

# MOMO 8. MAI

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wehr24



# THEMEN

- Knotenaufbau 2345donau
- EdgeRouter Setup 0xFF, Wizards
- OLSRv2 Zwischenbericht
- Monitoring: EdgeRouter, OLSR, Alerts



# KNOTENAUFBAU 2345DONAU

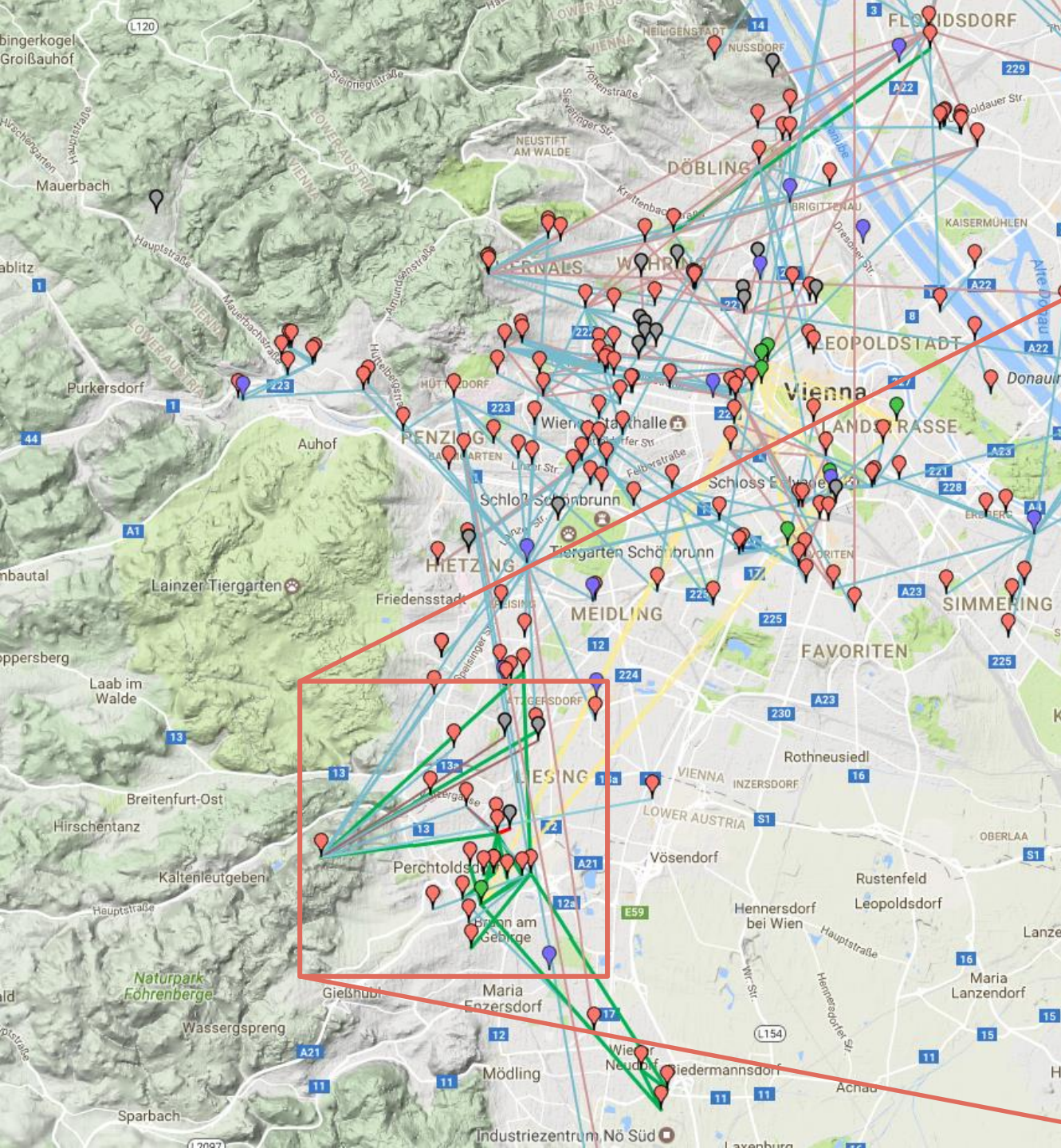


# VORGESCHICHTE

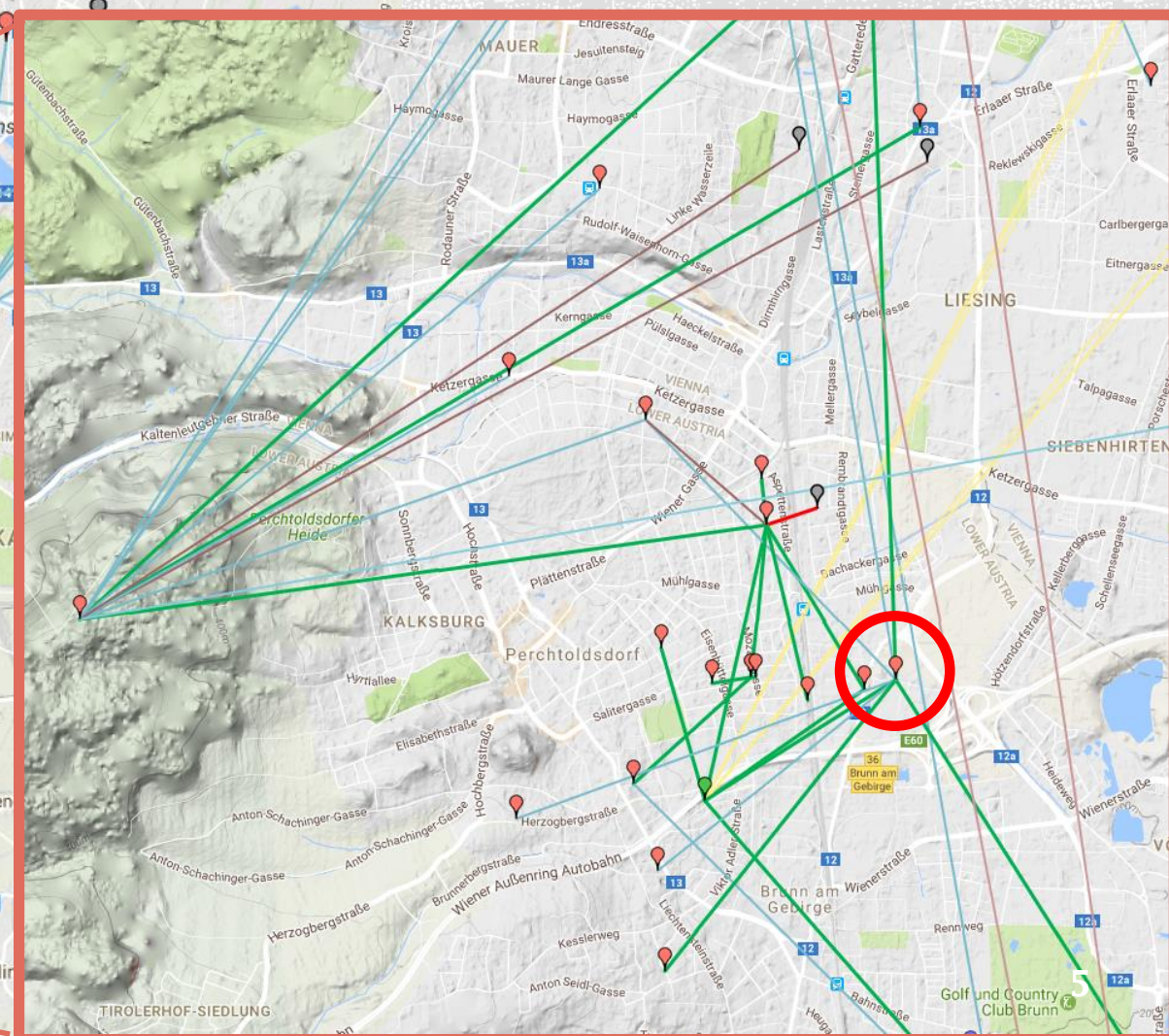
- **Wie es zur Location kam**  
Persönlicher Kontakt und Gespräche  
Zusage eines lokalen Netzwerkzugangs & Hotspots
- **Was gibt es an dieser Location**  
3-Punkt-Mast mit etwa 35m Höhe  
Kasten mit 230V  
Gute Aussicht in alle Richtungen
- **Was braucht es zur Inbetriebnahme**  
Kletterausrüstung und Mut (und gutes Wetter)  
Hardware: Router und Antennen  
Lange Netzwerkkabel







# LOCATION AUF DER MAP





# AUFGEBAUT

- **Montagetermin** Sonntag 14h–18h
  - Konfiguration der Geräte
  - Montage am Mast
  - Kabelvorbereitungen und Materialbereitstellung am Boden
- **Initial-Konfiguration** direkt vorort
  - EdgePoint R6: SW-Update, IP olsr-Bridge, 3 Wizards, Portforwardings – 10min
  - AirOS Antennen: Reset, SW-Update, Mgnt-Vlan, IP – 10min pro Gerät
- **Ergebnis** nach 4h: Standort mit 4 Antennen online
  - Uplink mit PBE-5AC-500 zu 2345falke
  - Link mit PBE-M5-300 zu ows0
  - 2 NanoStation-M5: Link nach Mödling und Wien-23
  - AirGateway-LR als Hotspot, NBE-M5-16 fürs Nachbargebäude in Betrieb
  - Montagevorrichtung PBE-5AC-620 nach Wr.Neudorf angebracht



# AUFGEBAUT

- **Montagetermin** Dienstag 15h–18h
- **Ergebnis** nach 3h
  - Links zu 2345falke und ows0 besser ausgerichtet
  - Link zu luxi122home mit PBE-5AC-620 hergestellt
  - Montage 3. NanoStation
- **Aktueller Zustand**
  - Zu 2345falke: Tausch PBE-5AC-500 geplant (scheint beschädigt zu sein), Anbindung mit 140/140mbps angestrebt
  - Zu OWS: eigene Antenne bei OWS sinnvoll (Distanzunterschiede der 3 Stations)
  - Zu luxi122home: Antennenwechsel und -Ausrichtung bei luxi122home nötig
  - NanoStation-1 zu Eno
  - NanoStation-2 zu hzb48, hag10, Mödling
  - NanoStation-3 nach Himberg







# FOTOS

PBE-5AC-500

PBE-6AC-620

NST-M5 3x



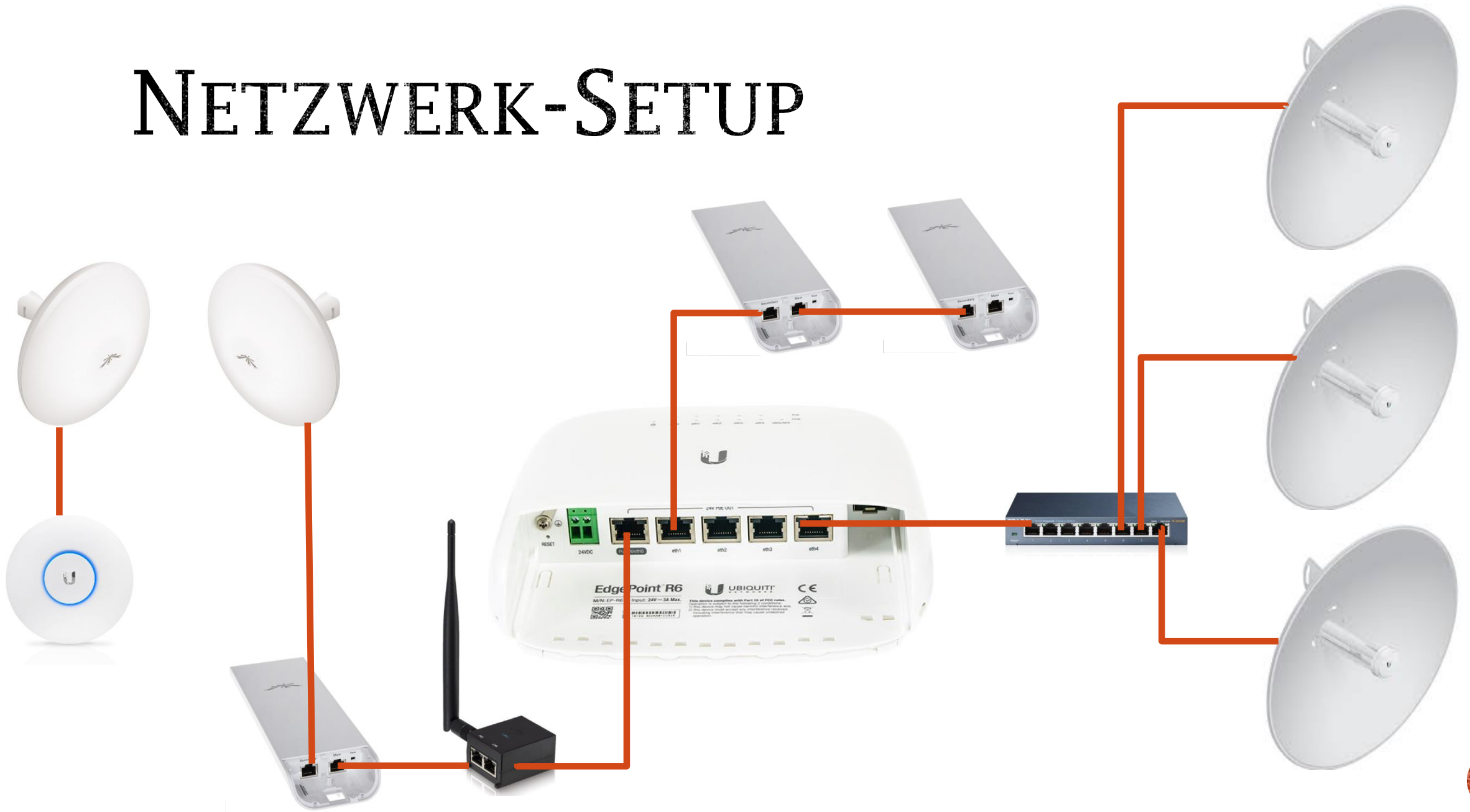


# FOTOS

PBE-M5-300

NBE-M5-16

# NETZWERK-SETUP







# EDGEROUTER SETUP 0xFF

# EDGEROUTER PRODUKTLINIE

- EdgeRouter X
- EdgeRouter X-SFP
- EdgePoint R6, R8
- EdgeRouter Lite
- EdgeRouter PoE-5

2x880MHz

256 RAM

256 Flash





# EDGEROUTER-X BEI 0xFF

## Geschätzte Vorteile

- OLSR mit nur 1 IP (vs. eine/zwei pro Antenne)
- Preis: leistbar: EUR 55 oder EUR 75
- Out-of-the-Box: kein Flashen von Custom-FW benötigt (Garantie, Reset, Wiederverkauf, Hersteller-Updates,...)
- Ausreichend Power: 330mbps „von links nach rechts“
- Individualisierbar
  - Wizards von Jedermann
  - Linux dpkg
- Dual-Wan, NAT und Transit, Tunnel,...

