RB750UP as an AP Controller

By Paul Darius

Presenter

Paul Darius

- Founder & Owner Sky Networks Solusindo (2007)
- Introduced to MikroTik @ 2004 with RB230+R52
- MTCNA (2011), MTCTCE (2012), MTCUME (2013), MTCRE (2014), MTCINE (2014)

Sky Networks Solusindo

- Founded Jan 2007 with one T1 (1.5Mbps link)
- Coverage Area Padang City
- Totally crash due to Giant Earthquake Sept 30th, 2009
- Jan 2008 start to see Mentawai Island – VSAT reseller
- On progress...
  - Dedicated link Jakarta – Mentawai Islands
  - 3 Access Point sites
  - 100% rural customer base

Sky Networks Solusindo

After giant earthquake september 30th, 2009

Sky Networks Solusindo

Where is Mentawai Islands ?

What are interested ?

- Biggest regency in West Sumatra
- Totally rural area; 140-160KM distance from Sumatra land
- Traditional
- Mosquitos
- Earthquake
- Best surfing spot area

Life in Mentawai

Mentawai traditional house = UMA

One of surfing spot area

Presentation Notes

- The continue of the previous presentation by Brian Horn
  - Sept 2013 @ USA
  - Feb 2014 @ Italia
- The result based on lab test environment; not on the real field.

RB750UP Spesification

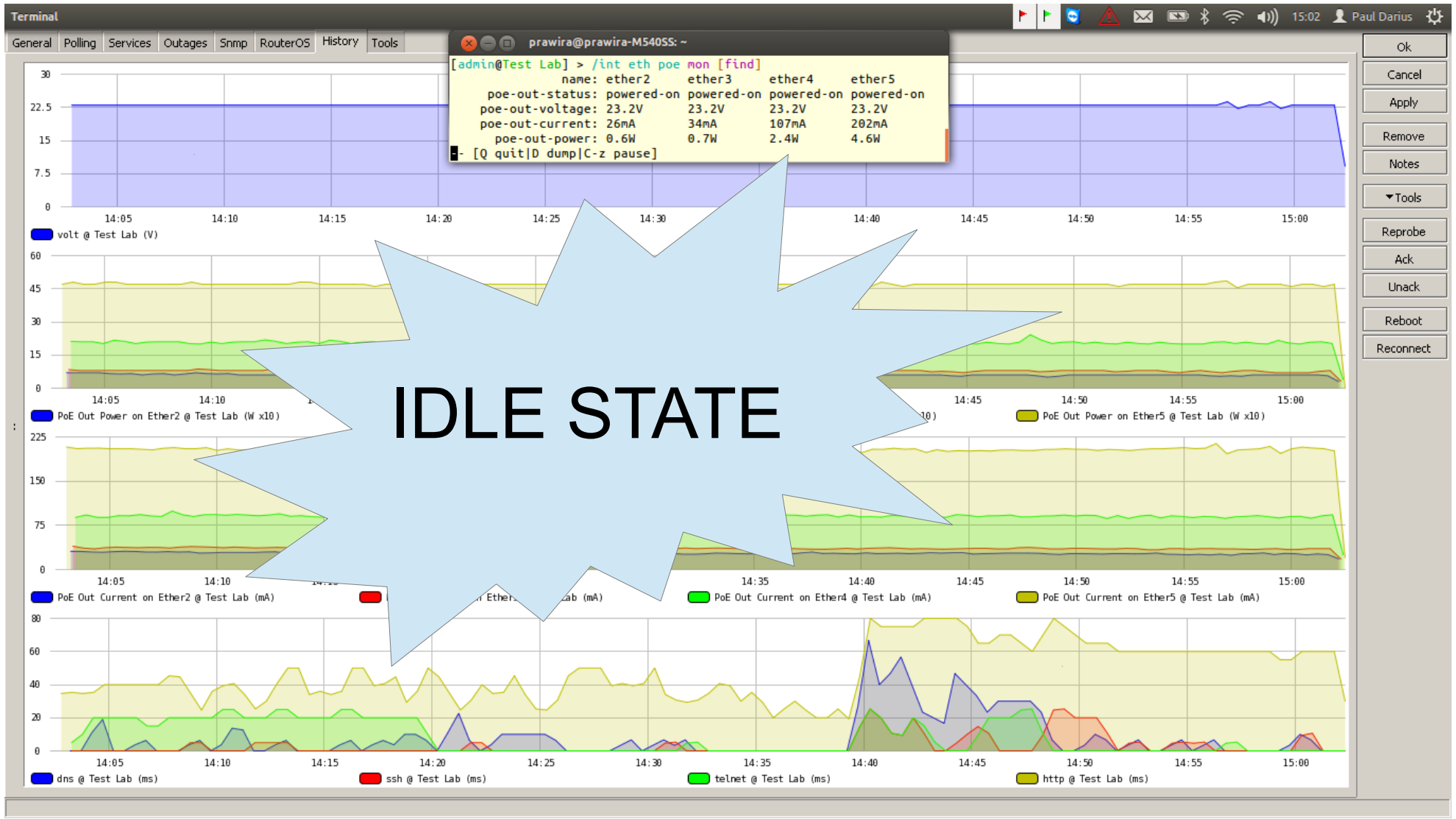
10/100 Ethernet ports	5
10/100/1000 Ethernet ports	0
PoE in on ether1	yes
PoE out on ether2-5 (firmware v2.0)	yes, max 1A per port, total 2.2A for all ports
Supported input voltage	8-30VDC
Voltage Monitor	yes
Max Power consumption	Up to 3W

