



EdgeRouter Setup Konfiguration

Einleitung

Übersicht und Info:

<https://docs.google.com/document/d/16ov0fOTm4ywXzTE8AOxJxf7HefD2qgliZGxBJmtjw5A>

Hier wird ein Funkfeuer Knoten-Aufbau mit dem Ubiquiti EdgeRouter (X / X-SFP) bzw. dem EdgePoint (R6/R8) und dem Routing Daemon "OLSRd" beschrieben. Der OLSRd wird mittels eines "EdgeMAX Wizards" implementiert, einer Möglichkeit des Herstellers um eigene Zusatzsoftware auf dem Router installieren zu können.

Es wird davon ausgegangen, dass gewisses Basiswissen zum Konfigurieren von Routern im Allgemeinen bekannt ist. Wie man grundsätzlich Zugriff auf die Verwaltungsoberfläche bekommt, ist auch in der beiliegenden Beschreibung [1] [2] [3] des jeweiligen Routers dokumentiert.

Geschätzter Zeitaufwand in Summe ca. 30 Minuten.

- Der ER-X wird für (eher seltene) Installationen mit nur einer Antenne verwendet, da dieser der preiswerteste Router mit *nur einem* POE-Anschluss ist. (Allgemein nicht empfohlen, da nur eine einzige Antenne per POE (Power Over Ethernet, Strom Aus/Ein) gesteuert werden kann weswegen bei einem Ausbau jede weitere Antennen wieder ihr eigenes Netzteil benötigt. Nur empfohlen wenn auf diesem Knoten eine einzelne Antenne zum Einsatz kommen soll oder weitere nicht schaltbar sein müssen.
- Der ER-X-SFP kommt für Installationen mit mehr als einer Antenne, bei vorhandenem IP65+ Gehäuse oder auch bei Antennen-Verkabelung bis unter das Dach, zum Einsatz.
- Der EP-R6/R8 wird ebenfalls für Installationen mit mehr als einer Antenne verwendet, jedoch wenn es kein vorhandenes IP65+ Gehäuse gibt bzw. keine einfache Möglichkeit gegeben ist um Netzwerkgeräte wettergeschützt zu verstauen.

Achtung Es wurde bisher davon ausgegangen, dass ein beliebiger Internet-Anschluss zum Einrichten des Routers vorhanden ist. Seit Version 1.3 hat der "OLSRd Wizard" [5] auch die beiden OLSRd Pakete [6] [7] integriert, wodurch das manuelle nachladen der Pakete mit SCP-Client (z.B. WinSCP) wegfällt.

OLSRd Wizard

Der "OLSRd_V1" Wizard für EdgeMAX kann entweder aus dem Ubiquiti Forum [4], von chil.at [5] oder auch von Github [9] bezogen werden und ist für die OLSR Routing Funktionalität im Funkfeuer Netzwerk notwendig. Der Wizard prüft ob OLSRd bereits installiert ist und falls nicht, werden OLSRd Pakete im Verzeichnis /config/user-data/ gesucht und installiert bzw. versucht herunter zu laden, sollten keine vorhanden sein. Konnte OLSRd erfolgreich installiert werden, bietet der Wizard eine einfache und übersichtliche Konfiguration. Weiters beinhaltet der Wizard ein "Setup Script" welches den OLSRd mit der bestehenden Konfiguration nach einem Firmware Update wieder einrichtet. Somit kann man immer die aktuellste Software des Routers einspielen. Sollte ein Bridge Interface für OLSR aktiviert werden, setzt der OLSRd Wizard einen MAC-Filter mittels "eatables -P FORWARD DROP" damit das OLSR Routing nicht verfälscht wird. Für HNA4 Geräte muss eine



statische Route ConfigTree->protocols->static->Interface-route->1.2.3.4/32->next-hop-interface br0 gesetzt werden.

Beispielkonfiguration

Das Management Netzwerk kann natürlich je nach Belieben konfiguriert werden, dies hier ist eine Empfehlung. Diese Empfehlung ist an den (geplanten) optionalen "Funkfeuer Wizard" angelehnt, der die Konfiguration gänzlich abnimmt und neben einer Funkfeuer Status Seite eine Übersicht der erreichbaren Antennen bietet, sowie Port-Forwards darauf setzen kann, falls der VPN-Zugriff nicht möglich sein sollte.

Folgende Konfiguration ist für jeden Node verschieden, hier wird als Beispiel für Node "bec2" konfiguriert.

Als Device-Name wird im Funkfeuer Frontend "router" gewählt um dann mit router.bec2.wien.funkfeuer.at darauf z.B. per VPN zu verbinden. Weitere Router werden dann "router1" bzw. "router2" genannt.

Für die Management IP-Adressen [8] wird die Knoten-ID wie in folgenden Beispielen miteinbezogen:

Node Name	Node-ID	Mgmt-IP
bec2	169	10.1.69.*
fl49	12	10.0.12.*
duer9	2194	10.21.94.*
minimum	1	10.0.1.*
maximum	25499	10.254.99.*

Die Antennen werden nach den Himmelsrichtungen und der Frequenz benannt. Deren IP-Adressen sind, wie folgt für 5GHz Geräte, durch nummeriert. Hier die gesamte Liste [8] mit 2,4GHz und reservierten Bereichen.

IP-Adresse - Hostname (Himmelsrichtung)

- 10.1.69.17 - bec2.n5 (norden)
- 10.1.69.18 - bec2.nno5 (nord nord-ost)
- 10.1.69.19 - bec2.no5 (nord-ost)
- 10.1.69.20 - bec2.ono5 (ost nord-ost)
- 10.1.69.21 - bec2.o5 (osten)
- 10.1.69.22 - bec2.oso5 (ost süd-ost)
- 10.1.69.23 - bec2.so5 (süd-ost)
- 10.1.69.24 - bec2.sso5 (süd süd-ost)
- 10.1.69.25 - bec2.s5 (süden)
- 10.1.69.26 - bec2.ssw5 (süd süd-west)
- 10.1.69.27 - bec2.sw5 (süd-west)
- 10.1.69.28 - bec2.wsw5 (west süd-west)
- 10.1.69.29 - bec2.w5 (westen)
- 10.1.69.30 - bec2.wnw5 (west nord-west)



10.1.69.31 - bec2.nw5 (nord-west)

10.1.69.32 - bec2.nnw5 (nord nord-west)

10.1.69.100 - bec2-router (EdgeRouter mit OLSRd, NAT/Gateway, VPN-Server)

10.1.69.101 - bec2-router1 (weitere EdgeRouter/EdgePoint oder sonstige Router mit OLSRd)