# EDGEROUTER-X BEI 0xFF

## Bekannte Drawbacks

- Preis: EUR 55 oder EUR 75 (alles ist relativ)
- Bastler (TFTP, LEDE-Flashen) müssen Gerät öffnen um TTY-Interface zu verbinden
- Kernel unterstützt 4in6-Tunnel derzeit nicht (native OLSRv1 /IPV4 nötig, wird parallel zu OLSRv2 /IPv6 gefahren)



# EDGEROUTER-X STATISTIC

- Derzeit 79 EdgeRouter in Betrieb mit EdgeOS
- Nur 7 mit Firmware älter als v1.9.0
- 51 EdgeRouter X-SFP
- 18 EdgePoint R6, 1 R8
- 6 EdgeRouter X
- 1 ERPoe5, 1 ERLite





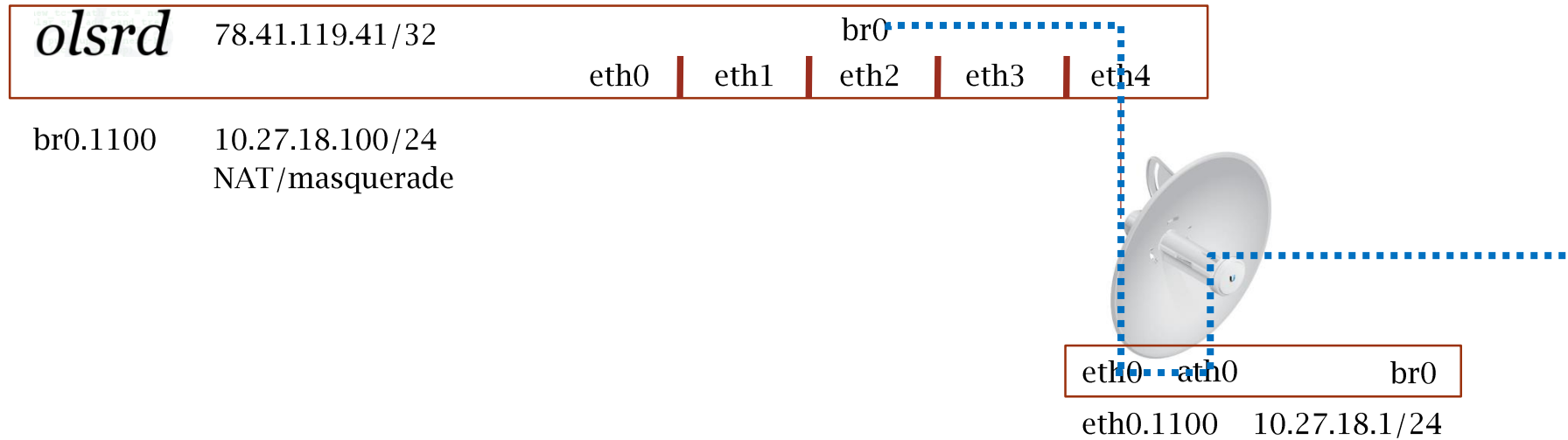
# EDGEROUTER-X 0xFF-SETUP

## **Einstellungen für Betrieb bei Funkfeuer mit OLSR [PDF-Beschreibung C.Lösch]**

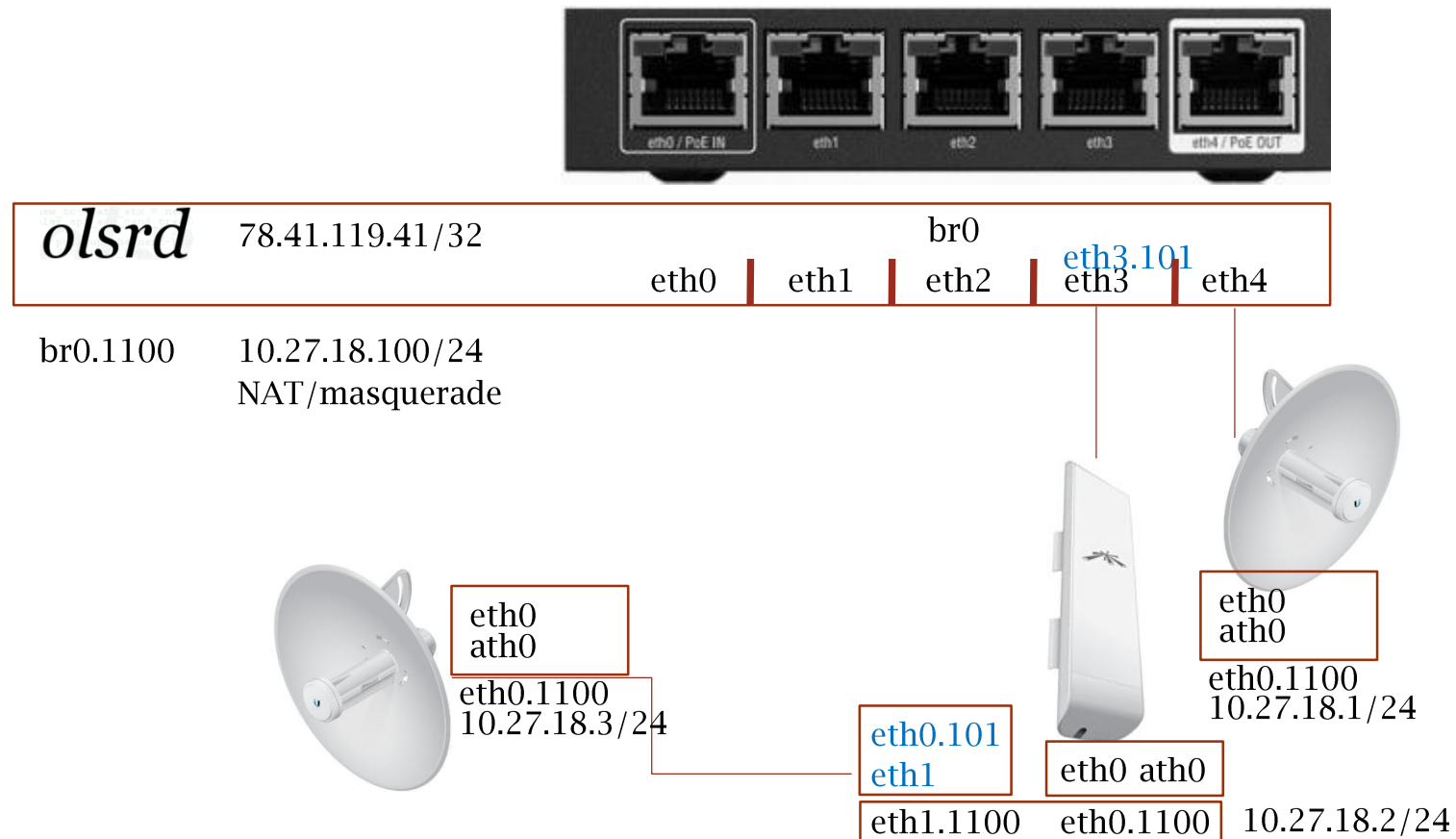
- Bridge br0 kombiniert alle Ethernet-Ports mit OLSR-Nachbarn, hält Public-IPv4
- Client-Isolation mittels ebtables -P FORWARD DROP
- br0.1100 oder br1 mit 10.x.y.100/24 als Management-Netz für Antennen, xy: Node-ID
- Managen der Antennen via Portforwarding oder PPTP
- OLSRv1 installiert sich als Wizard inkl. GUI
- OLSRv2 installiert sich als Wizard inkl. GUI  
legt IPv6-Adressen aufs loopback-Interface an.
- LAN-Interface wird aus br0 rausgelöst oder als vlan angelegt
- Optional: Wizard für LetsEncrypt-SSL und Status-Page/-API



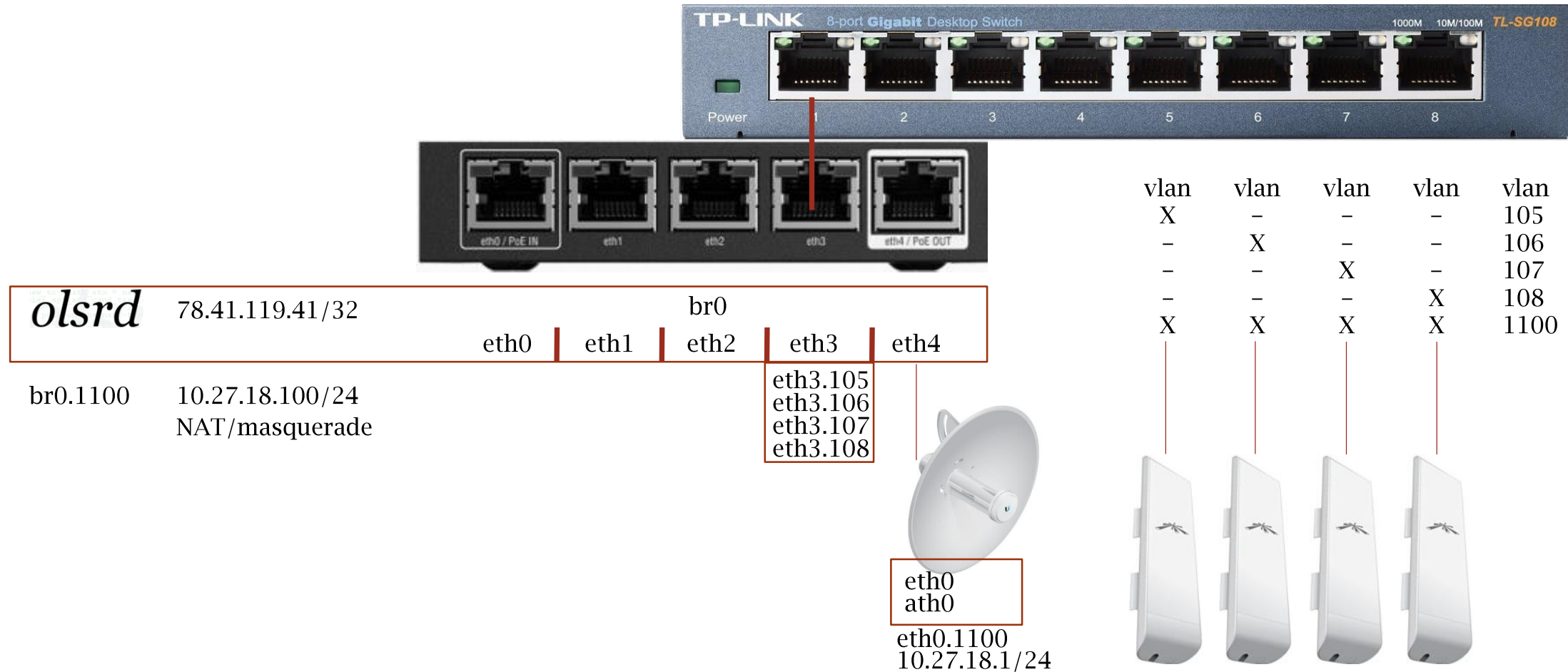
# EDGEROUTER-X 0xFF-SETUP



# EDGEROUTER-X 0xFF-SETUP

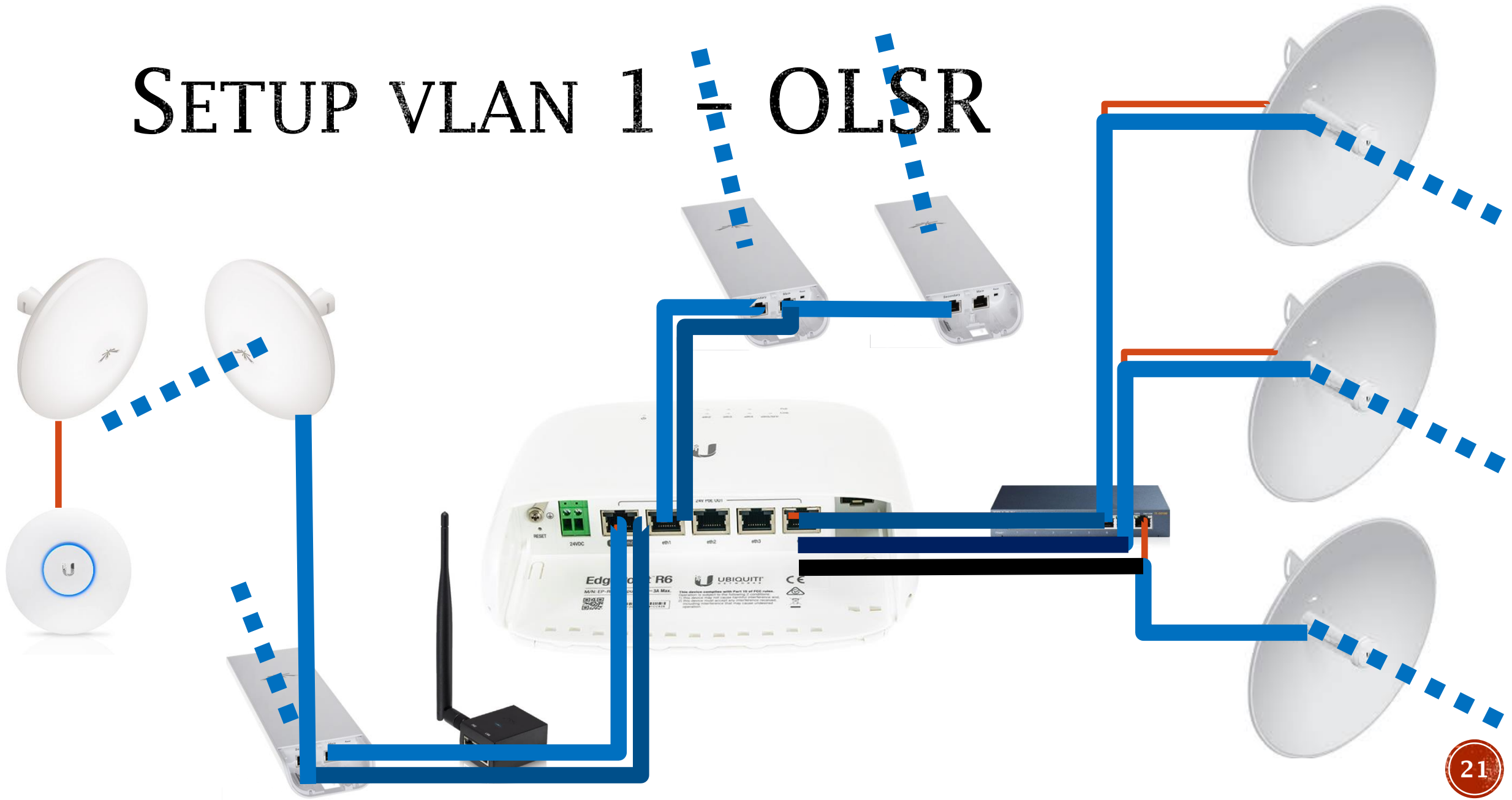


# EDGEROUTER-X 0xFF-SETUP

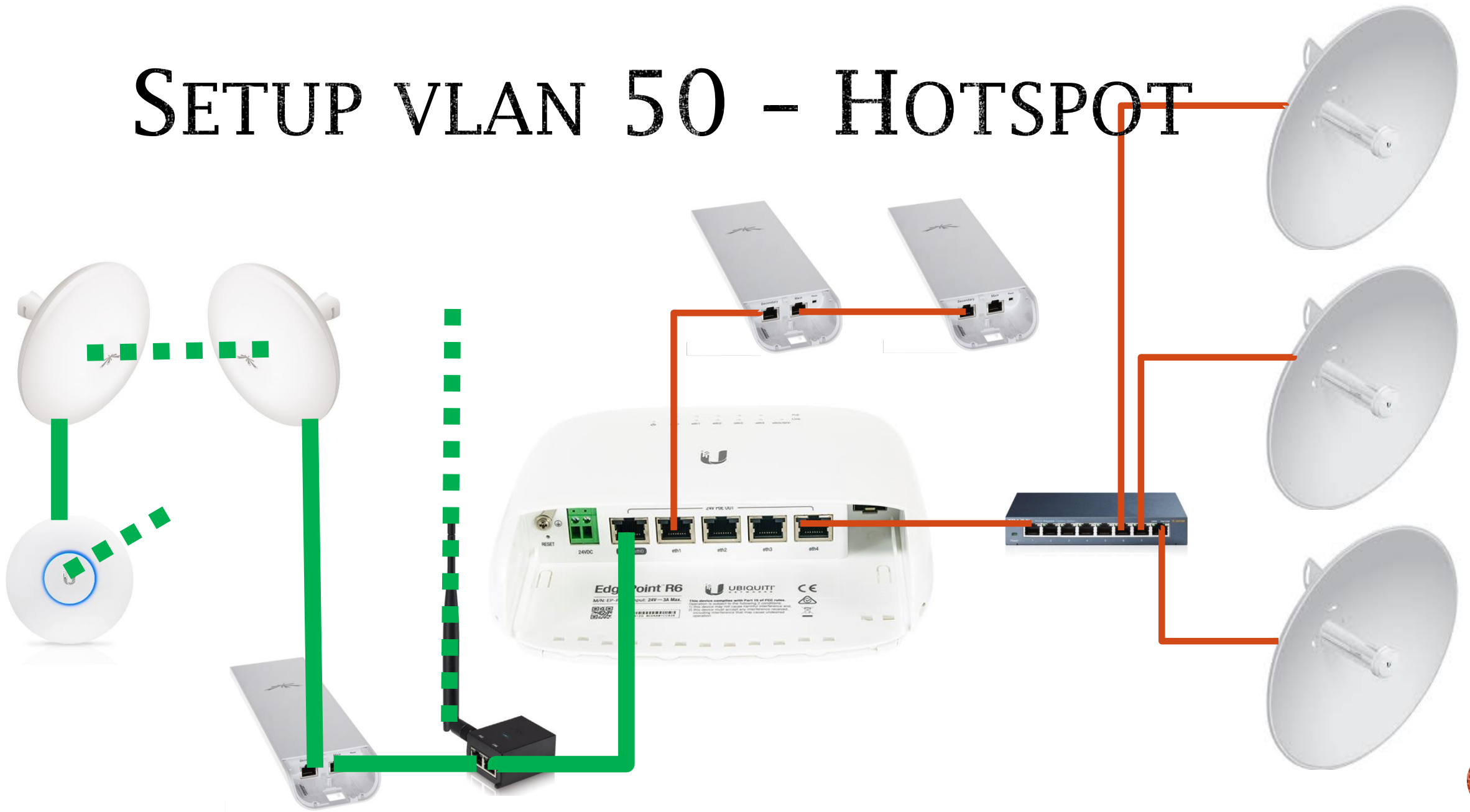




# SETUP VLAN 1 - OLSR



# SETUP VLAN 50 - HOTSPOT



# CLI

Welcome to EdgeOS

```

      |
,---.,---|,---.,---.,---.,---..  .|--- ,---.,---.
|---`|  ||  ||---`|  ||  ||  ||  ||  |---`|
`---`---`---|`---`---`---`---`---`---`---`---
      `---`      :: luxi-router ::
Location: 2351, Wr.Neudorf luxi
Contact : pocki@pocki.at
```