Services needed

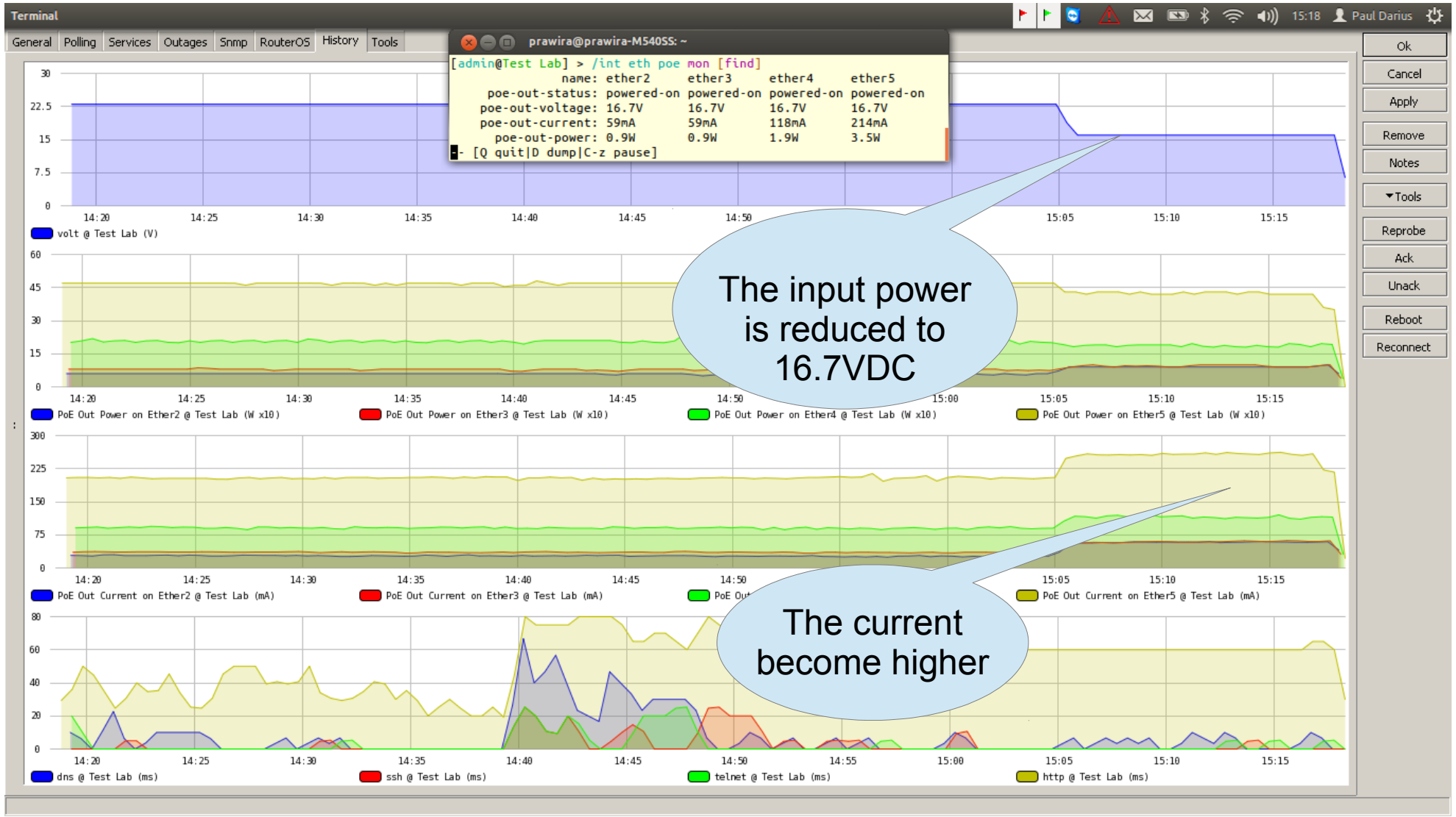
- SNMP (Simple Network Management Protocol)
- The Dude
- Custome functions and probes