Kurzfassung der Konfiguration

- Auf die IP-Adresse 192.168.1.1 verbinden, mit ubnt/ubnt einloggen
 - Reiter "Users" (Leiste oben)
 - Neuen Benutzer "funkfeuer" anlegen und damit einloggen
 - Standard Benutzer "ubnt" entfernen
 - Reiter "ConfigTree" -> Interfaces -> bridge
 - Bridge br0 setzen *Update List* Funkfeuer IP auf br0 setzen (z.B. 193.238.156.131/32)
 - Eine IP-Adresse aus dem eigenen lokalen Netzwerk hinzufügen (z.B. 192.168.1.10/24)
 - Bridge br1 setzen und Mgmt IP-Adresse setzen (z.B. 10.1.69.100/24)
 - Ethernet Schnittstellen eth1 bis eth5 zur Bridge br0 hinzufügen.
 - VLAN Schnittstelle (z.B. 1100) auf allen eth* anlegen und zur br1 hinzufügen *Preview->Apply*
- LAN-Kabel auf eth1 umhängen. **VORSICHT bei EP-R6! POE Stromzufuhr bleibt auf eth0!!!**
- Auf die IP-Adresse des lokalen Netzwerks (z.B.192.168.1.10) verbinden
 - Reiter "ConfigTree" -> Interfaces -> eth0
 - IP-Adresse 192.168.1.1/24 entfernen. *Preview->Apply*
 - eth0 zu br0 hinzufügen. *Preview->Apply*
- LAN-Kabel auf eth0 zurück hängen.
 - Reiter "System" (Leiste unten)
 - Host Name setzen: z.B. "bec2-router" -> Time Zone setzen
 - Gateway des lokalen Netzes setzen (z.B. 192.168.1.1)
 - Name Server setzen (z.B. Google DNS 8.8.8.8 und 8.8.4.4)
 - Standard SSH-Server Port 22 verändern (z.B. 10 oder 2222) *Save*
 - Reiter "ConfigTree" -> vpn -> pptp -> remote-access
 - authentication: local
 - local-users: Username setzen *Update List* User anwählen -> Passwort setzen
 - client-ip-pool: start: 10.1.69.110 stop: 10.1.69.120
 - dns-servers: server-1: 8.8.8.8 server-2: 8.8.4.4
 - (~~falls keine Internet Verbindung besteht: nun die beiden OLSRd Pakete [6] [7] per SCP auf den Router in das Verzeichnis /config/user data/ ablegen~~) - seit OLSRd-Wizard 1.3 nicht mehr nötig!
 - Reiter "Wizards" -> "Feature Wizard" mit "+" hinzufügen
 - Wizard Name: "OLSRd_V1" -> Files: ER-wizard-OLSRd_V1.tar rauf laden. *Save*
 - Beim ersten Öffnen des OLSRd Wizards das Laden abwarten, da im Hintergrund nun der OLSRd samt Plugins herunter geladen bzw. installiert wird.
 - Nach erfolgreicher Installation evtl. den Reiter wechseln bzw. die Seite neu laden.
 - Wenn OLSRd Version angezeigt wird, "Setup Script" aktivieren, OLSRd IPv4 aktivieren und Schnittstelle mit der Funkfeuer IP-Adresse aktivieren. Optional das txtinfo plugin aktivieren, unten "Restart" anhaken und *Apply* wählen.
 - Reiter "Firewall/NAT" -> NAT -> Source NAT Rule: br0, Masquerade, Src Address 10.1.69.0/24



- Anmerkung: durch Firewall Regeln wird automatisch connection tracking aktiviert, will man das nicht, muss man *alle* Firewall Regeln entfernen und darf keine Regeln setzen.
- Reiter "Dashboard" -> POE auf eth1 bis eth4 aktivieren.
- Reiter "ConfigTree" -> service -> gui -> https-port verändern (z.B. 10443)

Konfiguration & Zugriff Antenne(n)

Jede Antenne sollte eine Management IP-Adresse auf das Management VLAN (z.B. 1100) gesetzt haben, wie es am Beispiel einer NanoBridge im AirOS auf Seite 23 auf dem zweiten Screenshot zu sehen ist.

Der Zugriff darauf erfolgt optimalerweise per PPTP/VPN auf router.<node>.wien.funkfeuer.at bzw. die gesetzte Funkfeuer IP-Adresse. Bei Verbindung dann die Mgmt-IP im Browser aufrufen.

In diesem Beispiel wäre das router.bec2.wien.funkfeuer.at mit Benutzernamen "funkfeuer" und dem zuvor definierten Passwort, dann z.B. auf <https://10.1.69.19> zugreifen um die 5GHz Nord-Ost Antenne zu erreichen.