**ubnt@luxi-router:~\$ show bridge**

bridge name	bridge id	STP enabled	interfaces
br0	8000.44d9e75030dc	no	eth0 eth1 eth2 eth3 eth4 eth5

Linux luxi-router 3.10.14-UBNT #1 SMP Wed Mar 1 04:45:36 PST 2017 mips  
Last login: Wed Apr 26 08:11:45 2017 from router.wehr24.wien.funkfeuer.at

**ubnt@luxi-router:~\$ show interfaces**

Codes: S - State, L - Link, u - Up, D - Down, A - Admin Down

Interface	IP Address	S/L	Description
br0	78.41.113.155/32	u/u	
br0.1100	10.9.19.100/24	u/u	
eth0	-	u/D	xPDORF28_NBE
eth1	-	u/u	xWEHR_PBE
eth2	-	u/u	xHOCH_NBR
eth3	-	u/D	Port3
eth4	-	u/D	Port4
eth5	-	u/D	Port5sfp
lo	127.0.0.1/8 2a02:61:397:11::1/128 ::1/128	u/u	
switch0	-	u/u	



# CLI

```
ubnt@luxi-router:~$ df
```

Filesystem	1K-blocks	Used	Available	Use%	Mounted on
ubi0_0	220080	160132	55112	74%	/root.dev
aufs	220080	160132	55112	74%	/
devtmpfs	127364	0	127364	0%	/dev
tmpfs	127488	100	127388	0%	/run
tmpfs	127488	100	127388	0%	/run
tmpfs	127488	308	127180	0%	/var/log
tmpfs	127488	28	127460	0%	/tmp
none	127488	1000	126488	1%	/opt/vyatta/config

```
ubnt@luxi-router:~$ ls -al /config
```

```
total 28
drwxr-xr-x 18 root    vyattacf 1072 Apr 25 17:04 .
drwxr-xr-x 33 root    vyattacf  968 Apr 11 15:08 ..
drwxr-xr-x  2 www-data www-data  160 Feb 20 2016 auth
-rw-rw-r--  1 root    root      12914 Apr 25 17:04 config.boot
drwxr-xr-x  5 ubnt    1000      360 Apr 14 14:09 custom
drwxr-xr-x  2 root    root      1192 Apr 14 14:09 letsencrypt
drwxr-xr-x  2 root    root       240 Jan 31 14:19 lighttpd
drwxr-xr-x  3 ubnt    1000      512 Apr 10 19:43 olsrd2
drwxr-xr-x  4 www-data www-data  232 Mar 31 14:42 scripts
drwxr-xr-x  2 www-data www-data  232 Jan  1 2015 snmp
drwxr-xr-x  2 www-data www-data  160 Feb 20 2016 support
drwxr-xr-x  4 www-data www-data  232 Jan  1 2015 url-filtering
drwxr-xr-x  2 root    root       712 Mar 31 14:42 user-data
drwxr-xr-x  3 www-data www-data  224 Jun  1 2014 wizard
```



# WIZARDS




## Optimized Link State Routing Protocol


The [OLSR.org](http://OLSR.org) OLSR Daemon (olsrd) is an implementation of the IETF RFC 3626: [Optimized Link State Routing Protocol](http://RFC3626.org). OLSR is an IP routing protocol optimized for mobile ad hoc networks, which can also be used on other wireless ad hoc networks. As such it allows mesh routing for any network equipment.

Package Status: **success: packages olsrd 0.9.0.3-1 and olsrd-plugins 0.9.0.3-1 installed.**

Daemon Status: IPv4: 78.41.119.41:698 3399-olsrd. IPv6: not running.

Update Info: **new version available: 201704180, current: 201704140**

☒ Setup Script 

☐ Upgrade Wizard on 'Apply'. 

### ▼ OLSRd IPv4

☒ Enable OLSR daemon

☒ Run OLSR daemon  
(on boot, if enabled)

*olsrd*

an adhoc wireless mesh routing daemon

#### Interfaces:


Enable: ☒ Interface:  Address:


Enable: ☐ Interface:  Address:


Enable: ☐ Interface:  Address:

Enable: ☐ Interface:  Address:

#### Settings:

Ip4Broadcast 

Hna4 

LinkQualityMult (IPv4) 

#### Plugins:

☒ txtinfo (0.0.0.0:2006) ☐ jsoninfo (0.0.0.0:9090) ☐ httpinfo (0.0.0.0:8080)

# OLSRd\_V1

Installiert daemon

Managed daemon/plugin settings

Client-isolation mit ebttables

Hna und LQ settings

Setup-Script überlebt FW-Update



OLSRd2 Status: success: daemon is running - v0.13.0-30-g34afb3 (v0.13.0)

Update Info: current version 201704180 is up-to-date

☐ Upgrade on 'Apply'!☒ Upgrade Wizard from GitHub **automatically**☒ Enable OLSRd2 daemon and Start-on-Boot☐ Restart OLSRv2 daemon on 'Apply'☐ Reset olsrd2.conf to default-settings on 'Apply'

## ▼ OLSRd2 IPv6

Firewall rules exist ☐ Firewall-Rules have been createdInitialize Firewall rules ☐ Initialise or update firewall rulesEnable v6 Firewall ☐ Block unwanted IPv6 traffic to routerAssign Google DNSv6 ☒ User IPv6-DNS servers from Google as name-serversIo-Adresse EUI64 2a02:61:0:ff:46d9:e7ff:fe5:6bf3/128 ☐ AssignedIo-Adresse NodeID  
change here 2a02:61:a9e:11::1/128 ☐ Assigned

Node/Router/NIC-ID 2718 1 1

...hex... a9e 1 1

4in6 IPv4

## ► Interfaces

## ▼ Additional OLSRv2 Announcements

Prefix/Address: 2a02:61:a9e:11::0/64

- Remove

+ Add

# OLSRd\_V2

Installiert daemon

überlebt FW-Update

Konfiguriert IPv6-Adressen

Managet LAN-Announcements

Managet local Routeradverts

Aktiviert Firewall

Package Status:	new config-lighttpd exists - success		
Update Info:	new version available: 201704200, current: 201704145		
BMK-webstatus:	dpgk version 4.6 (4)		
Let's Encrypt:	version 2 installed (2)		
Certificates:	checked (2)		
Orig-Server-Ports:	81	443	(WebGUI!!!)
Custom-Server-Ports:	80	8443	(Cert-Check!!)
Several changes are applied with restarting the lighttpd. This will result in the error message "apply failed". <b>Reload the full WebUI after this!</b>			
Current DNS	router.wehr24.wien.funkfeuer.at		from ifconfig/def.route
Domain-Key FQDN	router.wehr24.wien.funkfeuer.at		
Certificate FQDN	router.wehr24.wien.funkfeuer.at		
Certificate Validity	Apr 12 05:52:00 2017 GMT	to Jul 11 05:52:00 2017 GMT	76 days left

## ► Let's Encrypt files

## ► BMK-WebStatus php files

## ► Let's Encrypt files

## ► File-Liste overall

## ► Configuration BMK-Webstatus-Page

- ☐ Upgrade Wizard from GitHub (online only) on 'Apply' ⓘ  
☐ Register FQDN and renew/install Certificate on 'Apply' ⓘ  
☒ Try to establish server.pem on local antennas after renewal ⓘ

**[download keyfile for AirOS]** -> In order to establish server.pem on AirOS devices, each target device needs the router's public ssh key registered. Use the download-link to retrieve the router's key and to add it on AirOS in Settings->Services->Authorized Keys. Alternatively you can run `sudo /config/letsencrypt/deploykeys.sh` in CLI to deploy all local antennas at once.

- ☐ Restart original lighttpd on 'Apply'  
☐ Restart custom lighttpd on 'Apply'

# LETSencrypt

Erstellt/registriert Certificates

Erneuert Certificates per Cronjob

Verteilt Cert. Zu AirOS-Geräten

Installiert BMK-Webstatus

Managet Webserver-Ports

EdgeMAX Wizard "ER-wizard-AutoUpdate"  
created 04/2017 by CPO/BMK for FunkFeuer.at  
Version 201704120

## AutoUpdate

Update Info: current version 201704230 is up-to-date

☐ Upgrade Wizard from GitHub (online only) on 'Apply' ⓘ  
☒ Upgrade Wizard from GitHub **automatically** (just this AutoUpdate-Wizard, not the individual Wizards) ⓘ

▼ Wizards enabled for AutoUpdate

<input checked="" type="checkbox"/>	AutoUpdate	Current:		Github:		
<input type="checkbox"/>	OLSRd_V1	Current:		Github:		
<input checked="" type="checkbox"/>	OLSRd_V2	Current:		Github:		
<input type="checkbox"/>	0xFF-WSLE	Current:		Github:		

# AUTOUPDATE

Prüft täglich auf neue Versionen

Installiert updates per Cronjob

Logging zu externem Server

## Device Summary

Device <a href="#">[klick to highlight in log]</a>	time	Logmessage
wehr-router	2017-04-25/06:27:02	finish
2620:101:4035:324:150:70:173:7	2017-04-19/09:16:49	test
wehrtest-router	2017-04-25/06:27:01	finish
ffh-router	2017-04-25/06:27:01	finish
hochmayer-router1	2017-04-25/06:27:02	finish
hochmayer-router2	2017-04-25/06:27:02	finish

## Log

Date/Time	IP-Address	IP-Hostname	Router-Hostname	Logmessage
2017-04-25/06:27:02	2a02:61:a9e:11::1	2a02:61:a9e:11::1	wehr-router	finish
2017-04-25/06:27:02	2a02:61:90f:11::1	2a02:61:90f:11::1	hochmayer-router1	finish
2017-04-25/06:27:02	2a02:61:90f:21::1	2a02:61:90f:21::1	hochmayer-router2	finish
2017-04-25/06:27:02	2a02:61:a9e:11::1	2a02:61:a9e:11::1	wehr-router	done ER-wizard-AutoUpdate
2017-04-25/06:27:02	2a02:61:90f:11::1	2a02:61:90f:11::1	hochmayer-router1	done ER-wizard-AutoUpdate
2017-04-25/06:27:01	2a02:61:90f:21::1	2a02:61:90f:21::1	hochmayer-router2	done ER-wizard-AutoUpdate
2017-04-25/06:27:01	2a02:61:a9e:21::1	2a02:61:a9e:21::1	wehrtest-router	finish
2017-04-25/06:27:01	2a02:61:291::1	2a02:61:291::1	ffh-router	finish

# WIZARDS

## wizard.html

HTML GUI

Forms-Elemente

Listen, Add/Remove

Javascript

## wizard-run

Shellscript

Liefert json-output für HTML-Forms-Elemente

- load()
- apply()



# WIZARD OFFLINE INSTALL

```
#!/bin/bash
```

```
## do thinks in any case!
```

```
#base64begin
```

```
# perfect location for one-time installation stuff
```

```
echo "7zik2wnpJteU1/sXrDy+qMZ09aSU7vH6qbQen4B0Z+aX1/t3cP0j0LMhU/yZWZc4juak8s
eIR7lZTuak95ul+0X/OykWxmWSI+sCyVyGai+IRbg9HukeyT8UxsjX6Epzmb+jB1tMDv/vvv1+/w
k+/68/J7WlqW33vPitByeL8iFGq5l2grVMA0r9C/r1yS30g215/RNJJJpXJ26Zzi//30f3I41v8h
e/xD9v/y++6/l/U/A+ZS9vhH/f/R76PfR7+PfvD7v0dDylsASA0ACg==
" | base64 -d >/tmp/installpackage.deb
dpkg -i /tmp/installpackage.deb
```

```
# remove installation block
```

```
sed -i '/^#base64begin/,/^#base64end$/d' $0
```

```
#base64end
```

```
load () {
```

```
## do things to return json data
```

```
}
```

```
apply () {
```

```
## do thinks GUI returned on apply
```

```
}
```

```
exit 0
```

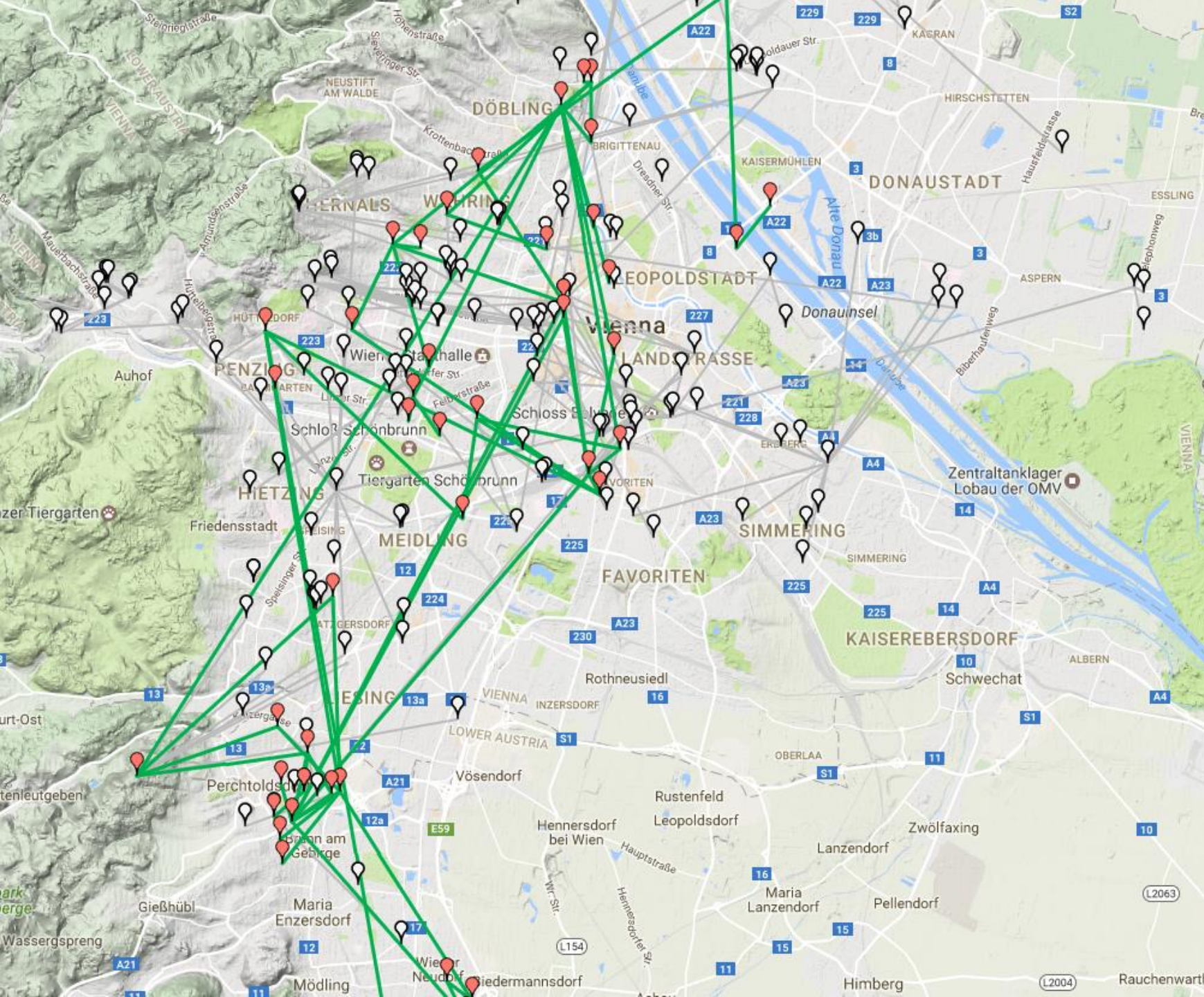
# WIZARDS – ANSÄTZE

- GUI – So you want to add a feature to the EdgeMax Web UI?
- Anwenden und Speichern von EdgeOS Config
- Persistent Code Injection
- Offline-Install mittels base64 Paketen
- Cronjob-Anlage
- “Upgrade-me” von Github, AutoUpdate
- LetsEncrypt-Renewal, SSH-Deployment zu AirOS-Geräten