PoE Out Monitoring

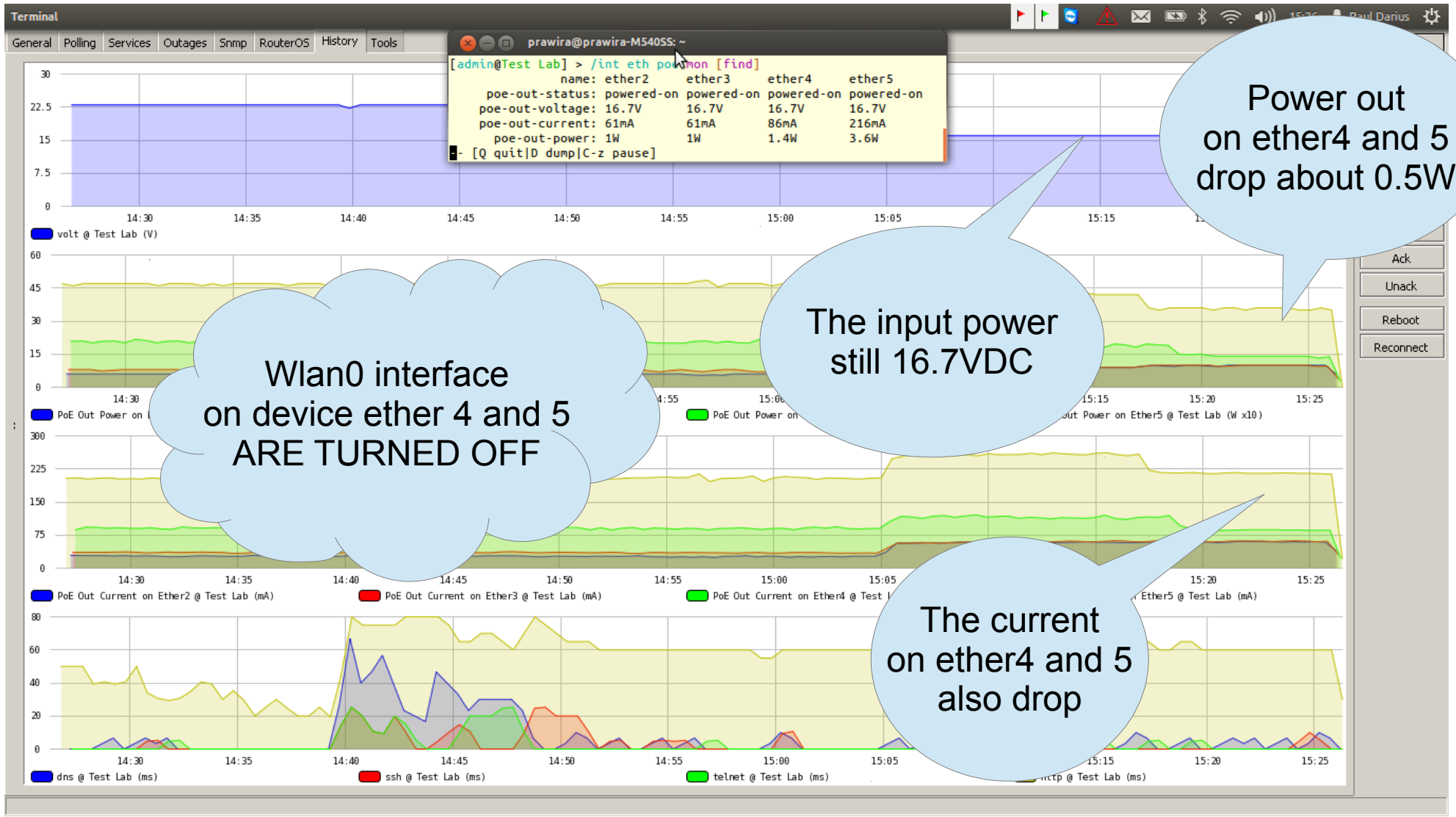
2 unit RB750, RB951Ui-2HnD, RB433UAH