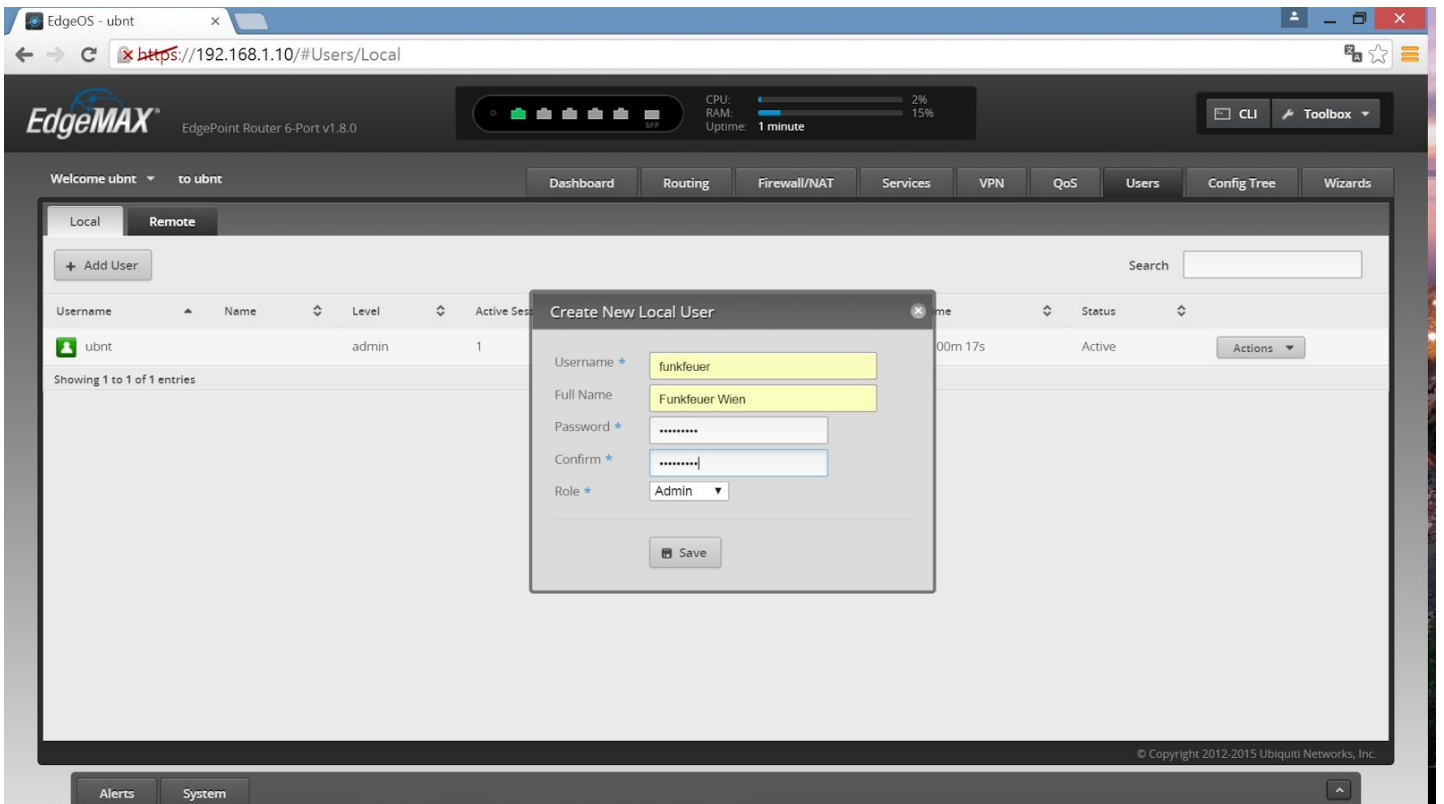
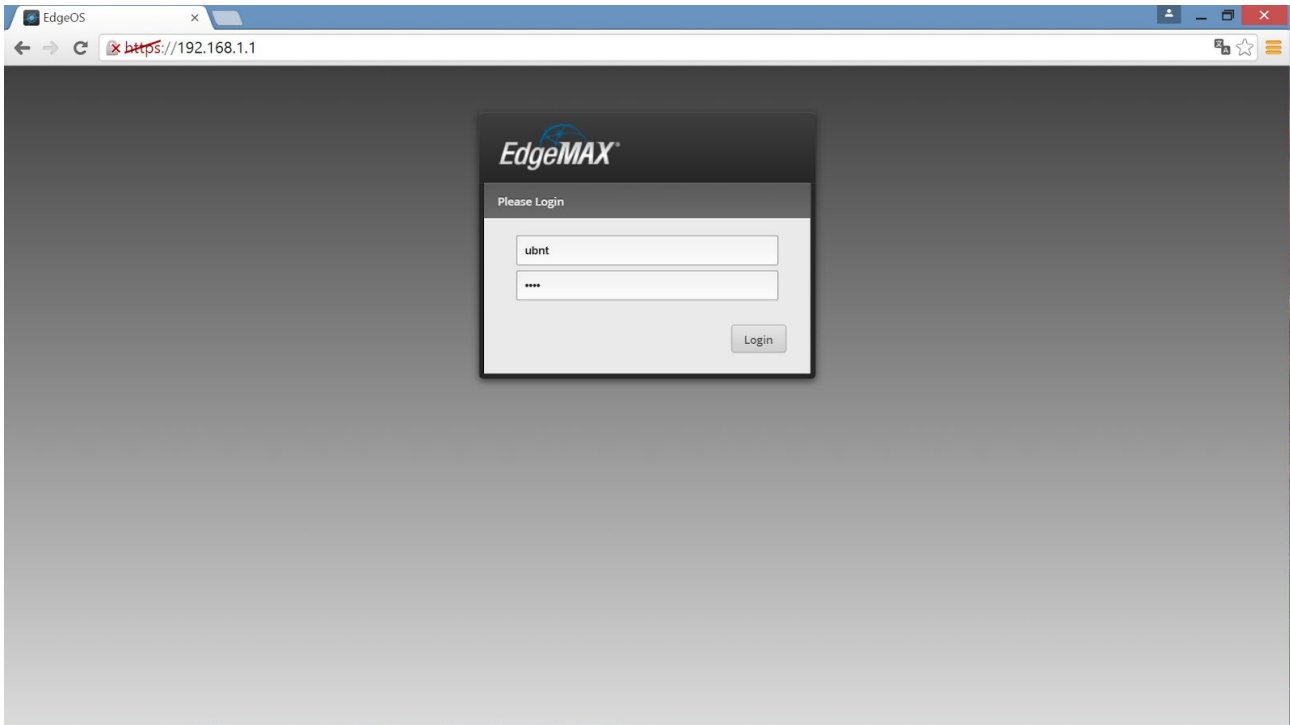
Alternativ kann man auch Port-Forwards setzen wie auf Seite 21 auf dem zweiten Screenshot zu sehen. Dies sollte aber eher vermieden und nur in Situationen wo kein PPTP/VPN möglich ist genutzt werden.