# OLSRv2 ROLLOUT





# IPv6@OLSR2

Active nodes: 47

jcn, pjsxjuh18, jed99, kryptaroom, metalab, nessus, 2345falke, goz19, hw, duer9, fl49, quell165, cza44, wuk, vor203, hnd1, bec2, fen42, we16, kr3, mh, ffh, frieden, kobe4, lax2, mzg32, pdorf28, gri106, eno, 2345donau, 2380hochmayer28, 2380grilanz, ows0, oswald5, td1, lsg33, luxi122home, wehr24, pdorf22, hag10, arn22, gri121, bal3, 2345wolf, fildan1, 2355riag, 2345gattringer85a



# CONFIG UND STATUS

```
ubnt@luxi-router:~$ grep -vE "^#" /config/olsrd2/olsrd2.conf | sed '/^\s*$/d'
```

```
[global]
failfast no
fork      yes
lockfile  /var/lock/olsrd2
pidfile   /var/run/olsrd2.pid
[log]
file      /var/log/olsrd2.log
info      main
info      http
stderr    true
[telnet]
port 2009
[http]
bindto 0.0.0.0
bindto ::0
webserver /config/olsrd2/www
port 8000
```

```
[olsrv2]
originator -2a02:61:0:ee:1::0/80
originator -0.0.0.0/0
originator -::1/128
originator default_accept
forward_hold_time 50
processing_hold_time 30
tc_interval 5
tc_validity 20
```

```
[interface=br0]
bindto -0.0.0.0/0
bindto -::1/128
bindto default_accept
[interface=lo]
bindto -0.0.0.0/0
bindto -::1/128
bindto default_accept
```

```
ubnt@luxi-router:~$ curl -s 127.0.0.1:8000/telnet/olsrv2info%20edge | awk {'print $1'"-"$2;'}'
```

```
2a02:61:0:ff:76d4:35ff:fe8a:382 2a02:61:0:ff:46d9:e7ff:fe51:38b2
2a02:61:0:ff:76d4:35ff:fe8a:382 2a02:61:492::1
2a02:61:0:ff:76d4:35ff:fe8a:382 2a02:61:60d::1
2a02:61:0:ff:76d4:35ff:fe8a:382 2a02:61:ac4:11::1
2a02:61:0:ff:822a:a8ff:fe1d:99ee 2a02:61:0:ff:46d9:e7ff:fe50:383d
2a02:61:0:ff:822a:a8ff:fe1d:99ee 2a02:61:492::1
2a02:61:6::1 2a02:61:16f::1
2a02:61:c::1 2a02:61:892::1
2a02:61:c::1 2a02:61:aa1::1
2a02:61:10::1 2a02:61:69f::1
2a02:61:10::1 2a02:61:7ea::1
2a02:61:7d::1 2a02:61:298::1
2a02:61:7d::1 2a02:61:b1d::1
2a02:61:a9::1 2a02:61:8db::1
bec2 fen42
```

```
ubnt@luxi-router:~$ curl -s 127.0.0.1:8000/telnet/olsrv2info%20attached_network | awk {'print $1'"-"$2;'}'
```

```
2a02:61:0:ff:76d4:35ff:fe8a:382 ::/0
2a02:61:0:ff:76d4:35ff:fe8a:382 2a02:61:0:ee::/80
2a02:61:0:ff:46d9:e7ff:fe51:38b2 2a02:61:0:ee:1:ffff:b9c2:142a 185.194.20.42
2a02:61:0:ff:46d9:e7ff:fe51:38b2 2a02:61:a2::/48 metalab
2a02:61:0:ff:822a:a8ff:fe1d:99ee 2a02:61:a98::/64 pjsxjuh18
2a02:61:1a1::1 2a02:61:1a1::/64
2a02:61:291::1 2a02:61:291::/64
2a02:61:3d8:11::1 2a02:61:3d8:11::/64
2a02:61:6e1:11::1 2a02:61:6e1:11::/64
```



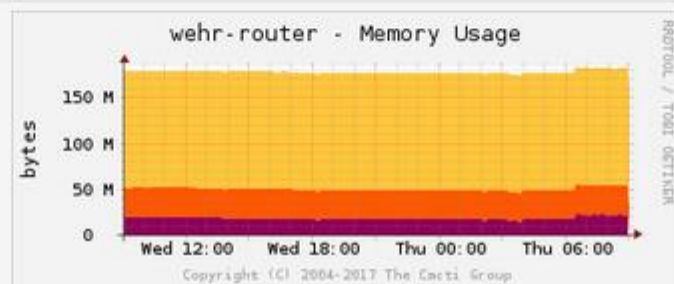
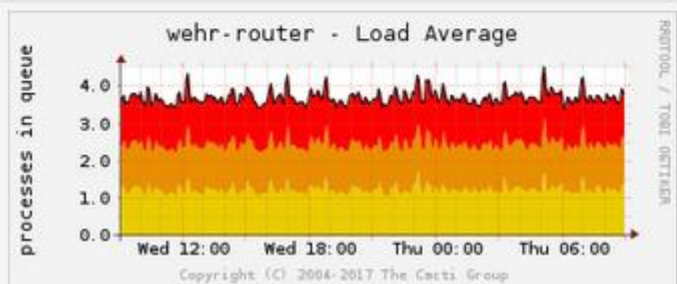
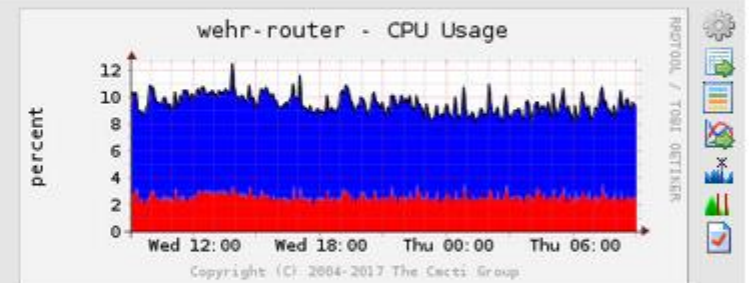
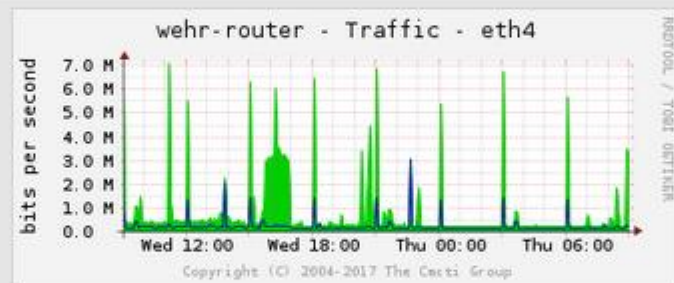
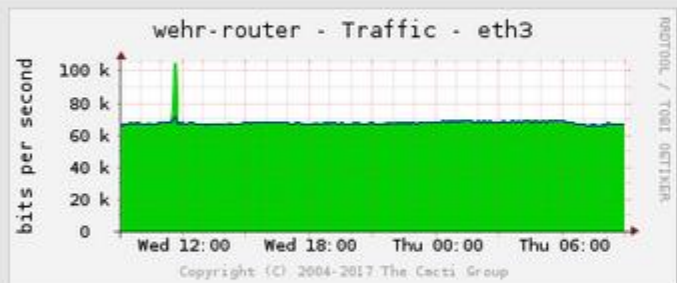
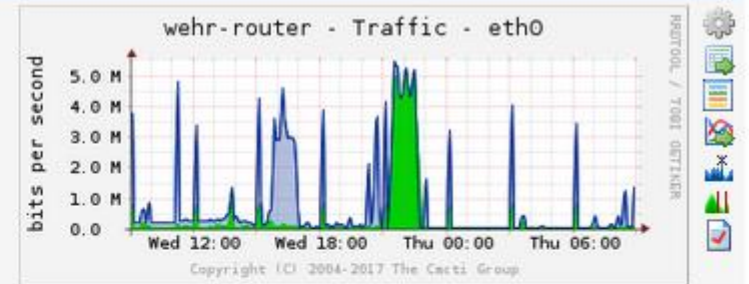
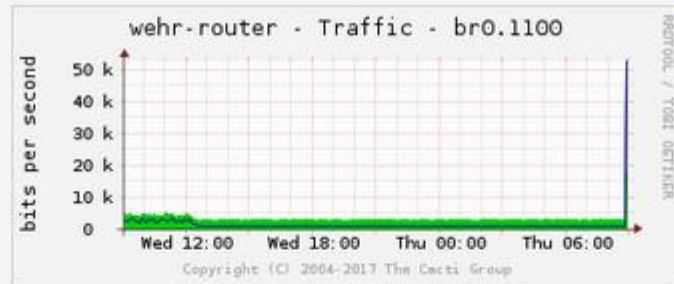
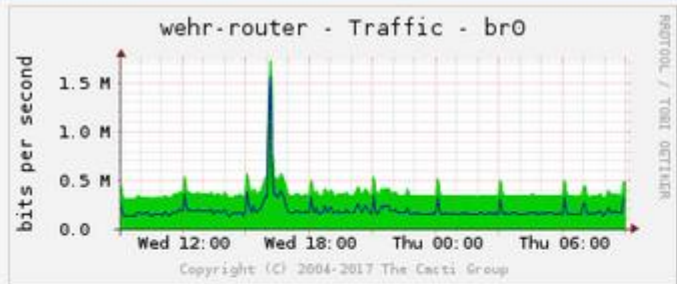
# MONITORING

# SYSTEME

- Cacti
- UNMS
- airControl 2
- Status-Monitoring EdgeOS/AirOS
- Status-Monitoring olsr
- Alerting Prowl/Push
- Traceroute-Analyse

# CACTI - EDGEROUTER

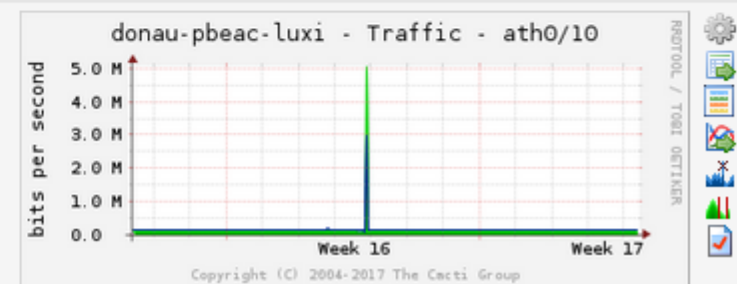
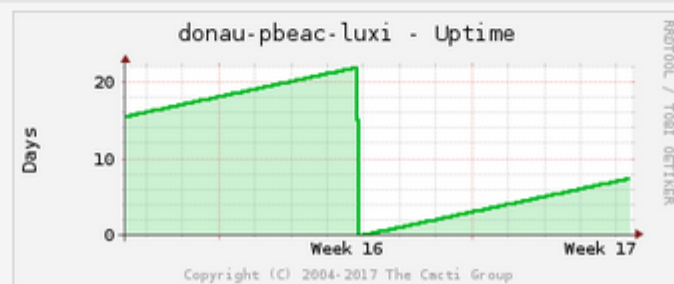
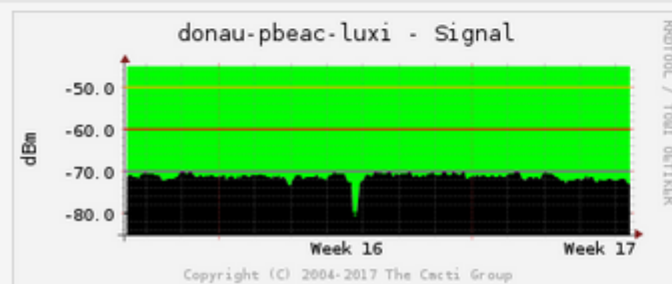
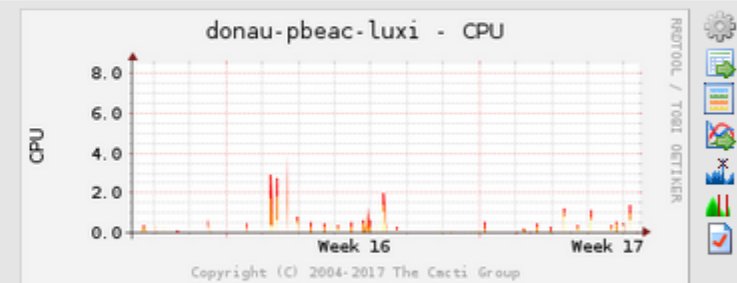
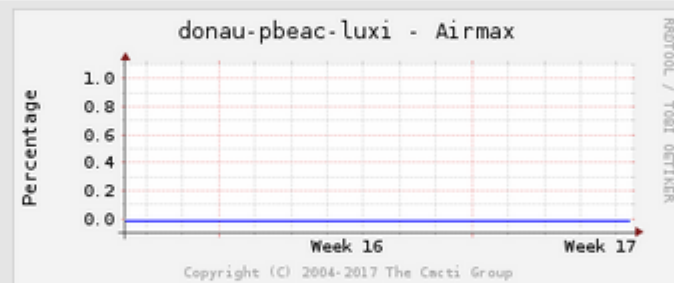
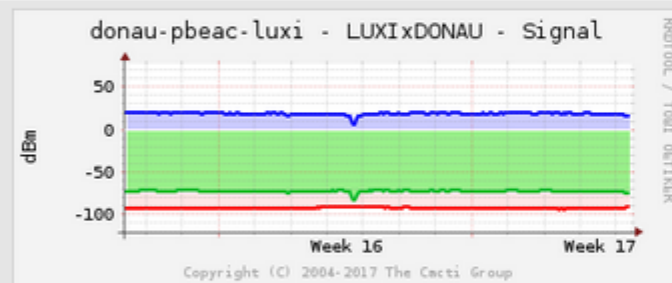
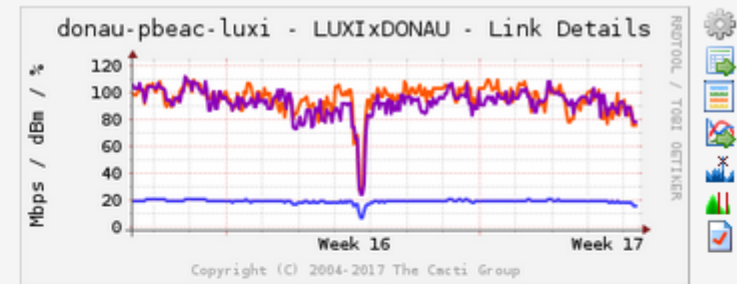
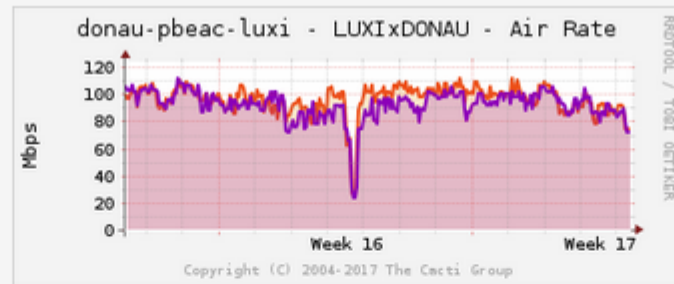
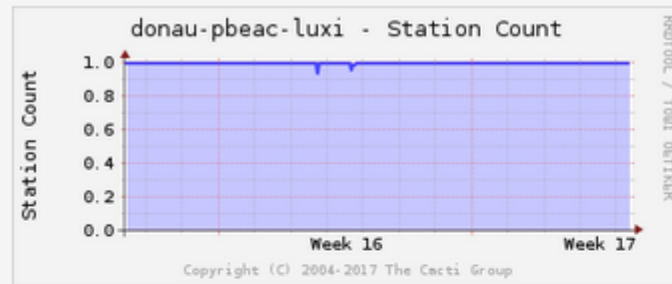
Tree:Router-> Device:wehr-router





# CACTI - AIROS BRIGDE

Tree:AirOS-Bridges-> Device:donau-pbeac-luxi



# CACTI - CPU USAGE AIROS

Showing All 29 Graphs




# UNMS


3

0.7.14 ALPHA

?