Another Condition

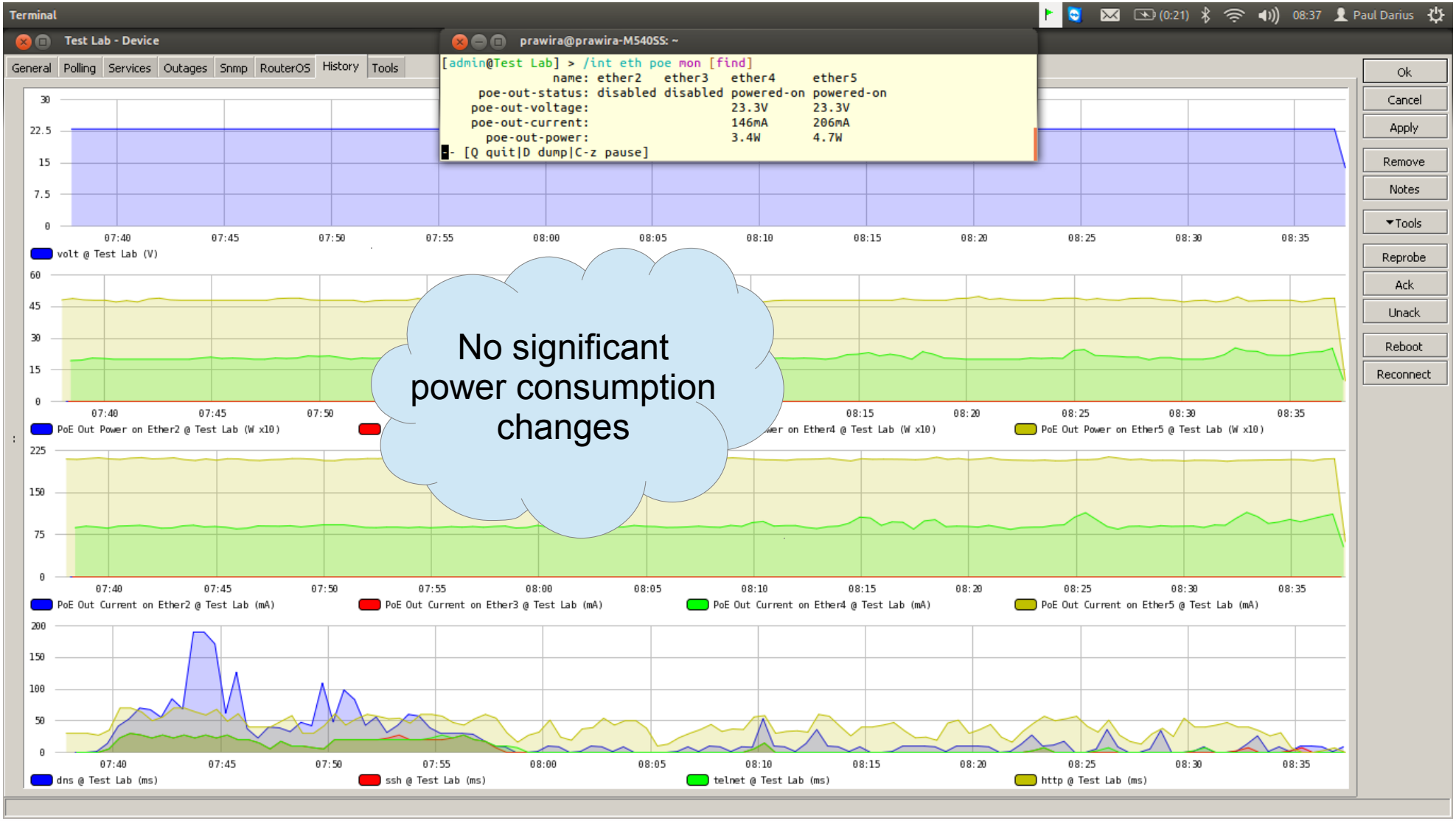


Another Condition (2)