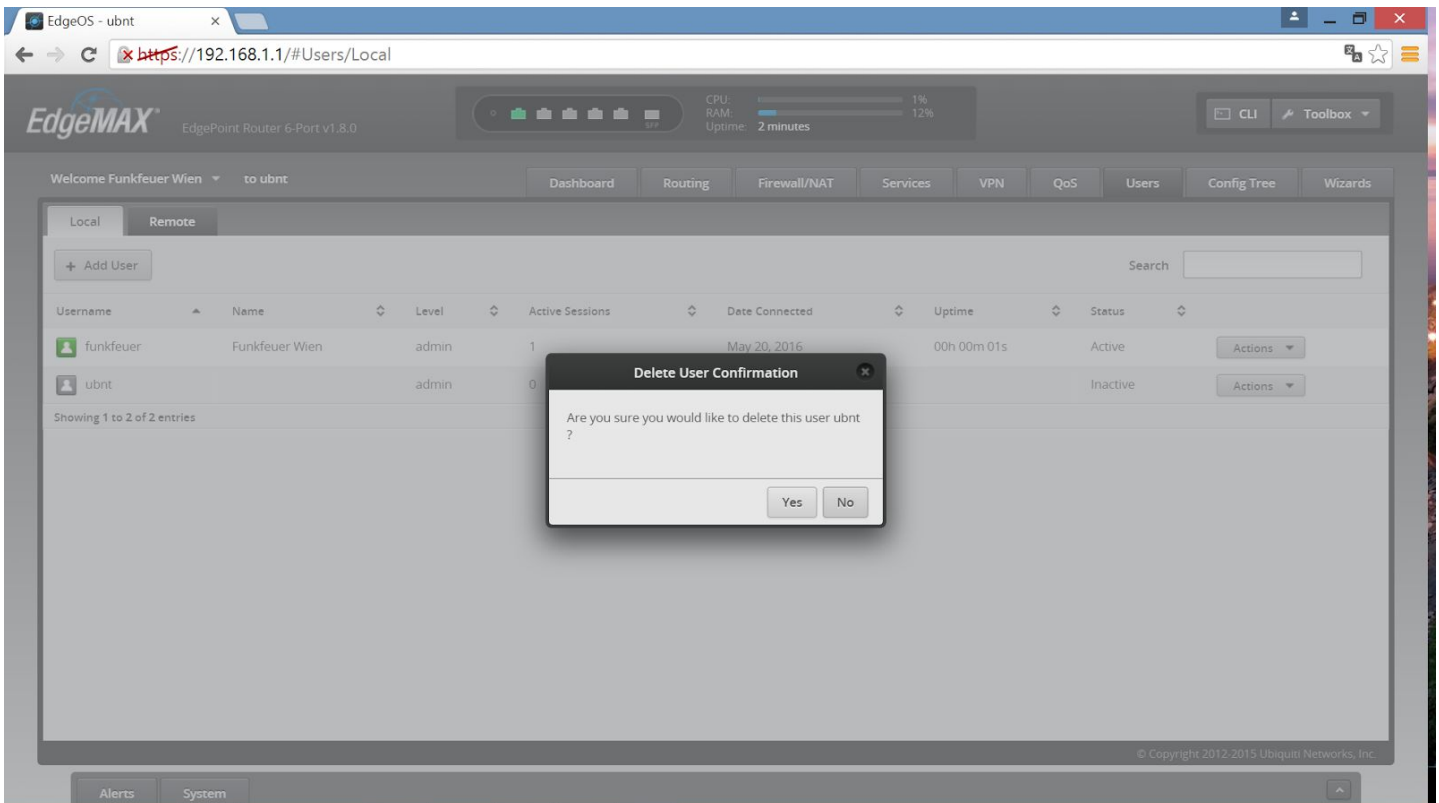
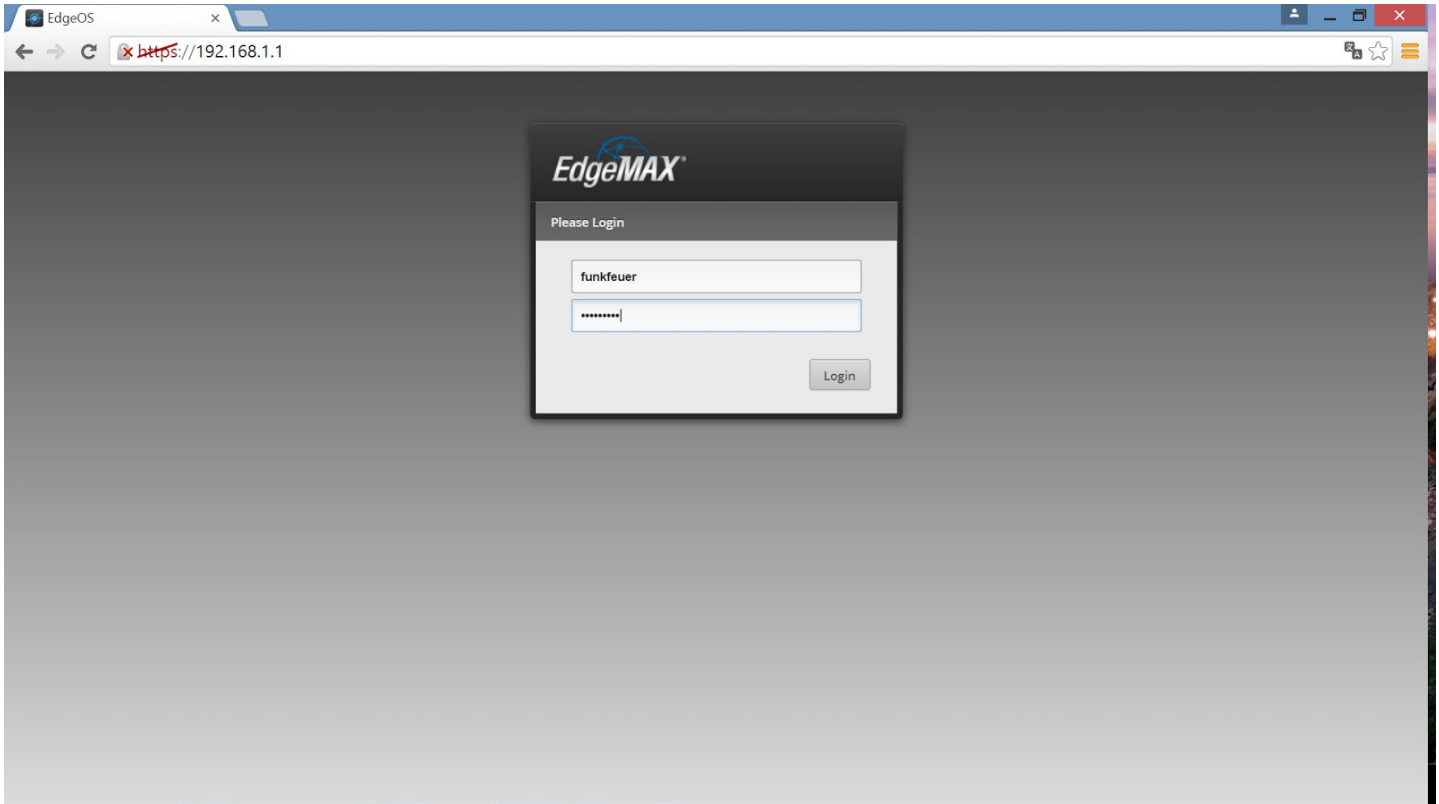
Verweise / Quellen:

- [1] https://dl.ubnt.com/guides/edgemax/EdgeRouter_ER-X_QSG.pdf
- [2] https://dl.ubnt.com/guides/edgemax/EdgeRouter_ER-X-SFP_QSG.pdf
- [3] https://dl.ubnt.com/guides/edgemax/EdgePoint_EP-R6_QSG.pdf
- [4] <https://community.ubnt.com/t5/EdgeMAX-Beta/Feature-Wizard-RFC3626-OLSR-daemon-v1/m-p/1507389>
- [5] https://chil.at/downloads/ER-wizard-OLSRd_V1.tar
- [6] http://ftp.de.debian.org/debian/pool/main/o/olsrd/olsrd_0.6.6.2-1_mipsel.deb
- [7] http://ftp.de.debian.org/debian/pool/main/o/olsrd/olsrd-plugins_0.6.6.2-1_mipsel.deb
- [8] <http://gsm.fl49.wien.funkfeuer.at/vlan.txt>
- [9] https://github.com/vchrizz/ER-wizard-OLSRd_V1/releases/latest



Langfassung mit Screenshots







EdgeOS - ubnt

https://192.168.1.1/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 1% RAM: 12% Uptime: 3 minutes