U

USERNAME  
pocki 




ER-X - 1.9.7alpha1

## Interfaces

All routes

Firewall **IN PROGRESS**

QoS **IN PROGRESS**

 Services

(A) DHCP

Console **IN PROGRESS**

## Statistics

## Backups

 [wehr24 / wehr-router](#)

CPU:  7%

RAM:  31%



ALL

ETHERNET

SWITCH

PPPOE

ADD VLAN

ADD PPPOE

Search

Q

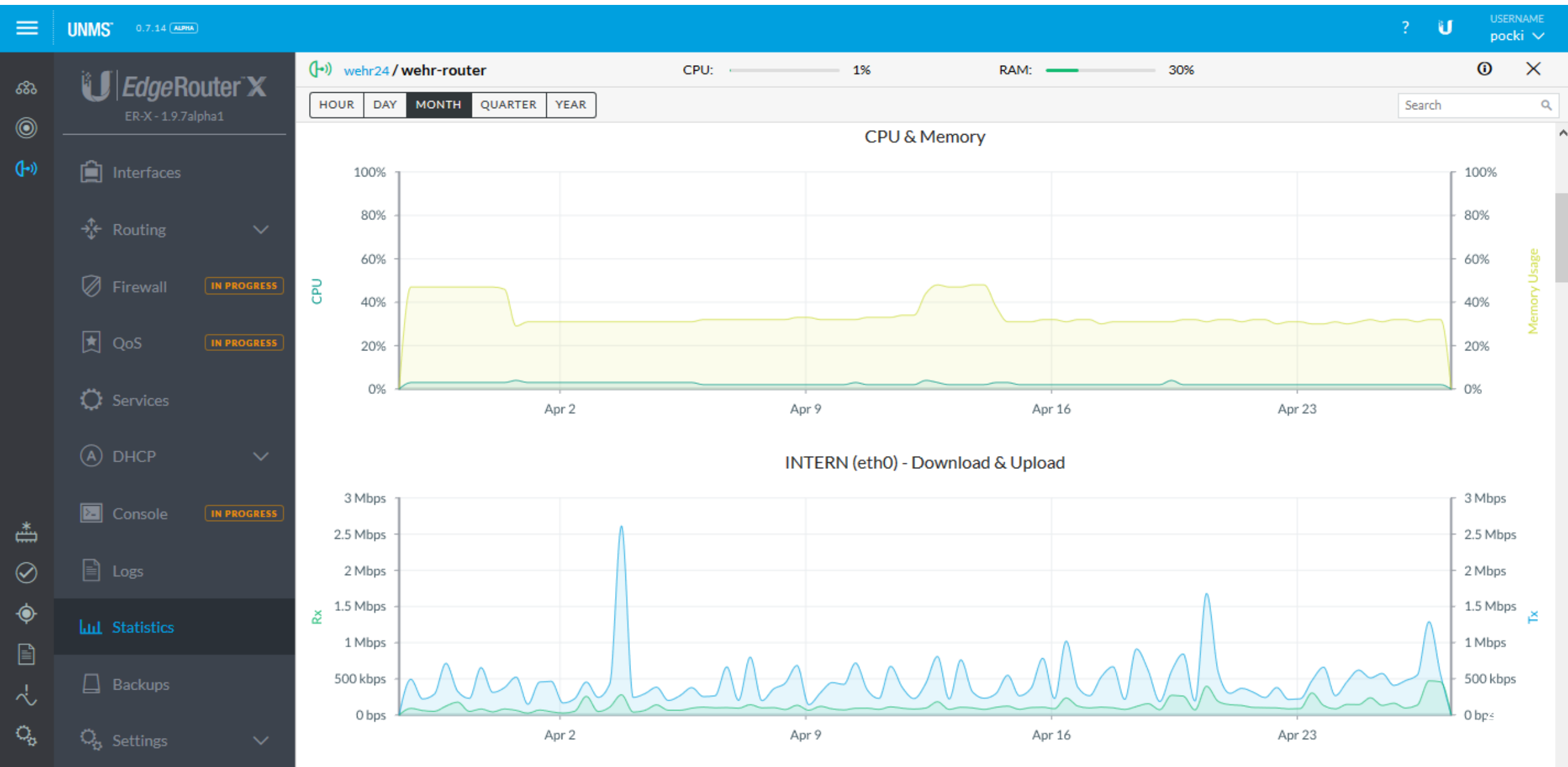
STATUS	NAME↑	TYPE	IP	POE	SFP	RX RATE	TX RATE	DROPPED	ERRORS	ACTIONS
ACTIVE	AirGateway (eth2)	Ethernet 100 Mbps - Full Duplex				0 bps	66.7 kbps	1	0	BLOCK
DISCONNECTED	eth1	Ethernet								BLOCK
ACTIVE	INTERN (eth0)	Ethernet 1000 Mbps - Full Duplex				102.3 kbps	83.7 kbps	46	0	BLOCK
DISCONNECTED	KSCLAN (br1)	Bridge	192.168.8.160/24							BLOCK
ACTIVE	KSCLAN (eth0.8)	VLAN				0 bps	0 bps	0	0	BLOCK  DELETE
ACTIVE	KSCLAN (eth2.8)	VLAN				0 bps	0 bps	0	0	BLOCK  DELETE
DISCONNECTED	MNGT (br0.1100)	VLAN	10.27.18.100/24 10.4.17.100/24 10.28.94.100/24							BLOCK  DELETE
ACTIVE	NAT-Funkfeuer (eth0.21)	VLAN	192.168.21.1/24			0 bps	0 bps	0	0	BLOCK  DELETE
DISCONNECTED	OLSR (br0)	Bridge	78.41.119.41/27							BLOCK
ACTIVE	switch0	Switch				0 bps	0 bps	0	0	
ACTIVE	xLUXI (eth3)	Ethernet 1000 Mbps - Full Duplex				57 kbps	66.7 kbps	2	0	BLOCK
ACTIVE	xRIAG (eth4)	Ethernet 1000 Mbps - Full Duplex		PTHRU		251.8 kbps	167.8 kbps	0	0	BLOCK

Showing 1-12 of 12 records. Items per page:



50








# UNMS





# AIRCONTROL 2





 V2.1-BETA4.2212.170323.1619 




TOPOLOGY **GROUPS** 

WEHR (4)   4  0  0








☐ 



	DEVICE NAME	IP ADDRESS ↓	FIRMWARE	WIRELESS MODE	SSID
<input type="checkbox"/>	 WEHRxLUXI	78.41.119.41	6.0.3 (XW)	Station	luxitowehr.funkfeuer...
<input type="checkbox"/>	 WEHRxRIAG	78.41.119.41	8.1.3-beta2 (WA)	Access Point (1)	NOCWEHR
<input type="checkbox"/>	 wehr-airgateway	78.41.119.41	1.1.8 (AIRGW)	Access Point (0)	KSC9
<input type="checkbox"/>	 RIAGxWEHR	78.41.119.41	8.1.3-beta2 (XC)	Station	NOCWEHR

 **WEHRxLUXI**  

PRODUCT NanoBeam M5 19

SSID luxitowehr.funkf...

IP ADDRESS 78.41.119.41

MAC ADDRESS 24:A4:3C:FA:FE:8D


WIRELESS MODE Station


NETWORK MODE Bridge

FIRMWARE 6.0.3 (XW)

SIGNAL / NOISE -66 dBm / -97 dBm

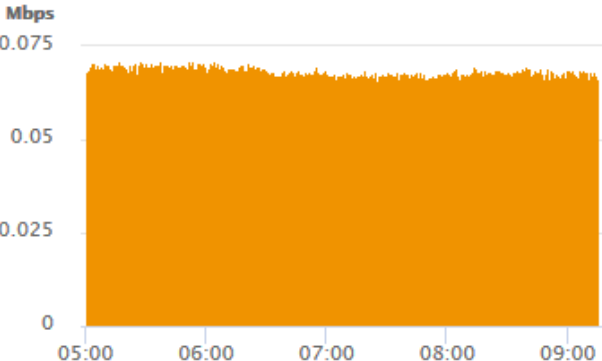
CHAIN IMBALANCE 3 dBm


01  -68 dBm

02  -71 dBm

THROUGHPUT

DOWNLINK UPLINK







# UMOBILE APP

-100 T-Mobile A09:1696 %


DoneConnections




NBRM5xLUXI  
78.41.113.233:1001




DONAUxOWS  
78.41.112.40:1005




DONAUxLUXI  
78.41.112.40:1002




NST3OST  
78.41.112.40:1008



wehrtest-router  
78.41.113.166



donau-router  
78.41.112.40




wehr-router

KSC

ConnectionsInstallSettings

-96 T-Mobile A09:1696 %

wehr-router



EdgeRouter X  
78.41.119.41

MACInternet

44:D9:E7:F5:6B:EEAVAILABLE

UNMS Status

Connected

eth0eth1eth2eth3eth4

10/100 Mbps1 Gbps10 GbpsDownPoE

InterfaceThroughput

INTERNETH1000/Full


NAT-Funkfeuer192.168.21.1/24VLANeth0.21

KSCLANVLANeth0.8

InterfacesDHCPSystemActions

-101 T-Mobile A09:1795 %

PBM5500ACWOLF



PowerBeam 5AC 500  
78.41.118.7:1001

SummaryDetail

Wireless ModeInternet

Station PtMPAVAILABLE

SSID

falke.ost.wien.funkfeuer.at

SIGNAL RX | TX

-59 dBmGOOD

-60 dBmGOOD

8x / 256QAMRate8x / 256QAM

THROUGHPUT | ISOLATED CAPACITY

104,5 kbps

StatusConfigurationToolsActions

-101 T-Mobile A09:1895 %

StationsSpeed

04:18:D6:F8:16:16-74 dBm

↓ 503,0 kbps ↑ 40,1 kbps9 d, 6 Std.

04:18:D6:8A:22:06-60 dBm

↓ 86,9 kbps ↑ 54,7 kbps9 d, 6 Std.

Antenna Alignment

RX SIGNAL

-59 Best

-59 dBmGood

Chain 0-63 dBmBestChain 1-62 dBmBest

TX SIGNAL

-60 Best

-60 dBmGood

45

StatusConfigurationToolsActions



# MONITORING SELFMADE – FEEL IT





# MONITORING UBNT

```
ubnt@wehr-router:~$ /usr/sbin/ubnt-discover
Scanning...
```

Local	Hardware Address	IP address	Name
br1	DC:9F:DB:80:FE:04	192.168.8.220	TSW-PoE PRO 'TOUGHSwitch PoE PRO'
br0	44:D9:E7:50:30:E2	78.41.113.155	ER-X-SFP 'luxi-router'
br0.1100	44:D9:E7:F5:6B:F3	10.27.18.100	ER-X 'wehr-router'
br0.1100	80:2A:A8:5D:FA:9E	10.27.18.140	ER-X 'wehrtest-router'
br0.1100	44:D9:E7:C8:EA:FC	10.27.18.99	AGW-LR 'wehr-airgateway'
br0.1100	44:D9:E7:A6:F9:64	10.27.18.95	N5C 'RIAGxWEHR'
br0.1100	24:A4:3C:FA:FE:8D	10.27.18.1	N5B-19 'WEHRxLUXI'
br0.1100	44:D9:E7:AA:26:74	10.27.18.4	P5C 'WEHRxRIAG'

Total: 8 devices.

```
ubnt@wehr-router:~$ /usr/sbin/ubnt-discover -j -V
{ "devices": [
{ "hwaddr": "44:D9:E7:A6:F9:64",
  "ipv4": "10.27.18.95",
  "hostname": "RIAGxWEHR",
  "product": "N5C",
  "uptime": 441066,
  "wmode": 2,
  "essid": "NOCWEHR",
  "addresses": [{ "hwaddr": "44:D9:E7:A6:F9:64", "ipv4" : "10.27.18.95" }],
  "fwversion": "XC.qca955x.v8.1.3-beta2.33689.170420.0858" }
]}
```

Übersicht

Status

OLSRv2

Port-Table

Kontakt

78.41.119.41 - router.wehr24.wien.funkfeuer.at

System Uptime  
mgmt Devices

12:10:59 up 6 days, 17:05, 0 users, load average: 1.13, 1.20, 1.27

HW Address	Local IP	Hostname	Product	Uptime	WMODE	ESSID	Firmware
24:A4:3C:FA:FE:8D	10.27.18.1	WEHRxLUXI	N5B-19	14d	STA	luxitowehr.funkfeuer.at	v6.0.3
44:D9:E7:AA:26:74	10.27.18.4	WEHRxRIAG	P5C	5d	AP	NOCWEHR	v8.1.3-beta2
44:D9:E7:A6:F9:64	10.27.18.95	RIAGxWEHR	N5C	5d	STA	NOCWEHR	v8.1.3-beta2
44:D9:E7:C8:EA:FC	10.27.18.99	wehr-airgateway	AGW-LR	37d	AP	KSC9	v1.1.8
44:D9:E7:F5:6B:F3	10.27.18.100	wehr-router	ER-X	7d	CABLE		v1.9.7alpha1
80:2A:A8:5D:FA:9E	10.27.18.140	wehrtest-router	ER-X	7d	CABLE		v1.9.7alpha1

IPv4 Default-Route  
IPv4 OLSR-Links

router.2355RIAG.wien.funkfeuer.at (78.41.112.81) via br0

Local IP	Remote IP	Remote Hostname	Hyst.	LQ	NLQ	Cost	routes	nodes
78.41.119.41	78.41.112.81	router.2355RIAG.wien.funkfeuer.at	0.00	1.000	1.000	1.000	677	190
78.41.119.41	78.41.113.155	router.luxi122home.wien.funkfeuer.at	0.00	1.000	1.000	1.000	90	30
78.41.119.41	78.41.113.166	router2.wehr24.wien.funkfeuer.at	0.00	1.000	0.298	3.354	2	1

## IPv6

disabled...

## Trace to UPLINK

#	Hostname	IP Address	Ping
1	router.2355RIAG.wien.funkfeuer.at	78.41.112.81	2.38 ms
2	router.2345Falke.wien.funkfeuer.at	78.41.112.141	3.77 ms
3	router.kryptarroof.wien.funkfeuer.at	78.41.112.85	6.06 ms
4	subway.funkfeuer.at	78.41.115.49	8.78 ms
5	tunnelserver.funkfeuer.at	78.41.115.228	5.13 ms