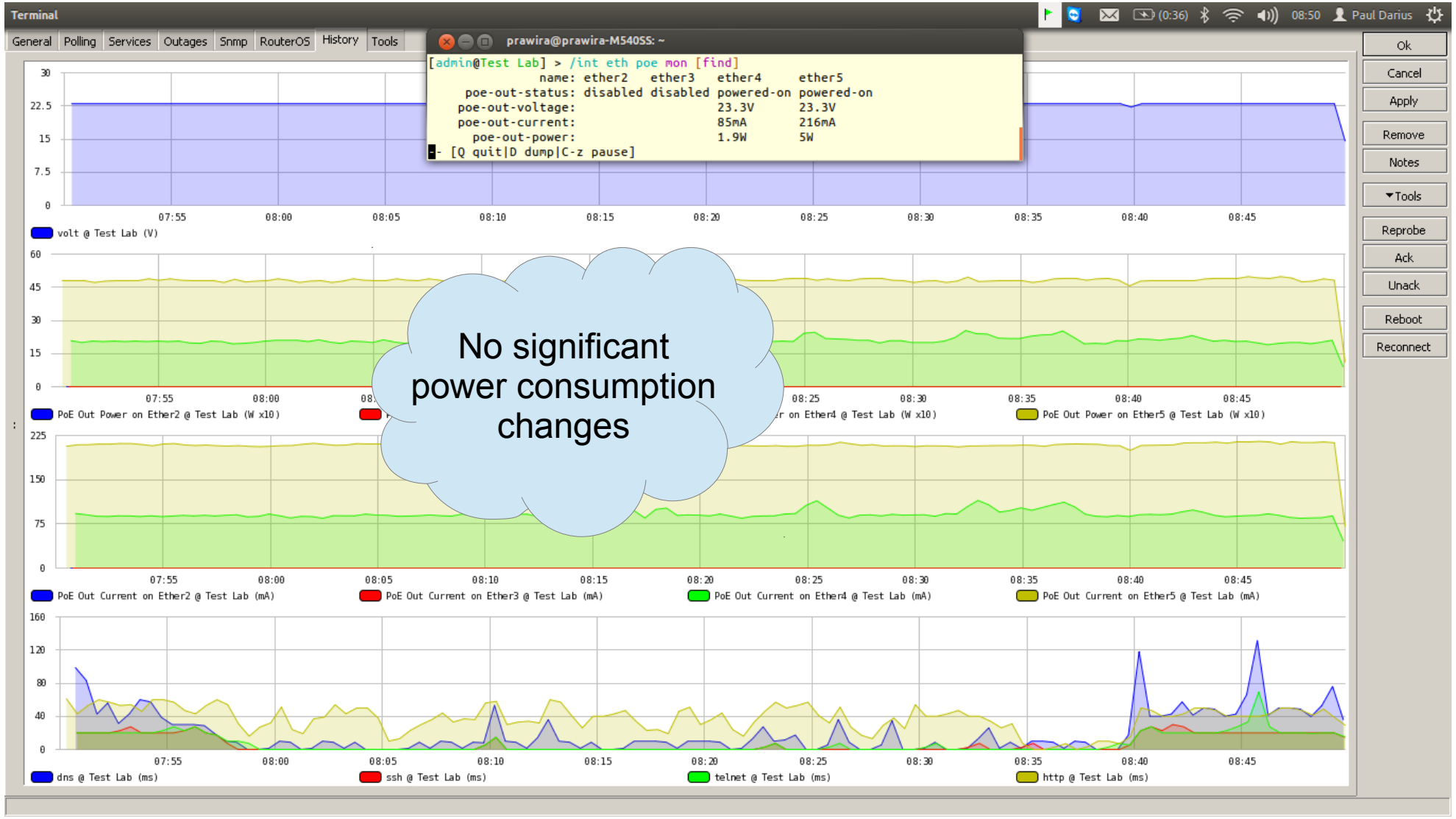
Normal Usages

on ether4 (browsing, youtube, etc)