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- custom-attribute
- firewall +
- interfaces -
 - bonding
 - bridge
 - br0
 - ethernet
 - input
 - l2tpv3
 - loopback
 - openvpn
 - pptp-client
 - pseudo-ethernet
 - switch
 - tunnel
 - vti
 - wirelessmodem
- load-balance +
- policy +
- port-forward +
- protocols +
- service -
- system -

interfaces / bridge : Bridge interface name

bridge - Remove

+ Add

Update List

Discard Preview

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EdgeOS - ubnt

https://192.168.1.1/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 1% RAM: 12% Uptime: 4 minutes

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- custom-attribute
- firewall +
- interfaces -
 - bonding
 - bridge
 - br0
 - bandwidth +
 - dhcp-options +
 - dhcpv6-options +
 - dhcpv6-pd +
 - disable +
 - disable-link-detect +
 - firewall +
 - ip +
 - ipv6 +
 - pppoe
 - traffic-policy +
 - vif
 - vrrp +
 - ethernet
 - input
 - l2tpv3
 - loopback

interfaces / bridge / br0

address - Remove

- Remove

+ Add

aging ⓘ

bridged-contrack ⓘ

description ⓘ

forwarding-delay ⓘ

hello-time ⓘ

max-age ⓘ

multicast ⓘ

priority ⓘ

promiscuous ⓘ

redirect ⓘ

Discard Preview

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EdgeOS - ubnt

https://192.168.1.1/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 3% RAM: 12% Uptime: 4 minutes

CLI Toolbox

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- custom-attribute
- firewall
- interfaces
 - bonding
 - bridge
 - br0
 - bandwidth
 - dhcp-options
 - dhcpv6-options
 - dhcpv6-pd
 - disable
 - disable-link-detect
 - firewall
 - ip
 - ipv6
 - pppoe
 - traffic-policy
 - vif
 - 1100
 - vrrp
- ethernet
 - input
 - l2tpv3

Interfaces / bridge / br0 / vif: Virtual Local Area Network (VLAN) ID

vif - Remove

+ Add

Update List

Discard Preview

Alerts System

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EdgeOS - ubnt

https://192.168.1.1/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 0% RAM: 12% Uptime: 8 minutes

CLI Toolbox

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- traffic-policy
- vrrp
- ethernet
 - eth0
 - eth1
 - bandwidth
 - bridge-group
 - dhcp-options
 - dhcpv6-options
 - dhcpv6-pd
 - disable
 - disable-link-detect
 - firewall
 - ip
 - ipv6
 - poe
 - pppoe
 - traffic-policy
 - vif
 - vrrp
 - eth2
 - eth3
 - eth4

interfaces / ethernet / eth1 / bridge-group: Add this interface to a bridge group

bridge ⓘ

cost ⓘ

priority ⓘ

Discard Preview

Alerts System

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EdgeOS - ubnt

https://192.168.1.1/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 1% RAM: 12% Uptime: 9 minutes

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- pppoe
- traffic-policy +
- vif
- vrrp +
- eth4**
 - bandwidth +
 - bridge-group -
 - dhcp-options +
 - dhcpv6-options +
 - dhcpv6-pd +
 - disable +
 - disable-link-detect +
 - firewall +
 - ip +
 - ipv6 +
 - poe +
 - pppoe
 - traffic-policy +
 - vif
 - vrrp +
- eth5**
 - bandwidth +
 - bridge-group +
 - dhcp-options +

Interfaces / ethernet / eth5 / bridge-group : Add this interface to a bridge group

bridge ⓘ

cost ⓘ

priority ⓘ

Discard Preview

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EdgeOS - ubnt

https://192.168.1.1/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 1% RAM: 12% Uptime: 10 minutes

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- pppoe
- traffic-policy +
- vif
- vrrp +
- eth4**
 - bandwidth +
 - bridge-group -
 - dhcp-options +
 - dhcpv6-options +
 - dhcpv6-pd +
 - disable +
 - disable-link-detect +
 - firewall +
 - ip +
 - ipv6 +
 - poe +
 - pppoe
 - traffic-policy +
 - vif
 - vrrp +
- eth5**
 - bandwidth +
 - bridge-group +
 - dhcp-options +

Interfaces / ethernet / eth5 / bridge-group

bridge ⓘ

cost ⓘ

priority ⓘ

Discard Preview

EdgeMAX

Commands to commit

Commands to Commit:

- set interfaces ethernet eth1 bridge-group bridge br0
- set interfaces ethernet eth2 bridge-group bridge br0
- set interfaces ethernet eth3 bridge-group bridge br0
- set interfaces ethernet eth4 bridge-group bridge br0
- set interfaces ethernet eth5 bridge-group bridge br0
- set interfaces bridge br0 address 193.238.156.131/32
- set interfaces bridge br0 address 192.168.1.10/24
- set interfaces bridge br0 vif 1100 address 10.1.69.100/24

Apply ✓ Not Now ✕

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EdgeOS - ubnt

https://192.168.1.10/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 7% RAM: 14% Uptime: 12 minutes

CLI Toolbox

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- custom-attribute
- firewall +
- Interfaces -
 - bonding
 - bridge
 - ethernet
 - eth0
 - bandwidth +
 - bridge-group +
 - dhcp-options +
 - dhcpv6-options +
 - dhcpv6-pd +
 - disable +
 - disable-link-detect +
 - firewall +
 - ip +
 - ipv6 +
 - poe +
 - pppoe
 - traffic-policy +
 - vif
 - vrrp +
 - eth1

Interfaces / ethernet / eth0

address: 192.168.1.1/24 [Remove]

+ Add

bond-group

description

duplex: auto

mac

mirror

mtu

redirect

speed: auto

Discard Preview

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Alerts System

EdgeOS - ubnt

https://192.168.1.10/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 10% RAM: 14% Uptime: 12 minutes

CLI Toolbox

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- custom-attribute
- firewall +
- Interfaces -
 - bonding
 - bridge
 - ethernet
 - eth0
 - bandwidth +
 - bridge-group +
 - dhcp-options +
 - dhcpv6-options +
 - dhcpv6-pd +
 - disable +
 - disable-link-detect +
 - firewall +
 - ip +
 - ipv6 +
 - poe +
 - pppoe
 - traffic-policy +
 - vif
 - vrrp +
 - eth1

Interfaces / ethernet /

address

bond-group

description

duplex

mac

mirror

mtu

redirect

speed

Discard Preview

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Alerts System

EdgeMAX

Commands to commit

Commands to Commit:

- delete interfaces ethernet eth0 address 192.168.1.1/24

Apply ✓ Not Now ✕



This screenshot shows the EdgeMAX web interface for an EdgePoint Router 6-Port v1.8.0. The browser address bar shows 'https://192.168.1.10/#ConfigTree'. The interface includes a top navigation bar with tabs for Dashboard, Routing, Firewall/NAT, Services, VPN, QoS, Users, Config Tree, and Wizards. A left sidebar contains a 'Configuration' tree with categories like custom-attribute, firewall, interfaces, bonding, bridge, ethernet, and eth0. The main content area is titled 'Interfaces / ethernet / eth0 / bridge-group : Add this interface to a bridge group' and contains three input fields: 'bridge' (with 'br0' entered), 'cost', and 'priority'. A green message at the bottom states 'The configuration has been applied successfully'. The bottom status bar shows 'Alerts' and 'System' buttons.