# DEVICES LIST

luxi   <a href="#">78.41.113.155</a>   3 devices   avg:22.1ms loss:0% last:11:59   olsrv1:cpo0903f/20170322   olsrv2:20170410/pkg-0.6/oonf-0.13.0   0xffwsle:20170414/bmk4.6   bmk-webstatus:4.6   ipv4: <a href="#">78.41.113.155</a>   originator: <a href="#">2a02:61:397:11::1</a>													
hostname	product	boot_time	uptime	ipv4	addresses	hwaddr	ethspeed	fwversion	wmode	ssid	channel	txpower	connections
luxi-router	ER-X-SFP	31.03.13:37:28	25d	10.9.19.100		44:D9:E7:50:30:E2		v1.9.6alpha2	CABLE				
LUXIxWEHR	P5B-400	31.03.22:03:36	25d	<a href="#">10.9.19.2</a>	169.254.240.42	04:18:D6:E8:F0:2A		v6.0.3	AP	luxitowehr.funkfeuer.at	108(5540/20)	5	1
LUXIxDONAU	NB5	19.04.21:07:14	6d	<a href="#">10.9.19.3</a>		DC:9F:DB:EC:B5:6C		v6.0.3	STA	donauXluxi.funkfeuer.at	104(5520/20)	5	1
wehr24   <a href="#">78.41.119.41</a>   6 devices   avg:6.9ms loss:0% last:11:59   falke-riag   olsrv1:cpo0903f/20170414   olsrv2:20170418/pkg-0.6/oonf-0.13.0   0xffwsle:20170414/bmk4.6   bmk-webstatus:4.6   ipv4: <a href="#">78.41.119.41</a>   originator: <a href="#">2a02:61:a9e:11::1</a>													
hostname	product	boot_time	uptime	ipv4	addresses	hwaddr	ethspeed	fwversion	wmode	ssid	channel	txpower	connections
wehr-router	ER-X	18.04.19:05:37	7d	10.27.18.100	10.4.17.100 10.28.94.100 192.168.8.160 192.168.21.1	44:D9:E7:F5:6B:F3		v1.9.7alpha1	CABLE				
wehrtest-router	ER-X	18.04.19:07:46	7d	<a href="#">10.27.18.140</a>	78.41.113.166	80:2A:A8:5D:FA:9E		v1.9.7alpha1	CABLE				
WEHRxLUXI	N5B-19	11.04.19:19:12	14d	<a href="#">10.27.18.1</a>		24:A4:3C:FA:FE:8D		v6.0.3	STA	luxitowehr.funkfeuer.at	108(5540/20)	10	1
WEHRxRIAG	P5C	20.04.09:43:55	5d	<a href="#">10.27.18.4</a>		44:D9:E7:AA:26:74		v8.1.3-beta2	AP	NOCWEHR			
RIAGxWEHR	N5C	20.04.09:42:36	5d	<a href="#">10.27.18.95</a>		44:D9:E7:A6:F9:64		v8.1.3-beta2	STA	NOCWEHR			
wehr-airgateway	AGW-LR	19.03.00:52:52	37d	<a href="#">10.27.18.99</a>		44:D9:E7:C8:EA:FC		v1.1.8	AP	KSC9			
pdorf28   <a href="#">193.238.158.108</a>   3 devices   avg:10.9ms loss:0% last:11:59   falke-hochmayer-mzg32   olsrv1:cpo0903f/20170322   olsrv2:20170410/pkg-0.6/oonf-0.13.0   0xffwsle:20170414/bmk4.6   bmk-webstatus:4.6   ipv4: <a href="#">193.238.158.108</a>   originator: <a href="#">2a02:61:1a1::1</a>													
hostname	product	boot_time	uptime	ipv4	addresses	hwaddr	ethspeed	fwversion	wmode	ssid	channel	txpower	connections
pdorf28-router	ER-X-SFP	18.04.03:45:57	7d	10.4.17.100	10.26.89.100 192.168.2.1 10.10.5.1	44:D9:E7:50:2C:82		v1.9.2alpha1	CABLE				
NanoBeam M5 19	N5B-19	18.04.03:45:49	7d	<a href="#">10.4.17.1</a>	169.254.165.108	04:18:D6:38:A5:6C		v6.0.3	STA	ost.pdorf28.funkfeuer.at			
PDORF28xSUEDcpo	N5N	18.04.03:47:24	7d	<a href="#">10.4.17.4</a>	169.254.243.45	24:A4:3C:4A:F3:2D		v6.0.3	AP	pdorftoneudorf.funkfeuer.at			
falke   <a href="#">78.41.112.141</a>   5 devices   avg:2.6ms loss:0% last:11:59   olsrv1:cpo0903f/20170322   olsrv2:20170408/pkg-0.6/oonf-0.13.0   0xffwsle:20170414/bmk4.6   bmk-webstatus:4.6   ipv4: <a href="#">78.41.112.141</a>   originator: <a href="#">2a02:61:ac4:11::1</a>													
hostname	product	boot_time	uptime	ipv4	addresses	hwaddr	ethspeed	fwversion	wmode	ssid	channel	txpower	connections
falke-router	ER-X-SFP	18.04.02:25:16	7d	10.27.56.100	192.168.3.1	44:D9:E7:50:32:A9		v1.9.6alpha2	CABLE				
PBE5ac500FALKE	P5C	18.04.02:26:37	7d	<a href="#">10.27.56.1</a>		04:18:D6:8A:22:10		v8.1.2-beta2	AP	falke.ost.wien.funkfeuer.at			
ASFINAGxHOCH	P5C	18.04.02:26:38	7d	<a href="#">10.27.56.2</a>	10.99.99.1	04:18:D6:A4:F2:E9		v8.1.2-beta2	STA	ASFINxHOCH.funkfeuer.at			
NSTM5xNORD	N5N	18.04.02:26:40	7d	<a href="#">10.27.56.4</a>		00:27:22:44:A9:18		v6.0.3	STA	pdorf22.wien.funkfeuer.at			
PBE5ac620FALKESued	P5C	18.04.02:26:36	7d	<a href="#">10.27.56.5</a>		04:18:D6:EE:64:47		v8.1.2-beta2	STA	NOCINET			1
donau   <a href="#">78.41.112.40</a>   10 devices   avg:8.4ms loss:0% last:11:59   olsrv1:cpo0903f/20170322   olsrv2:20170410/pkg-0.6/oonf-0.13.0   0xffwsle:20170414/bmk4.6   bmk-webstatus:4.6   ipv4: <a href="#">78.41.112.40</a>   originator: <a href="#">2a02:61:b4e:11::1</a>													
hostname	product	boot_time	uptime	ipv4	addresses	hwaddr	ethspeed	fwversion	wmode	ssid	channel	txpower	connections
donau-router	EP-R6	02.04.16:57:12	23d	10.28.94.100	192.168.1.254	44:D9:E7:F5:41:90		v1.9.6alpha2	CABLE				
DONAUxFALKE	P5C	28.03.17:00:29	28d	<a href="#">10.28.94.1</a>		04:18:D6:F8:16:16		v8.1.2-beta2	STA	falke.ost.wien.funkfeuer.at			
DONAUxLUXI	P5C	19.04.21:04:48	6d	<a href="#">10.28.94.2</a>	169.254.28.215	44:D9:E7:AE:1C:D7		v8.1.2-beta2	AP	donauXluxi.funkfeuer.at			
NST1VIE	N5N	31.03.20:05:34	25d	<a href="#">10.28.94.3</a>	169.254.23.227	00:27:22:AA:17:E3		v6.0.3	AP	donauNNW.funkfeuer.at			
NST2MD	N5N	02.04.16:58:41	23d	<a href="#">10.28.94.4</a>	169.254.243.73	24:A4:3C:4A:F3:49		v6.0.3	AP	donau2.funkfeuer.at			
DONAUxOWS	P5B-300	31.03.19:45:11	25d	<a href="#">10.28.94.5</a>	169.254.75.87	44:D9:E7:DE:4B:57		v6.0.3	STA	ows0sso.funkfeuer.at			
NBE16cpo Hotspot	N5B-16	31.03.20:06:06	25d	<a href="#">10.28.94.6</a>		04:18:D6:4A:53:D8		v6.0.3	STA	donaublume			
NBR300intern	NB5	18.04.16:53:47	7d	<a href="#">10.28.94.7</a>	169.254.135.46	00:27:22:D8:87:2E		v6.0.3	AP	donaublume			
NST3OST	N5N	02.04.16:59:10	23d	<a href="#">10.28.94.8</a>	169.254.23.241	00:27:22:AA:17:F1		v6.0.3	AP	ost.donau.wien.funkfeuer.at			
AGW01	AGW-LR	28.03.15:17:49	28d	<a href="#">10.28.94.99</a>		44:D9:E7:C8:EC:C2		v1.1.8	AP	donau.wien.funkfeuer.at			
mzg32   <a href="#">193.238.159.144</a>   4 devices   avg:9.9ms loss:0% last:11:59   olsrv1:cpo0903f/20170322   olsrv2:20170408/pkg-0.6/oonf-0.13.0   0xffwsle:20170414/bmk4.6   bmk-webstatus:4.6   ipv4: <a href="#">193.238.159.144</a>   originator: <a href="#">2a02:61:abd::1</a>													
hostname	product	boot_time	uptime	ipv4	addresses	hwaddr	ethspeed	fwversion	wmode	ssid	channel	txpower	connections
mzg32-router	ER-X-SFP	16.02.11:46:16	68d	10.27.49.100	192.168.0.1	44:D9:E7:50:06:1E		v1.8.5	CABLE				
PBM5400xHOCHMAYER	P5B-400	01.04.14:08:53	24d	<a href="#">10.27.49.1</a>		04:18:D6:E8:F0:23		v6.0.3	STA	HOCHxMZG.funkfeuer.at			
PBM5400xPDORF28	P5B-400	01.04.14:06:19	24d	<a href="#">10.27.49.2</a>		04:18:D6:E8:F0:63		v6.0.3	AP	ost.pdorf28.funkfeuer.at			
NBEM5xMZG32	N5B-19	01.04.14:06:53	24d	<a href="#">10.27.49.3</a>		24:A4:3C:FA:FF:E4		v6.0.3	AP	mzg32tomzg31.funkfeuer.at			

# ALERTS LOGFILE

## HISTORY

25.04. 09:20:45	78.41.113.115	hochmayer(2)	P5B500ACHOCHxMANNER	rebooted recently at 09:16 after 39min.
25.04. 08:40:41	78.41.113.115	hochmayer(2)	P5B500ACHOCHxMANNER	rebooted recently at 08:38 after 17min.
25.04. 08:30:41	78.41.113.115	hochmayer(2)	P5B500ACHOCHxMANNER	back online after 3d
25.04. 08:30:41	78.41.113.115	hochmayer(2)	P5B500ACHOCHxMANNER	rebooted recently at 08:21 after 3d.
25.04. 05:00:49	193.238.156.4	ffh		changed wizard olsrv1 from version not installed to cpo0903f/20170418
25.04. 04:50:42	193.238.156.4	ffh		changed wizard olsrv1 from version cpo0903f/20170418 to not installed
24.04. 07:41:01	78.41.118.82	rsg32		back online
24.04. 07:10:53	78.41.118.82	rsg32		not responding since 06:20 after 6 tries / avg-median-ping:73.1ms loss:10.67% last:06:14
24.04. 07:10:58	78.41.113.162	baer2		not responding since 06:21 after 6 tries / avg-median-ping:6.5ms loss:14.67% last:06:14
23.04. 21:30:44	193.238.156.4	ffh	LBE23NO	changed ESSID from pjs_sued.funkfeuer.at to hws.w.funkfeuer.at
23.04. 20:50:49	193.238.156.4	ffh	LBE23NO	changed ESSID from hws.w.funkfeuer.at to pjs_sued.funkfeuer.at
23.04. 20:50:49	193.238.156.4	ffh	LiteBeam M5	changed name to LBE23NO
23.04. 20:30:25	78.41.112.40	donau		changed wizard olsrv2 from version unknown to 20170410/pkg-0.6/oonf-0.13.0
23.04. 20:20:28	78.41.112.40	donau		changed wizard olsrv2 from version 20170410/pkg-0.6/oonf-0.13.0 to unknown
23.04. 18:00:46	193.238.156.4	ffh	LiteBeam M5	changed firmware from v6.0 to v6.0.3
23.04. 17:10:45	193.238.156.4	ffh	ffh-router	changed firmware from v1.8.5 to v1.9.7alpha1
23.04. 16:50:51	193.238.156.4	ffh	LiteBeam M5	ONLINE (first time seen here)
23.04. 16:50:53	193.238.156.4	ffh	FFHxRSG32	missing in device list since 16:30 (3 times)
23.04. 16:40:45	193.238.156.4	ffh	ffh.BULM2HPxPDORF	missing in device list since 16:00 (5 times)
23.04. 16:10:46	193.238.156.4	ffh	FFHxRSG32	changed wmode from AP to STA
23.04. 16:10:46	193.238.156.4	ffh	FFHxRSG32	changed ESSID from ffhno.2380.funkfeuer.at to hws.w.funkfeuer.at
23.04. 11:50:24	78.41.112.141	falke	falke-router	back online after 40min
23.04. 11:50:26	78.41.112.141	falke	PBE5ac620FALKEsued	back online after 40min
23.04. 11:40:29	78.41.112.141	falke	PBE5ac500FALKE	back online after 30min
23.04. 11:40:29	78.41.112.141	falke	ASFINAGxHOCH	back online after 30min
23.04. 11:30:33	78.41.112.141	falke	falke-router	missing in device list since 11:10 (3 times)
23.04. 11:30:33	78.41.112.141	falke	PBE5ac500FALKE	missing in device list since 11:10 (3 times)
23.04. 11:30:33	78.41.112.141	falke	ASFINAGxHOCH	missing in device list since 11:10 (3 times)
23.04. 11:30:33	78.41.112.141	falke	PBE5ac620FALKEsued	missing in device list since 11:10 (3 times)
22.04. 22:00:36	78.41.113.190	hochmayer(1)		changed wizard olsrv1 from version cpo0903f/20170322 to cpo0903f/20170418
22.04. 22:00:36	78.41.113.190	hochmayer(1)		changed wizard olsrv2 from version 20170408/pkg-0.6/oonf-0.13.0 to 20170418/pkg-0.6/oonf-0.13.0
22.04. 22:00:36	78.41.113.190	hochmayer(1)		changed wizard 0xffwsle from version 20170414/bmk4.6 to 20170420/bmk4.6
22.04. 22:00:40	78.41.113.115	hochmayer(2)		changed wizard olsrv1 from version cpo0903f/20170322 to cpo0903f/20170418
22.04. 22:00:40	78.41.113.115	hochmayer(2)		changed wizard olsrv2 from version 20170408/pkg-0.6/oonf-0.13.0 to 20170418/pkg-0.6/oonf-0.13.0
22.04. 22:00:40	78.41.113.115	hochmayer(2)		changed wizard 0xffwsle from version 20170414/bmk4.6 to 20170420/bmk4.6



# MONITORING OLSR1

```
curl -s http://78.41.119.41:2006/topo
```

Table: Topology

Dest. IP	Last hop IP	LQ	NLQ	Cost		
78.41.113.155	78.41.112.40	1.000	0.693	1.440	router. <b>luxi122home</b>	router. <b>2345donau</b>
78.41.112.81	78.41.119.41	1.000	1.000	1.000	router. <b>2355riag</b>	router. <b>wehr24</b>
78.41.113.155	78.41.119.41	1.000	1.000	1.000	router. <b>luxi122home</b>	router. <b>wehr24</b>
78.41.113.166	78.41.119.41	1.000	0.298	3.354	<b>router2.wehr24</b>	<b>router.wehr24</b>
78.41.119.41	78.41.112.81	1.000	1.000	1.000	<b>router.wehr24</b>	<b>router.2355riag</b>
78.41.112.40	78.41.113.155	0.693	1.000	1.440	<b>router.2345donau</b>	<b>router.luxi122home</b>
78.41.119.41	78.41.113.155	1.000	1.000	1.000	<b>router.wehr24</b>	<b>router.luxi122home</b>
78.41.119.41	78.41.113.166	0.298	1.000	3.354	<b>router.wehr24</b>	<b>router2.wehr24</b>
...						

# MONITORING OLSR1

## Topology sources:

<http://78.41.112.119:2006> (metalab) successfully loaded 1708 lines

<http://78.41.119.41:2006> (wehr24) successfully loaded 1708 lines

## Active nodes (total): 236 (423 IPs)

### Nodes missing: 24 (have been active withing the last 10 days)

1230rekl, baer2, fildan1, blei20, wuk, cza44, gs15, erzherz170, essling1, prue4, mhfattuer, gangster, geb, gob27, stein712, voip, lobe26, stern, stefan, nussberg, lann, lat7, oa12, trt6

### Nodes resolved by DNS: 17 (49 IPs)

1130wuerz36, gb, gbwest, goldegg26-05, goldegg26-08, goldegg26-10, goldegg26-14, goldegg26-22, keller, ley21, map, marburg, mp, rei6, rht, sonne, wawi22

### Nodes linked to tunnel: 30 nodes:

liechtwicht, as5, pas77tun, net, Villa, gablitz167, brenner, mh, bw331, goldegg26, hetzendorf, OZW, 2345Falke, nixroof, kryptarroof, wpaec501, Lang59, map, kdm, metalab, nessus, marburg, hofj, sanktelisabeth, muth1, kol33, sfg95, 2345bahn46a, traut3, tele3

### Nodes linked to core: 25 nodes: (link to krypta or nessus)

garten94, zelter7, erlachp, PJSxJUH18, sulm20, matz, nbg43, 2345Falke, mp, nixroof, jg7, tunnel, bici, kdm, metalab, dfs73, nessus, kryptarroof, duer9, sanktelisabeth, kr3, quell165, matbb, vdn58, lax2

### Connected by VPN - 23 nodes: (link to tunnel, but neither link to krypta nor nessus)

liechtwicht, as5, pas77tun, net, villa, gablitz167, brenner, mh, bw331, goldegg26, hetzendorf, ozw, wpaec501, lang59, map, marburg, hofj, muth1, kol33, sfg95, 2345bahn46a, traut3, tele3

### Connected directly to core network - 7 nodes: (link to tunnel and either krypta or nessus)

2345falke, nixroof, kryptarroof, kdm, metalab, nessus, sanktelisabeth

### Monitoring 28 nodes with active alerts:

1230bfs256, 2345bahn46a, 2345donau, 2345falke, 2345wolf, 2355riag, 2380hochmayer28, 2380roemer34, amd178, asp1, astg6, baer2, ehg66, eno, ffh, hag10, hh10, hohewand, jcn, luxi122home, mzg31, mzg32, pdorf22, pdorf28, pjsxjuh18, prue4, rsg32, wehr24