Normal Usages

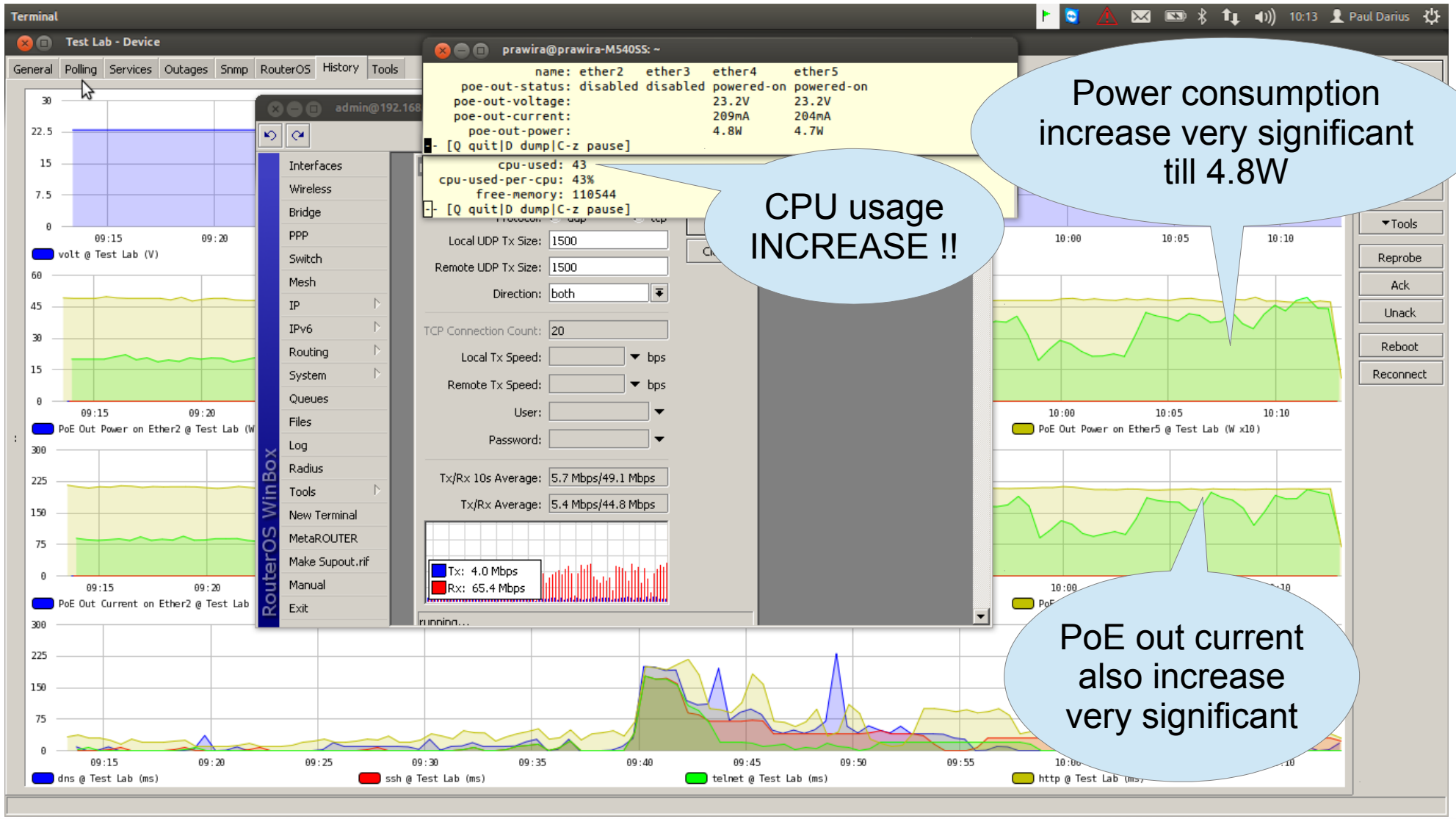
on ether5 (browsing, youtube, etc)