This screenshot shows the same EdgeMAX web interface as above, but with a modal dialog box open. The dialog box is titled 'EdgeMAX' and 'Commands to commit'. It contains the text 'Commands to Commit:' followed by a bulleted list: '• set interfaces ethernet eth0 bridge-group bridge br0'. At the bottom of the dialog are two buttons: 'Apply' (with a checkmark icon) and 'Not Now' (with an 'x' icon). The background interface is dimmed, showing the same configuration page and navigation elements.



EdgeOS - ubnt

https://192.168.1.10/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 0% RAM: 14% Uptime: 18 minutes

CLI | Toolbox

Welcome Funkfeuer Wien to ubnt

Dashboard | Routing | Firewall/NAT | Services | VPN | QoS | Users | Config Tree | Wizards

Configuration

- custom-attribute
- firewall
- Interfaces
- load-balance
- policy
- port-forward
- protocols
- service
- system
- traffic-control
- traffic-policy
- vpn
 - ipsec
 - l2tp
 - pptp
 - remote-access
 - authentication
 - local-users
 - username
 - funkfeuer**
 - disable
 - radius-server
 - client-ip-pool

vpn / pptp / remote-access / authentication / local-users / username / funkfeuer

password:

static-ip:

Discard | Preview

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Alerts | System

EdgeOS - ubnt

https://192.168.1.10/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 0% RAM: 14% Uptime: 18 minutes

CLI | Toolbox

Welcome Funkfeuer Wien to ubnt

Dashboard | Routing | Firewall/NAT | Services | VPN | QoS | Users | Config Tree | Wizards

Configuration

- policy
- port-forward
- protocols
- service
- system
- traffic-control
- traffic-policy
- vpn
 - ipsec
 - l2tp
 - pptp
 - remote-access
 - authentication
 - local-users
 - username
 - funkfeuer
 - disable
 - radius-server
 - client-ip-pool
 - dns-servers
 - wins-servers
 - rsa-keys
 - zone-policy

vpn / pptp / remote-access / client-ip-pool : Pool of client IP address (must be within a /24)

start:

stop:

Discard | Preview

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Alerts | System



EdgeOS - ubnt

https://192.168.1.10/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 1% RAM: 14% Uptime: 19 minutes

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- policy +
- port-forward +
- protocols +
- service -
- system -
- traffic-control +
- traffic-policy +
- vpn -
 - ipsec +
 - l2tp +
 - pptp -
 - remote-access -
 - authentication -
 - local-users -
 - username -
 - funkfeuer -
 - disable +
 - radius-server -
 - client-ip-pool -
 - dns-servers +
 - wins-servers +
- rsa-keys +
- zone-policy +

vpn / pptp / remote-access / dns-servers : Domain Name Service (DNS) server

server-1 8.8.8.8

server-2 8.8.4.4

Discard Preview

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EdgeOS - ubnt

https://192.168.1.10/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 1% RAM: 14% Uptime: 20 minutes

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- policy +
- port-forward +
- protocols +
- service -
- system -
- traffic-control +
- traffic-policy +
- vpn -
 - ipsec +
 - l2tp +
 - pptp -
 - remote-access -
 - authentication -
 - local-users -
 - username -
 - funkfeuer -
 - disable +
 - radius-server -
 - client-ip-pool -
 - dns-servers +
 - wins-servers +
- rsa-keys +
- zone-policy +

vpn / pptp / remote-access / dns-servers : Domain Name Service (DNS) server

server-1 8.8.8.8

server-2 8.8.4.4

Discard Preview

EdgeMAX

Commands to commit

Commands to Commit:

- set vpn pptp remote-access authentication mode local
- set vpn pptp remote-access authentication local-users username funkfeuer password [REDACTED]
- set vpn pptp remote-access client-ip-pool start 10.1.69.110
- set vpn pptp remote-access client-ip-pool stop 10.1.69.120
- set vpn pptp remote-access dns-servers server-1 8.8.8.8
- set vpn pptp remote-access dns-servers server-2 8.8.4.4

Apply ✓ Not Now ✗

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EdgeOS - ubnt

https://192.168.1.10/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 1% RAM: 14% Uptime: 21 minutes

CLI Toolbox

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- custom-attribute
- firewall +
- Interfaces -
- load-balance +
- policy +
- port-forward +
- protocols +
- service -
- system -
 - config-management +
 - conntrack +
 - domain-search +
 - flow-accounting +
 - ip +
 - ipv6 +
 - login -
 - ntp -
 - offload +
 - options +
 - package +
 - static-host-mapping +
 - syslog -
 - task-scheduler +

system / options : System options

reboot-on-panic

Discard Preview The configuration has been applied successfully

Alerts System

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EdgeOS - ubnt

https://192.168.1.10/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 1% RAM: 14% Uptime: 21 minutes

CLI Toolbox

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- custom-attribute
- firewall +
- Interfaces -
- load-balance +
- policy +
- port-forward +
- protocols +
- service -
- system -
 - config-management +
 - conntrack +
 - domain-search +
 - flow-accounting +
 - ip +
 - ipv6 +
 - login -
 - ntp -
 - offload +
 - options +
 - package +
 - static-host-mapping +
 - syslog -
 - task-scheduler +

system / options : System options

reboot-on-panic

Discard Preview The configuration has been applied successfully

Alerts System

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EdgeMAX

Commands to commit

Commands to Commit:

- set system options reboot-on-panic true

Apply ✓ Not Now ✕



EdgeOS - ubnt x

https://192.168.1.10/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 0% RAM: 14% Uptime: 22 minutes

CLI Toolbox

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration root

Alerts System

Basic Settings

Currently running EdgeOS v1.8.0
Ubiquiti License Agreement

Host Name
System host name: router-bec2

Gateway
System gateway address: 192.168.1.1

Domain Name
System domain-name:

Time Zone
 Use Coordinated Universal Time (UTC)
 Time zone: Europe Austria All

Name Server
 System name server: 8.8.8.8
 8.8.4.4

NTP
 Automatically update system time using NTP

Management Settings

SSH Server Telnet Server

EdgeOS - ubnt x

https://192.168.1.10/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 0% RAM: 14% Uptime: 24 minutes