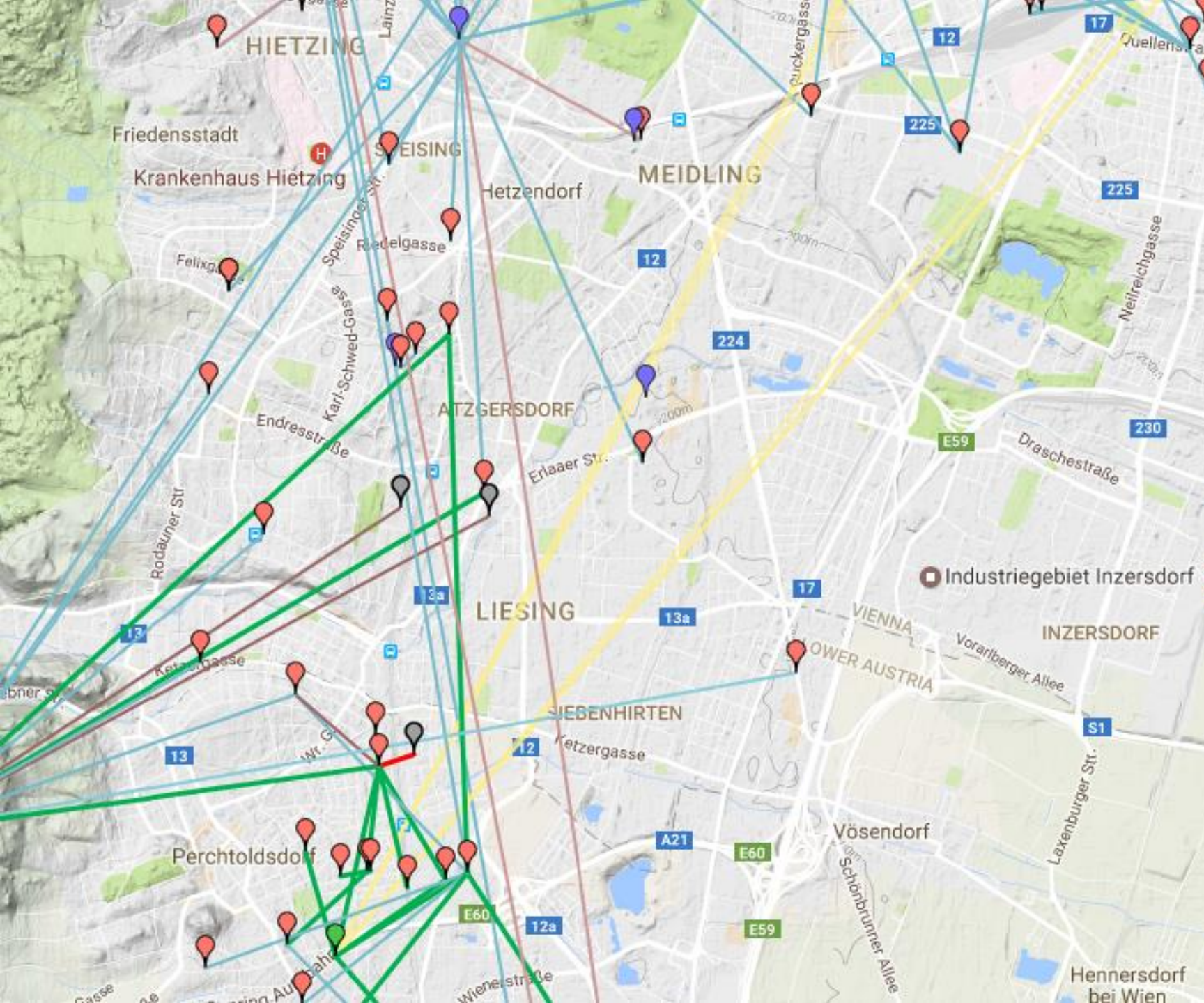
### Ignoring messages for 3 nodes:

scho33, gring30, prue4

### Ignoring messages for 5 links:

2380grilanz-2380hochmayer28, pdorf28-schrems62, 1230rekl-ffh, 2345gattringer85a-pdorf28, ffh-ozw





# MAPPED STATES

## LINKS

- grün/blau – connected
- rot/dunkelrot – missing
- grau – ignored
- gelb – cores

## NODES

- rot – online
- grün – core-node
- blau – vpn
- grau – offline



# MONITORING OLSR1

src node	src id	src ip	dest node/internal	dest id	state-history
1230Bfs256	2182	193.238.156.64	OZW	1366	11111111111111111111111111111111
1230Bfs256	2182	193.238.158.194	ffh	657	11111111111111111111111111111111
1230Bfs256	2182	193.238.158.194	nbeM5sw,natrouter		11111111111111111111111111111111
1230Bfs256	2182	193.238.156.64	nbrM5sw,natrouter		00000000000000000000000000000000
1230Bfs256	2182	193.238.158.194	nbeM5sw,nbrM5sw		00000000000000000000000000000000
1230Rekl	2881	78.41.112.195	ffh	657	00000000000000000000000000000000
falke	2756	78.41.112.141	wolf	2688	11111111111111111111111111111111
falke	2756	78.41.112.141	riag	2851	11111111111111111111111111111111
falke	2756	78.41.112.141	hochmayer	2319	11111111111111111111111111111111
falke	2756	78.41.118.73	kdm	2772	11111111111111111111111111111111
falke	2756	78.41.118.73	kryptaroorf	1170	11111111111111111111111111111111
falke	2756	78.41.118.73	metalab	162	11111111111111111111111111111111
falke	2756	78.41.118.73	nessus	1549	11111111111111111111111111111111
falke	2756	78.41.118.73	nixroof	1174	11111111111111111111111111111111
falke	2756	78.41.112.141	pdorf22	984	11111111111111111111111111111111

## HISTORY

25.04. 09:50:04	recover	donaublume	HZB48	recovered donaublume-HZB48.
25.04. 09:04:46	recover	kryptaroorf	PJS	recovered kryptaroorf-PJS.
25.04. 09:03:27	missing	kryptaroorf	PJS	missing kryptaroorf-PJS.
25.04. 06:40:03	recover	ffh	kobe4	recovered ffh-kobe4.
25.04. 06:20:03	recover	ffh	hw	recovered ffh-hw.
25.04. 06:20:03	recover	ffh	kobe4	recovered ffh-kobe4.



swaps	online
0%	100%
0%	100%
0%	100%
0%	0%
0%	100%
0%	100%
0%	100%
0%	100%
0%	100%
0%	100%
0%	100%
1%	32%
0%	0%
0%	100%



https://www.prowlapp.com

Prowl

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Home

Apps

Help

API

Prowl is a push notification client for iOS. Push to your iPhone, iPod touch, or iPad notifications from a Mac or Windows computer, or from a multitude of apps and services. Easily integrate the Prowl API into your applications.

Download on the App Store

Push notifications

When a Growl notification pops up on your computer, Prowl sends it over Push.

Prowl now

Adium—Jackie Balzer the time machine goes back to 3013 in 20 minutes, dont be late slide to v

Beautiful, elegant list

A clean, easy-to-control list of your notifications.

Clear

Prowl

Monitor

New comment

You got a new comment on your website!

Transmission 44s

Download Complete

ubuntu-15.10-desktop-amd64.iso.torrent

-95 T-Mobile A 11:53 77 %

Christian

Prowl: Easy Push Notifications

Zachary West >

Details

Rezensionen

Zugehörig

API

-97 T-Mobile A 11:52 78 %

Clear

Prowl

Edit

OxFF@pocki.at	25.04.17, 09:50
olsr	
recovered donaublume-HZB48.	
OxFF@pocki.at	25.04.17, 09:21
Alert	
hochmayer(2) device P5B500ACHOCHxMANNER rebooted recently at 09:16 after 39min.	
OxFF@pocki.at	25.04.17, 09:04
olsr	
recovered kryptaroot-PJS.	
OxFF@pocki.at	25.04.17, 05:01
olsrv1 from version not installed to	
	25.04.17, 04:51
Alert	
ffh changed wizard olsrv1 from version cpo0903f/20170418 to not installed	
OxFF@pocki.at	24.04.17, 20:40
olsr	
recovered ffh-kobe4.	
OxFF@pocki.at	24.04.17, 20:37

cee79bc25efca340153db4563cc20c371470fffc-nohash@api.prowlapp.com

HISTORY				
25.04. 09:50:04	recover	donaublume	HZB48	recovered donaublume-HZB48.
25.04. 09:04:46	recover	kryptaroot	PJS	recovered kryptaroot-PJS.
25.04. 09:03:27	missing	kryptaroot	PJS	missing kryptaroot-PJS.
25.04. 06:40:03	recover	ffh	kobe4	recovered ffh-kobe4.
25.04. 06:20:03	recover	ffh	hw	recovered ffh-hw.
25.04. 06:20:03	recover	ffh	kobe4	recovered ffh-kobe4.

55

# INSTABILE LINKS

src node	src id	src ip	dest node/internal	dest id	dest ip	lq	dist	miss/recvd	swapping	swaps	online
akkuunterwegs	706	193.238.156.252	zelter7	22	78.41.113.98	1.000	2.8km			0%	100%
alpen2	1369	78.41.113.143	zelter7	22	193.238.156.49	13.338	5.1km	03.05/21:00	02.05/12:44	4%	5%
arsen	672	193.238.158.243	zelter7	22	193.238.159.169	2.435	0.2km			0%	100%
bici	20	193.238.159.101	zelter7	22	78.41.113.98	1.000	4.9km	02.05/06:00		0%	0%
ble20	46	78.41.113.102	zelter7	22	193.238.156.49	23.818	2.7km	04.05/10:40	02.05/16:10	14%	30%
ettenr	1629	193.238.159.60	zelter7	22	193.238.156.49	4.521	4.5km	04.05/07:10		2%	20%
gri106	2651	78.41.119.97	zelter7	22	78.41.113.149	1.000	5.3km	30.04/12:40		0%	0%
jg7	866	78.41.112.100	zelter7	22	78.41.113.98	1.000	0.3km	03.05/17:50		1%	98%
kryptaroorf	1170	78.41.112.85	zelter7	22	193.238.156.22	1.000	0.7km			0%	100%
liebe	2857	193.238.159.207	zelter7	22	78.41.113.98	1.000	1.4km			0%	100%
nbg43	398	78.41.113.94	zelter7	22	193.238.159.169	6.631	0.7km	04.05/11:14	02.05/20:30	14%	79%
pf1	332	78.41.118.180	zelter7	22	78.41.113.98	1.040	0.2km			0%	100%
sulm20	2306	78.41.112.51	zelter7	22	78.41.113.98	1.000	2.6km	02.05/06:00		0%	0%
zelter7	22	193.238.159.169	1zeltsuedfunk,1omnifunk		193.238.156.22	1.000				0%	100%
zelter7	22	193.238.158.100	edge,1omnifunk		193.238.156.22	1.000		04.05/00:10	03.05/17:40	4%	98%
zelter7	22	78.41.113.149	router,1omnifunk		193.238.156.22	1.000		30.04/16:00		0%	0%
zelter7	22	193.238.159.169	1zeltsuedfunk,edge		193.238.158.100	1.000		04.05/00:10	03.05/17:40	4%	98%
zelter7	22	193.238.159.169	1zeltsuedfunk,router		78.41.113.149	1.000		30.04/16:00		0%	0%
zelter7	22	193.238.156.192	zelt7haus,1zeltsuedfunk		193.238.159.169	1.617				0%	100%
zelter7	22	193.238.159.169	1zeltsuedfunk,zelter7h13x		193.238.156.49	1.000				0%	100%
zelter7	22	193.238.156.191	zelter7v13funk,1zeltsuedfunk		193.238.159.169	1.000				0%	100%
zelter7	22	193.238.159.169	1zeltsuedfunk,zeltozwlan		78.41.113.98	1.000				0%	100%
zelter7	22	193.238.159.169	1zeltsuedfunk,zelttest3		193.238.156.149	1.000				0%	100%
zelter7	22	193.238.158.100	edge,zelter7h13x		193.238.156.49	1.000		04.05/00:10	03.05/17:40	4%	98%
zelter7	22	193.238.156.191	zelter7v13funk,edge		193.238.158.100	1.000		04.05/00:10	03.05/17:40	4%	98%
zelter7	22	193.238.156.149	zelttest3,edge		193.238.158.100	1.000		04.05/00:10	03.05/17:40	4%	98%
zelter7	22	78.41.113.149	router,zelter7h13x		193.238.156.49	1.000		30.04/16:00		0%	0%
zelter7	22	193.238.156.191	zelter7v13funk,router		78.41.113.149	1.000		30.04/16:00		0%	0%
zelter7	22	78.41.113.149	router,zeltozwlan		78.41.113.98	1.000		30.04/16:00		0%	0%
zelter7	22	193.238.156.149	zelttest3,router		78.41.113.149	1.000		30.04/16:00		0%	0%
zelter7	22	193.238.156.192	zelt7haus,zelter7h13x		193.238.156.49	1.269		04.05/02:40	02.05/14:20	7%	5%

# INSTABILE LINKS

## Disabled logging for 88 unstable links:

2345donau-2345Gattringer85a | LSG33-ows0 | Lang59-tunnel | Lang59:nox-tserver | OZW-pfad12 | OZW-rr72 | OZW-scho54 | alpen2-zelter7 | beindl4-rosen2 | bici-htlo | bici-sulm20 | bici-wh8panel | biss-hfs | biss-math28 | ble20-zelter7 | brenner-Tmrg41 | brenner-gatt12 | brenner-renn68 | brenner-tele3 | brenner-wawi22 | brenner-wo9 | cless79-math28 | dfs73-kryptaroorf | din-pampa | din-wh8panel | din-wikinger6 | duer9-hohl28 | duer9-kryptaroorf | duer9-wikinger6 | essling1-tele3 | feh39-ows0 | frieden-wuk | gangster-geb | garten94-kryptaroorf | goldegg26:gateway-xsanktelisabeth | goldegg26:tunnel-xsanktelisabeth | gvw23-math28 | hann-spreng25 | hann-stefan | heuklein-maxbrod | heunord-schafbergalm | hfs-staud9B | hoch-peer1 | hoch-sied5 | htlo-pampa | htlo-staud9B | htlo-tha130panel | kolbeter-vh11 | kryptaroorf-PJSxJUH18 | l13-loef34 | ley21-ley23 | manh2-puts8 | math28-sey5 | maxbrod-schaukal | mberg-sonn91 | men39-men39-6 | men39:men39a-men39c | mhfat-mhfatfabrix | mhfat-mhfattuer | mhfat:aumannv10omni-loftwv10panel10 | mhfatfabrix-mhfatwaehr | mhfattuer:stern10fon9omni-sternsv10panel10 | mhfattuer:stern10fon9omni-sternv10officeomni9 | mhfattuer:sternsv10panel10-sternsv13omni9 | mhfattuer:sternsv10panel10-sternv10officeomni9 | nbg43-zelter7 | ows0-TD1 | pampa-tha130panel | put24:manh2-omniv4 | put24:manh2-routerstation | put24:omniv4-routerstation | put54-silber1 | sche11-schenkich | schenkich-siegfried28 | staud9B-wh8panel | staud9B-wikinger6 | tha130panel-wh8panel | toe14:HomeLan-o2 | toe14:no5-o2 | tunnel-wmg64 | vh11-vh13 | wikinger6:nord5-west | zelter7:1omnifunk-edge | zelter7:1zeltsuedfunk-edge | zelter7:edge-zelter7h13x | zelter7:edge-zelter7v13funk | zelter7:edge-zelttest3 | zelter7:zelt7haus-zelter7h13x

# MONITORING IPv4-ROUTING

## All routes to 245 nodes

1130wuerz36	subway,tunnel,OZW,1130wuerz36	htlo	subway,tunnel,nessus,lax2,arn22,hfs,staud9B,htlo
1230Bfs256	subway,tunnel,2345Falke,2380Hochmayer28,ffh,1230Bfs256	hw	subway,tunnel,mh,hw
2345Falke	subway,tunnel,2345Falke	hws	subway,tunnel,brenner,hws
2345Wolf	subway,tunnel,2345Falke,2345Wolf	jed99	subway,tunnel,kol33,jed99
2345bahn46a	subway,tunnel,2345bahn46a	jg7	subway,tunnel,kryptaroorf,jg7
2345donau	subway,tunnel,2345Falke,2345donau	kdm	subway,tunnel,kdm
2355RIAG	subway,tunnel,2345Falke,2355RIAG	keller	
2380Hochmayer28	subway,tunnel,2345Falke,2380Hochmayer28	ketz423	subway,tunnel,2345Falke,2380Hochmayer28,ffh,ketz423
2380Roemer34	subway,tunnel,2345Falke,2380Hochmayer28,2380Roemer34	klg30	subway,tunnel,OZW,klg30
2380grilanz	subway,tunnel,2345Falke,2345donau,2380grilanz	ko81	subway,tunnel,nessus,lax2,arn22,hfs,staud9B,htlo,bici,ko81a,ko81
ENO	subway,tunnel,2345Falke,2345donau,ENO	ko81a	subway,tunnel,nessus,lax2,arn22,hfs,staud9B,htlo,bici,ko81a
FILDAN1	subway,tunnel,Villa,FILDAN1	kobe4	subway,tunnel,mh,hw,kobe4
HND1	subway,tunnel,kol33,jed99,vor203,HND1	koelbl15	subway,tunnel,sanktelisabeth,hohl28,koelbl15
HZB48	subway,tunnel,2345Falke,2345donau,HZB48	kol33	subway,tunnel,kol33
Ibs1	subway,tunnel,nessus,quell165,fl49,Ibs1	kolbeter	subway,tunnel,hofj,alechner,kolbeter
JCN	subway,tunnel,kol33,jed99,JCN	kr3	subway,tunnel,nessus,kr3
LSG33	subway,tunnel,OZW,LSG33	kryptaroorf	subway,tunnel,kryptaroorf
Lang59	subway,tunnel,Lang59	l13	subway,tunnel,nessus,quell165,l13
OZW	subway,tunnel,OZW	lann	subway,tunnel,lann
PJSxJUH18	subway,tunnel,kol33,jed99,JCN,PJSxJUH18	lat7	subway,tunnel,kryptaroorf,duer9,gs15,cza44,wuk,lat7
SCHREMS62	subway,tunnel,2345Falke,2380Hochmayer28,mzg32,pdorf28,SCHREMS62	lax2	subway,tunnel,nessus,lax2
TD1	subway,tunnel,Villa,FILDAN1,TD1	ley21	subway,tunnel,mh,hw,ley23,ley21
Tmrg41	subway,tunnel,brenner,Tmrg41	ley23	subway,tunnel,mh,hw,ley23
Villa	subway,tunnel,Villa	liebe	subway,tunnel,kryptaroorf,zelter7,liebe
ah2	subway,tunnel,sanktelisabeth,ah2	liechtwicht	subway,tunnel,liechtwicht
akkuunterwegs	subway,tunnel,kryptaroorf,zelter7,akkuunterwegs	lobe26	subway,tunnel,kryptaroorf,duer9,gs15,lobe26
alechner	subway,tunnel,hofj,alechner	loef34	subway,tunnel,mh,hw,kobe4,loef34
arg67	subway,tunnel,kryptaroorf,nbg43,wo9,arg67	luxi122home	subway,tunnel,2345Falke,2345donau,luxi122home
arn22	subway,tunnel,nessus,lax2,arn22	lzstr168	subway,tunnel,OZW,lzstr168
arsen	subway,tunnel,kryptaroorf,zelter7,arsen		
as5	subway,tunnel,as5		



