices on L2

New Bridge Port

General Status

Interface:

Bridge:

Priority:  hex

Path Cost:

Horizontal:

Edge:

Point To Point:

External Flooding:

☐ Auto Isolate

enabled inactive

OK Cancel Apply Disable Comment Copy

AND BRIDGE ALL THEM TOGETHER

Interface <managment\_bridge>

General STP Status Traffic

Protocol Mode: ☐ none ☐ stp ☒ rstp

Priority:  hex

OK Cancel Apply Disable Comment Copy

MAKE SURE IF (R)STP IS ENABLED

New Interface

General Status Traffic

Name:

Type:

MTU:

L2 MTU:

MAC Address:

ARP:

VLAN ID:

Interface:

OK Cancel Copy Remove Torch

CREATE VLANS ON CORE INTERFACE

New Interface

General Status Traffic

Name:

Type:

MTU:

L2 MTU:

MAC Address:

ARP:

VLAN ID:

Interface:

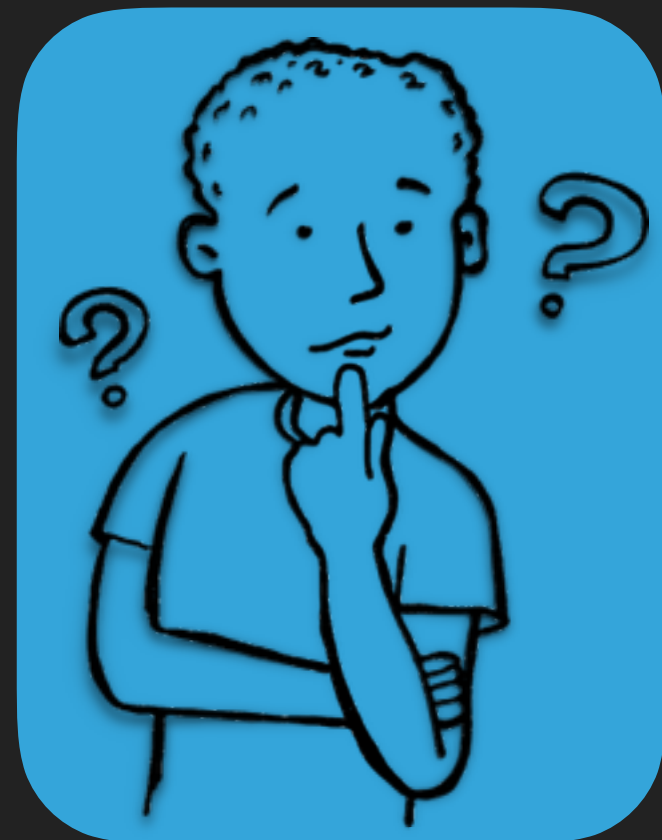
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## MANAGEMENT VLAN – ONE BIG BRIDGE ?

HUH ? I'VE IMPLEMENTED OSPF AND NEED TO CREATE ONE BIG BRIDGE AGAIN ?

- ▶ Management Bridge „network“ is not used for carrying customer data
- ▶ Broadcast Storm is not that serious as only core devices exists in management „network“
- ▶ STP may lead to not optimized path, but that is ok for emergency management traffic





TEXT

|                                      | RoMON | Managmement<br>Vlan |
|--------------------------------------|-------|---------------------|
| Can manage devices<br>behind NAT     | YES   | NO                  |
| Support other clients<br>then Winbox | NO    | YES                 |
| Vendor Independent                   | NO    | YES                 |
| Allow secure<br>connections          | YES   | NO                  |

## SO SHOULD WE SWAP ROMON TO VLANS?

- ▶ RoMON is great protocol and never let me down
- ▶ Both methods can be used at same time
- ▶ I personally use both methods in networks I manage.

# WANT TO LEARN MORE ?

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- ▶ Visit [wispcasts.com](http://wispcasts.com) - place where you can improve your skills

SITE IS STILL UNDER PRODUCTION BUT VIDEO CONTENT IS ALREADY AVAILABLE, AND PUBLISHED FREQUENTLY

TWO VIDEO SERIES AVAILABLE:  
MIKROTIK INTRODUCTION  
MIKROTIK VPN

AND MANY MORE UNDERWAY