CLI Toolbox

Welcome Funkfeuer Wien to ubnt

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration root

Alerts System

Management Settings

SSH Server
 Enable
 Port: 10

System Log
 Log to remote server:
 Log Level: Error

Telnet Server
 Enable
 Port:

UBNT Discovery
 Enable

SNMP Agent
 Enable
 SNMP community: funkfeuer
 Contact: mail@chil.at
 Location: 1140, Beckmanogasse 2

Configuration Management & Device Maintenance

Back Up Config Upgrade System Image



EdgeOS - ubnt

https://192.168.1.10/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 6% RAM: 15% Uptime: 24 minutes

CLI | Toolbox

Welcome Funkfeuer Wien to ubnt

Dashboard | Routing | Firewall/NAT | Services | VPN | QoS | Users | Config Tree | Wizards

Configuration root

Alerts | System

Configuration Management & Device Maintenance

Back Up Config

Download backup config file:

Upgrade System Image

Upload system image:

To check for updates go to: www.ubnt.com/download

Restore Config

Upload config file:

Reset Config to Default

Restart & Shut Down Router

Restart Router

Shut Down Router

EdgeOS - router-bec2

https://192.168.1.10/#Wizard

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 0% RAM: 15% Uptime: 29 minutes

CLI | Toolbox

Welcome Funkfeuer Wien to ubnt

Dashboard | Routing | Firewall/NAT | Services | VPN | QoS | Users | Config Tree | Wizards

Setup Wizards

- Load Balancing
- Load Balancing2
- WAN+2LAN
- WAN+2LAN2

Feature Wizards +

- TCP MSS clamping
- UPnP

Please choose a wizard from the left.

Upload new feature wizard

Wizard Name *

Wizard Files *

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Alerts | System



EdgeOS - router-bec2 x

https://192.168.1.10/#Wizard/feature/OLSRd_V1

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 1% RAM: 15% Uptime: 30 minutes

CLI | Toolbox

Welcome Funkfeuer Wien to ubuntu

Dashboard | Routing | Firewall/NAT | Services | VPN | QoS | Users | Config Tree | Wizards

Setup Wizards

- Load Balancing
- Load Balancing2
- WAN+2LAN
- WAN+2LAN2

Feature Wizards +

- TCP MSS clamping
- UPnP
- OLSRd V1**

Alerts System

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EdgeOS - router-bec2 x

https://192.168.1.10/#Wizard/feature/OLSRd_V1

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 1% RAM: 15% Uptime: 30 minutes

CLI | Toolbox

Welcome Funkfeuer Wien to ubuntu

Dashboard | Routing | Firewall/NAT | Services | VPN | QoS | Users | Config Tree | Wizards

Setup Wizards

- Load Balancing
- Load Balancing2
- WAN+2LAN
- WAN+2LAN2

Feature Wizards +

- TCP MSS clamping
- UPnP
- OLSRd V1**

Alerts System

EdgeMAX Wizard "OLSRd_V1" created 2016 by Onetrix.net for Funkfeuer.at

Optimized Link State Routing Protocol

The OLSR.org OLSR Daemon (olsrd) is an implementation of the IETF RFC 3626: [Optimized Link State Routing Protocol](#). 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: running olsrd installation ... completed.

Daemon Status: IPv4: not running. IPv6: not running.

Setup Script

▼ OLSRd IPv4

- Enable OLSR daemon
- Run OLSR daemon (on boot, if enabled)

Interfaces:

Enable: Interface: br0 Address: 193.238.156.131/32

Enable: Interface: br0.1100 Address: 10.1.69.100/24

Settings:

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EdgeOS - router-bec2 x

https://192.168.1.10/#Wizard/feature/OLSRd_V1

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 0% RAM: 16% Uptime: 31 minutes

Welcome Funkfeuer Wien to router-bec2

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Setup Wizards

- Load Balancing
- Load Balancing2
- WAN+2LAN
- WAN+2LAN2

Feature Wizards +

- TCP MSS clamping
- UPnP
- OLSRd V1**

EdgeMAX Wizard "OLSRd_V1" created 2016 by Onetrix.net for Funkfeuer.at

Optimized Link State Routing Protocol

The OLSR.org OLSR Daemon (olsrd) is an implementation of the IETF RFC 3626: *Optimized Link State Routing Protocol*. 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 0.6.6.2-1 and olsrd-plugins 0.6.6.2-1 installed.

Daemon Status: IPv4: not running, IPv6: not running.

Setup Script

OLSRd IPv4

Enable OLSR daemon

Run OLSR daemon (on boot, if enabled)

Interfaces:

Enable: Interface: br0 Address: 193.238.156.131/32

Enable: Interface: br0.1100 Address: 10.1.69.100/24

Settings:

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EdgeOS - router-bec2 x

https://192.168.1.10/#Wizard/feature/OLSRd_V1

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 1% RAM: 16% Uptime: 32 minutes

Welcome Funkfeuer Wien to router-bec2

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Setup Wizards

- Load Balancing
- Load Balancing2
- WAN+2LAN
- WAN+2LAN2

Feature Wizards +

- TCP MSS clamping
- UPnP
- OLSRd V1**

Package Status: success: packages olsrd 0.6.6.2-1 and olsrd-plugins 0.6.6.2-1 installed.

Daemon Status: IPv4: not running, IPv6: not running.

Setup Script

OLSRd IPv4

Enable OLSR daemon

Run OLSR daemon (on boot, if enabled)

Interfaces:

Enable: Interface: br0 Address: 193.238.156.131/32

Enable: Interface: br0.1100 Address: 10.1.69.100/24

Settings:

255.255.255.255 Ip4Broadcast

Hna4

LinkQualityMult (IPv4)

Plugins:

xtinfo (0.0.0.0:2006) jsoninfo (0.0.0.0:9090) httpinfo (0.0.0.0:8080)

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EdgeOS - router-bec2 x

https://192.168.1.10/#Wizard/feature/OLSRd_V1

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 3% RAM: 16% Uptime: 33 minutes

Welcome Funkfeuer Wien to router-bec2

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Setup Wizards

- Load Balancing
- Load Balancing2
- WAN+2LAN
- WAN+2LAN2

Feature Wizards +

- TCP MSS clamping
- UPnP
- OLSRd V1**

Common OLSR Settings

Emission intervals: (for both IPv4 & IPv6 daemons)
If not defined, RFC proposed values will be used in most cases.

5.0 HelloInterval

125.0 HelloValidityTime

2.0 TcInterval

500.0 TcValidityTime

25.0 MidInterval

500.0 MidValidityTime

25.0 HnaInterval

500.0 HnaValidityTime

Olsrcd can autodetect changes in NIC configurations (IP address changes etc.). This is Enabled by default but can be turned off pr. NIC to save CPU cycles.