# MONITORING IPv4-ROUTING

Transit Nodes and all nodes "behind" - to show individual routes for each node, [click here](#)

tunnel	223	1130wuerz36, 1230Bfs256, 2345Falke, 2345Wolf, 2345bahn46a, 2345donau, 2355RIAG, 2380Hochmayer28, 2380Roemer34, 2380grilanz, ENO, FILDAN1, HND1, HZB48, Ibs1, JCN, LSG33, Lang59, OZW, PJSxJUH18, SCHREMS62, TD1, Tmrg41, Villa, ah2, akkuunterwegs, alechner, arg67, arn22, arsen, as5, bahnstr, bal3, bec2, beindl4, ber13, berg22, berg36, bici, biss, ble20, blei20, bm5, brambiE, brenner, cless79, cottage8, cza44, danne20, dfs73, dg38, dg59, din, duer9, ehg66, erd222, erlachp, ernstl, es112, essling2, ettenr, feh39, felb62, feld19, fen42, ffh, fl49, frieden, garten94, gaugu13, gb, geb, ginkgo, goldegg26, goldegg26-05, goldegg26-08, goldegg26-10, goldegg26-14, goldegg26-22, gri106, gri121, gs15, guglg6, gurk46, gvw23, hack36, hag10, hann, hetzendorf, heuklein, heunord, hfs, hoch, hock21, hofj, hohl28, hptstr12, hptstr1a, htlo, hw, hws, jed99, jg7, kdm, ketz423, klg30, ko81, ko81a, kobe4, koelbl15, kol33, kolbeter, kr3, kryptarroof, l13, lann, lat7, lax2, ley21, ley23, liebe, liechtwicht, lobe26, loef34, luxi122home, lzstr168, ma89, manh2, manner, map, marburg, matbb, math28, matz, maxbrod, mberg, men10, men39, men39-6, metalab, mh, mhfat, mhfatwaehr, mjc, mm31, mp, muehl, musik, muth1, mzg31, mzg32, nbg43, nessus, net, nixroof, obdo9, ojg19, ojg21, oswald5, ows0, ows2, pas77tun, pbg9, pdorf22, pdorf28, peer, peer1, pf1, pod41, put24, put49, put54, puts8, quell165, red22, renn68, rosen2, rr72, rsg32, ruz24, sanktelisabeth, schafbergalm, schaukal, sche11, schenkich, scho33, scho54, sfg95, sied5, siegfried28, silber1, sir, so7, sonn91, sonne, staud9B, stefan, stern, stu7, tele3, toe14, traut3, troll20, tul, vdn58, veit53, venus33, vh11, vh13, vor203, wasl, wawi22, we16, wehr24, wmg64, wo9, wpaeC501, wrkch, wte84, wuerfl1, wuk, zahnrad1, zelter7
nessus	28	Ibs1, arn22, bal3, bici, bm5, din, erlachp, felb62, fl49, geb, hfs, htlo, ko81, ko81a, kr3, l13, lax2, matbb, matz, mp, oswald5, ows0, pbg9, quell165, red22, staud9B, vdn58, we16
mh	28	bec2, ber13, biss, cless79, fen42, frieden, goz19, gri106, gri121, gurk46, gvw23, hw, kobe4, ley21, ley23, loef34, math28, men10, men39, men39-6, obdo9, pod41, sche11, schenkich, siegfried28, sir, toe14, veit53
2345Falke	25	1230Bfs256, 2345Wolf, 2345donau, 2355RIAG, 2380Hochmayer28, 2380Roemer34, 2380grilanz, ENO, HZB48, SCHREMS62, ehg66, es112, ffh, hag10, ketz423, luxi122home, mjc, mzg31, mzg32, pdorf22, pdorf28, rr72, rsg32, scho33, wehr24
kryptarroof	23	akkuunterwegs, arg67, arsen, ble20, blei20, cza44, dg59, duer9, garten94, gs15, hock21, jg7, lat7, liebe, lobe26, ma89, nbg43, ows2, pf1, stern, wo9, wuk, zelter7
brenner	18	Tmrg41, brambiE, erd222, ettenr, ginkgo, guglg6, hann, heuklein, heunord, hws, maxbrod, renn68, schafbergalm, schaukal, stefan, troll20, wawi22, wmg64
kol33	16	HND1, JCN, PJSxJUH18, beindl4, dfs73, jed99, manh2, muehl, put24, put49, put54, puts8, rosen2, silber1, vor203, zahnrad1
quell165	16	Ibs1, bal3, bici, bm5, din, felb62, fl49, geb, hfs, l13, oswald5, ows0, pbg9, red22, staud9B, we16
jed99	15	HND1, JCN, PJSxJUH18, beindl4, dfs73, manh2, muehl, put24, put49, put54, puts8, rosen2, silber1, vor203, zahnrad1
OZW	15	1130wuerz36, LSG33, feh39, gaugu13, hack36, hetzendorf, klg30, lzstr168, mm31, ojg19, ojg21, scho54, so7, sonn91, venus33
traut3	14	berg22, berg36, feld19, gb, hoch, hptstr12, hptstr1a, manner, musik, peer, peer1, sied5, sonne, wasl
2380Hochmayer28	13	1230Bfs256, 2380Roemer34, SCHREMS62, ehg66, es112, ffh, ketz423, mjc, mzg31, mzg32, pdorf28, rr72, rsg32
duer9	12	bal3, blei20, cza44, dg59, geb, gs15, lat7, lobe26, ows2, red22, stern, wuk
biss	12	ber13, cless79, gvw23, math28, men10, men39, men39-6, pod41, sche11, schenkich, siegfried28, sir
hw	11	bec2, fen42, frieden, goz19, gurk46, kobe4, ley21, ley23, loef34, toe14, veit53
sanktelisabeth	9	ah2, danne20, ernstl, essling2, hohl28, koelbl15, stu7, tele3, wte84
arn22	9	bici, din, hfs, htlo, ko81, ko81a, oswald5, staud9B, we16
berg22	8	hoch, hptstr12, hptstr1a, manner, peer, peer1, sied5, sonne

# MONITORING IPv4-ROUTING

## Links most used from routes

tunnel,kryptarroof	43	Ibs1, JCN, PJSxJUH18, akkuunterwegs, arg67, arsen, bal3, bici, ble20, blei20, cza44, dfs73, dg59, din, duer9, fl49, gangster, garten94, geb, gs15, hock21, htlo, jg7, ko81, ko81a, kryptarroof, lat7, liebe, lobe26, ma89, nbg43, oa12, ows2, pampa, pf1, red22, stern, sulm20, tha130panel, wh8panel, wo9, wuk, zelter7
tunnel,mh	31	bec2, ber13, biss, cless79, fen42, frieden, goz19, gri106, gri121, gtxgoz11, gurk46, gvw23, hw, kobe4, ley21, ley23, loef34, math28, men10, men39, men39-6, mh, obdo9, pod41, sche11, schenkich, sey5, siegfried28, sir, toe14, veit53
tunnel,2345Falke	26	1230Bfs256, 2345Falke, 2345Wolf, 2345donau, 2355RIAG, 2380Hochmayer28, 2380Roemer34, 2380grilanz, ENO, HZB48, SCHREMS62, ehg66, es112, ffh, hag10, ketz423, luxi122home, mjc, mzg31, mzg32, pdorf22, pdorf28, rr72, rsg32, scho33, wehr24
tunnel,brenner	20	Tmrg41, brambiE, brenner, erd222, ettenr, gatt12, ginkgo, guglg6, hann, heuklein, heunord, hws, maxbrod, renn68, schafbergalm, schaukal, sdlth03, troll20, wawi22, wmg64
tunnel,nessus	20	LSG33, arn22, bm5, erlachp, felb62, hfs, kr3, l13, lax2, matbb, matz, mp, nessus, oswald5, ows0, pbg9, quell165, staud9B, vdn58, we16
tunnel,traut3	19	berg22, berg36, betr5, feld19, gb, gbwest, hoch, hptstr12, hptstr1a, hptstr58, keller, manner, musik, peer, peer1, sied5, sonne, traut3, wasl
kryptarroof,duer9	17	Ibs1, bal3, blei20, cza44, dg59, duer9, fl49, gangster, geb, gs15, lat7, lobe26, oa12, ows2, red22, stern, wuk
tunnel,OZW	16	1130wuerz36, OZW, feh39, hack36, kl30, lzstr168, mei78, mm31, ojg19, ojg21, pfad12, rei6, scho54, so7, sonn91, venus33
2345Falke,2380Hochmayer28	16	1230Bfs256, 2380Hochmayer28, 2380Roemer34, 2380grilanz, SCHREMS62, ehg66, es112, ffh, ketz423, mjc, mzg31, mzg32, pdorf28, rr72, rsg32, scho33
tunnel,kol33	15	HND1, beindl4, jed99, kol33, manh2, muehl, nussberg, put24, put49, put54, puts8, rosen2, silber1, vor203, zahnrad1
mh,biss	14	ber13, biss, cless79, gvw23, math28, men10, men39, men39-6, pod41, sche11, schenkich, sey5, siegfried28, sir
kol33,jed99	14	HND1, beindl4, jed99, manh2, muehl, nussberg, put24, put49, put54, puts8, rosen2, silber1, vor203, zahnrad1
mh,hw	13	bec2, fen42, frieden, goz19, gtxgoz11, gurk46, hw, kobe4, ley21, ley23, loef34, toe14, veit53
nessus,quell165	12	LSG33, arn22, bm5, felb62, hfs, l13, oswald5, ows0, pbg9, quell165, staud9B, we16
tunnel,sanktelisabeth	10	ah2, danne20, ernstl, essling2, hohl28, koelbl15, sanktelisabeth, stu7, tele3, wte84
duer9,gs15	10	blei20, cza44, gangster, geb, gs15, lat7, lobe26, oa12, stern, wuk
kryptarroof,bici	8	bici, din, htlo, ko81, ko81a, pampa, tha130panel, wh8panel
tunnel,hofj	8	alechner, bahnstr, cottage8, hofj, kolbeter, mberg, vh11, vh13
hw,kobe4	7	bec2, fen42, gurk46, kobe4, loef34, toe14, veit53
2380Hochmayer28,ffh	7	1230Bfs256, 2380grilanz, es112, ffh, ketz423, mjc, scho33
brenner,wmg64	7	hann, heuklein, heunord, maxbrod, schafbergalm, schaukal, wmg64
biss,schenkich	7	ber13, men10, men39, men39-6, sche11, schenkich, siegfried28
hofj,alechner	6	alechner, bahnstr, cottage8, kolbeter, vh11, vh13
sanktelisabeth,hohl28	6	ernstl, essling2, hohl28, stu7, tele3, wte84
tunnel,goldegg26	6	goldegg26, goldegg26-05, goldegg26-08, goldegg26-10, goldegg26-14, goldegg26-22
wmg64,heunord	6	hann, heuklein, heunord, maxbrod, schafbergalm, schaukal
berg22,hptstr1a	6	hoch, hptstr1a, manner, peer, peer1, sied5
2380Hochmayer28,mzg32	6	SCHREMS62, ehg66, mzg31, mzg32, pdorf28, rr72
jed99,put24	6	manh2, put24, put49, put54, puts8, silber1

# MONITORING IPv4-ROUTING

## Logfile of changed routes from all nodes

sanktelisabeth 17x	2	NEW from 2017.08.05/17:03:03 - subway,tunnel,nessus,erlachp,sanktelisabeth OLD from 2017.08.05/16:49:05 - subway,tunnel,goldegg26,sanktelisabeth
heuklein 11x	1	NEW from 2017.08.05/17:00:10 - subway,tunnel,brenner,wmg64 OLD from 2017.08.05/14:52:02 - subway,tunnel,brenner,wmg64,heunord,heuklein
ah2 8x	1	NEW from 2017.08.05/16:58:05 - subway,tunnel,nessus,erlachp,sanktelisabeth,ah2 OLD from 2017.08.05/16:27:06 - subway,tunnel,goldegg26,sanktelisabeth,ah2
schaukal 15x	1	NEW from 2017.08.05/16:57:06 - subway,tunnel,brenner,wmg64 OLD from 2017.08.05/15:42:06 - subway,tunnel,brenner,wmg64,heunord,schaukal
pampa 67x	1	NEW from 2017.08.05/16:55:10 - subway,tunnel,kryptaroof,bici,tha130panel,din,htlo,pampa OLD from 2017.08.05/15:51:05 - subway,tunnel,kryptaroof,bici,tha130panel,din,pampa
htlo 75x	1	NEW from 2017.08.05/16:54:04 - subway,tunnel,kryptaroof,bici,tha130panel,din,htlo OLD from 2017.08.05/16:24:03 - subway,tunnel,kryptaroof,bici,htlo
sanktelisabeth 17x	2	NEW from 2017.08.05/16:49:05 - subway,tunnel,goldegg26,sanktelisabeth OLD from 2017.08.05/16:18:05 - subway,tunnel,nessus,erlachp,sanktelisabeth
danne20 13x	1	NEW from 2017.08.05/16:49:05 - subway,tunnel,goldegg26,sanktelisabeth,danne20 OLD from 2017.08.05/15:17:03 - subway,tunnel,nessus,erlachp,sanktelisabeth,danne20
ernstl 4x	1	NEW from 2017.08.05/16:35:08 - subway,tunnel,nessus,erlachp,sanktelisabeth,hohl28,stu7,ernstl OLD from 2017.08.05/16:04:08 - subway,tunnel,goldegg26,sanktelisabeth,hohl28,stu7,ernstl
koelbl15 45x	1	NEW from 2017.08.05/16:32:05 - subway,tunnel,nessus,erlachp,sanktelisabeth,koelbl15 OLD from 2017.08.05/16:01:01 - subway,tunnel,goldegg26,sanktelisabeth,koelbl15
ah2 8x	1	NEW from 2017.08.05/16:27:06 - subway,tunnel,goldegg26,sanktelisabeth,ah2 OLD from 2017.08.05/15:57:04 - subway,tunnel,nessus,erlachp,sanktelisabeth,ah2
htlo 75x	1	NEW from 2017.08.05/16:24:03 - subway,tunnel,kryptaroof,bici,htlo OLD from 2017.08.05/15:52:08 - subway,tunnel,kryptaroof,bici,tha130panel,din,htlo
math28 55x	1	NEW from 2017.08.05/16:21:04 - subway,tunnel,mh,biss,math28 OLD from 2017.08.05/15:51:02 - subway,tunnel,mh,biss,cless79,math28
sanktelisabeth 17x	2	NEW from 2017.08.05/16:18:05 - subway,tunnel,nessus,erlachp,sanktelisabeth OLD from 2017.08.05/16:01:01 - subway,tunnel,goldegg26,sanktelisabeth
ernstl 4x	1	NEW from 2017.08.05/16:04:08 - subway,tunnel,goldegg26,sanktelisabeth,hohl28,stu7,ernstl OLD from 2017.08.05/13:58:02 - subway,tunnel,nessus,erlachp,sanktelisabeth,hohl28,stu7,ernstl
sanktelisabeth 17x	2	NEW from 2017.08.05/16:01:01 - subway,tunnel,goldegg26,sanktelisabeth OLD from 2017.08.05/15:30:05 - subway,tunnel,nessus,erlachp,sanktelisabeth
koelbl15 45x	1	NEW from 2017.08.05/16:01:01 - subway,tunnel,goldegg26,sanktelisabeth,koelbl15 OLD from 2017.08.05/13:58:07 - subway,tunnel,nessus,erlachp,sanktelisabeth,koelbl15

# MOMO 8. MAI

Christian Pock  
wehr24