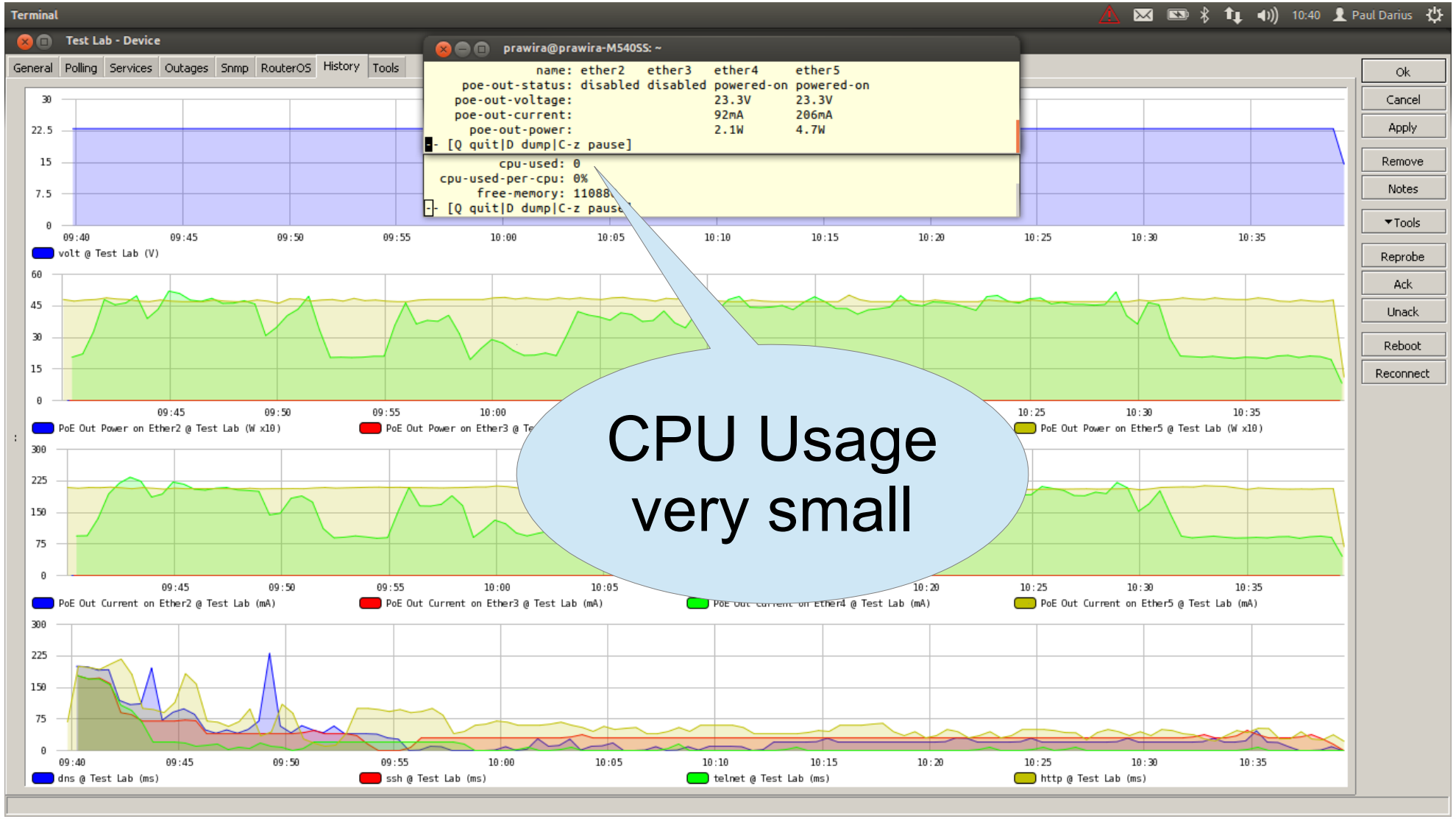
Spesification of RB952Ui-2HnD

Max Power consumption	Up to 7W

Bandwidth Test on ether4

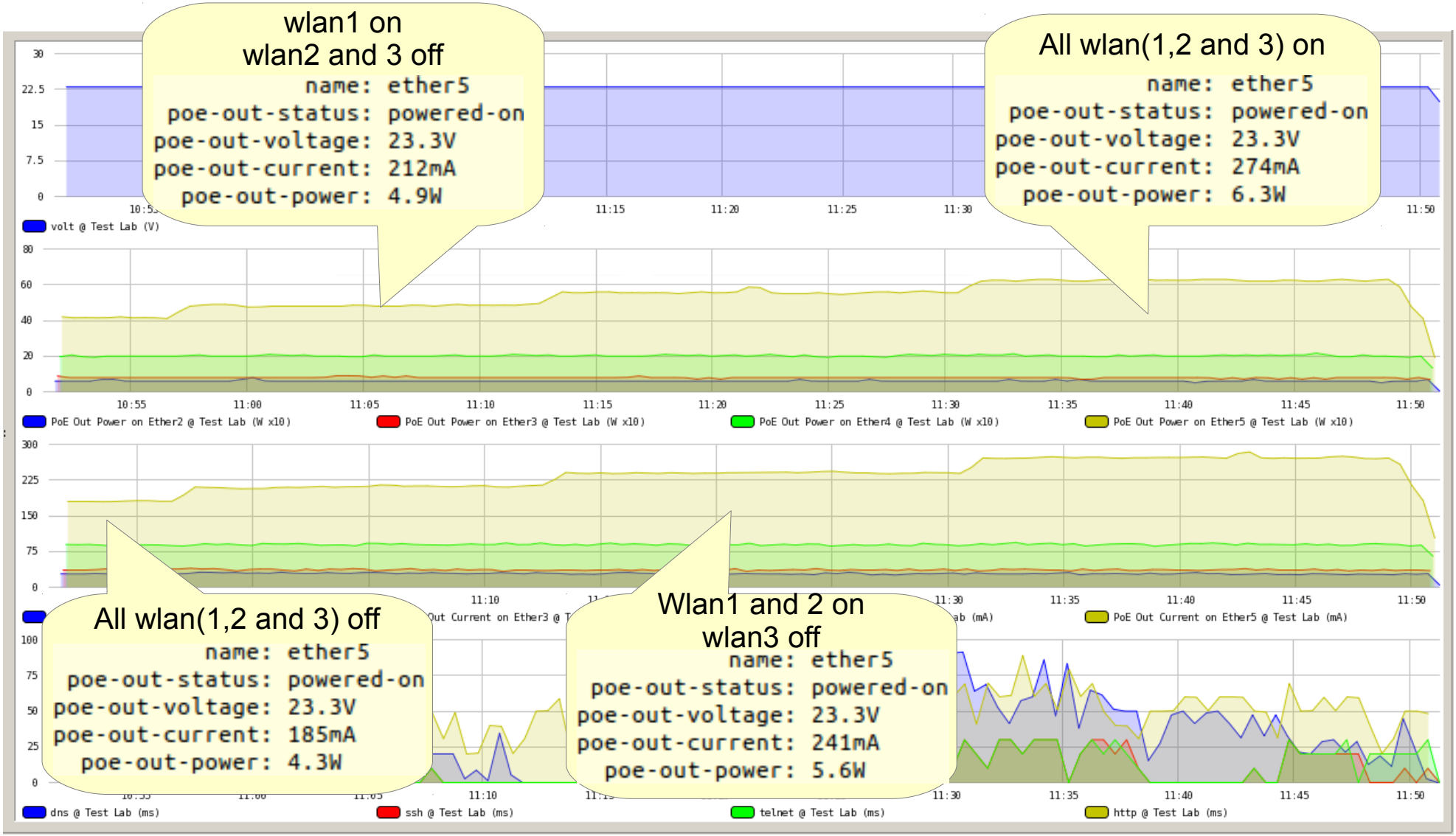


CPU Usage on IDLE



Another Test with RB433UAH

(idle state)



Summary

- Lower voltage supplied will increase the current need.
- Always power up the RB with almost the max voltage allowed.
- Prepare more power bank when using solar panel as they will very useful during night time and or bad weather.
- Uninstall all unnecessary packages to lower the power consumption.
- Heavy traffict will tigger bigger power consumption.
- Avoid of using complicated firewall (filter, mangle, L7) on the equipment with battery powered.

Disadvantage of RB750UP

- plastic case.
- no place for ground / earth anchor.
- limited number of RG45 ports.

Features Requested

- metal case.
- ground / earth anchor at RB case.
- more number of RG45 prots (such as 10 or more), faster CPU and support gigabit interfaces.
- Ability of PoE-out voltage conversion.
- Ability of graphics zoom of The Dude for detail problem investigation.

Credit

- http://routerboard.com/RB750UP
- http://routerboard.com/RB951Ui-2HnD
- http://mum.mikrotik.com/presentations/US13/horn.pdf
- http://mum.mikrotik.com/presentations/IT14/horn.pdf
- http://wiki.mikrotik.com/wiki/Manual:PoE-Out
- http://wiki.mikrotik.com/wiki/Display_voltage_for_Mipsbe_devices

Thank you

Comment and suggestion:

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