Restart OLSR daemon(s) on 'Apply'.

Cancel Apply Delete From List The configuration has been applied successfully

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EdgeOS - router-bec2 x

https://193.238.156.131/#Wizard/feature/OLSRd_V1

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 8% RAM: 17% Uptime: 35 minutes

Welcome Funkfeuer Wien to router-bec2

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Setup Wizards

- Load Balancing
- Load Balancing2
- WAN+2LAN
- WAN+2LAN2

Feature Wizards +

- TCP MSS clamping
- UPnP
- OLSRd V1**

EdgeMAX Wizard "OLSRd_V1" created 2016 by Onetrix.net for Funkfeuer.at

Optimized Link State Routing Protocol

The OLSR.org OLSR Daemon (olsrd) is an implementation of the IETF RFC 3626: Optimized Link State Routing Protocol. 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 0.6.6.2-1 and olsrd-plugins 0.6.6.2-1 installed.

Daemon Status: IPv4: 193.238.156.131:698 4050-olsrd. IPv6: not running

Setup Script

OLSRd IPv4

Enable OLSR daemon

Run OLSR daemon (on boot, if enabled)

Interfaces:

Enable: Interface: br0 Address: 193.238.156.131/32

Enable: Interface: br0.1100 Address: 10.1.69.100/24

Settings:

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EdgeOS - router-bec2 x

https://193.238.156.131/#Security/NAT

EdgeMAX EdgePoint Router 6-Port v1.8.0

Welcome Funkfeuer Wien to router-bec2

Port Forwarding Firewall Policies NAT Firewall

+ Add Source NAT Rule Save Rule Order

Order	Description
No rules available.	

+ Add Destination NAT Rule Save Rule Order

Order	Description
No rules available.	

Alerts System

CPU: 10% RAM: 17%

Source NAT Rule Configuration

Description:

Enable:

Outbound Interface: **br0**

Translation: Use Masquerade Specify address and/or port

Exclude from NAT:

Enable Logging:

Protocol: All protocols TCP UDP Both TCP and UDP Choose a protocol by name Enter a protocol number

Src Address:

Src Port:

Src Address Group: -- or Interface Addr: --

Src Network Group: --

Src Port Group: --

Save Cancel

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EdgeOS - router-bec2 x

https://193.238.156.131/#Security/NAT

EdgeMAX EdgePoint Router 6-Port v1.8.0

Welcome Funkfeuer Wien to router-bec2

Port Forwarding Firewall Policies NAT Firewall

+ Add Source NAT Rule Save Rule Order

Order	Description	Source
1		address 10.

Showing 1 to 1 of 1 entries

+ Add Destination NAT Rule Save Rule Order

Order	Description
No rules available.	

Alerts System

CPU: 3% RAM: 16%

Destination NAT Rule Configuration

Inbound Interface: **br0**

Translations:

Exclude from NAT:

Enable Logging:

Protocol: All protocols TCP UDP Both TCP and UDP Choose a protocol by name Enter a protocol number

Src Address:

Src Port:

Src Address Group: -- or Interface Addr: --

Src Network Group: --

Src Port Group: --

Dest Address:

Dest Port:

Save Cancel

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EdgeOS - router-bec2 x

https://193.238.156.131/#Dashboard

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 0% RAM: 17% Uptime: 1 hour, 36 minutes

Welcome Funkfeuer Wien to router-bec2

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Services

Routes

connected	4
static	1
rip	0
ospf	0
bgp	0
total	5

OSPF is disabled

areas n/a

NAT is enabled

rules 1

Firewall is disabled

rulesets 0

rules 0

DHCP is disabled

active servers 0

inactive servers 0

Add Interface

All Ethernet VLAN PPPoE

Description	Interface	Type	PoE	IP Addr	MTU	Tx	Rx	Status	Actions
br0	br0	bridge		193.238.156.131/32 192.168.1.10/24	1500	24.92 Kbps	170.08 Kbps	Connected	Actions
br0.1100	br0.1100	vlan		10.1.69.100/24	1500	0 bps	0 bps	Connected	Actions
eth0	eth0	ethernet	off		1500	24.70 Kbps	173.14 Kbps	Connected	Actions
eth1	eth1	ethernet	off		1500	0 bps	0 bps	Disconnected	Actions
eth2	eth2	ethernet	off		1500	0 bps	0 bps	Disconnected	Actions
eth3	eth3	ethernet	off		1500	0 bps	0 bps	Disconnected	Actions
eth4	eth4	ethernet	off		1500	0 bps	0 bps	Disconnected	Actions
eth5	eth5	ethernet			1500	0 bps	0 bps	Disconnected	Actions
switch0	switch0	switch			1500	0 bps	0 bps	Connected	Actions

Showing 1 to 9 of 9 entries

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EdgeOS - router-bec2 x

https://193.238.156.131/#Dashboard

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 0% RAM: 17% Uptime: 1 hour, 38 minutes

Welcome Funkfeuer Wien to router-bec2

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Services

Routes

connected	4
static	1
rip	0
ospf	0
bgp	0
total	5

OSPF is disabled

areas n/a

NAT is enabled

rules 1

Firewall is disabled

rulesets 0

rules 0

DHCP is disabled

active servers 0

inactive servers 0

Add Interface

All Ethernet VLAN PPPoE

Description	Interface	Type	PoE	IP Addr	MTU	Tx	Rx	Status	Actions
br0	br0	bridge			1500	6.84 Kbps	137.32 Kbps	Connected	Actions
br0.1100	br0.1100	vlan			1500	0 bps	0 bps	Connected	Actions
eth0	eth0	ethernet	off		1500	6.97 Kbps	140.51 Kbps	Connected	Actions
eth1	eth1	ethernet	off		1500	0 bps	0 bps	Disconnected	Actions
eth2	eth2	ethernet	off		1500	0 bps	0 bps	Disconnected	Actions
eth3	eth3	ethernet	off		1500	0 bps	0 bps	Disconnected	Actions
eth4	eth4	ethernet	off		1500	0 bps	0 bps	Disconnected	Actions
eth5	eth5	ethernet			1500	0 bps	0 bps	Disconnected	Actions
switch0	switch0	switch			1500	0 bps	0 bps	Connected	Actions

Showing 1 to 9 of 9 entries

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Alerts System

Interface Configuration for eth1

Config PoE

PoE 24V WARNING: Connected device MUST support selected voltage!

PoE Watchdog

Enable Cutting power during FW upgrade will damage your device. Make sure you specify safe Ping Interval

Watchdog

Save Cancel



EdgeOS - router-bec2

https://193.238.156.131:10443/#ConfigTree

EdgeMAX EdgePoint Router 6-Port v1.8.0

CPU: 1% RAM: 17% Uptime: 5 hours, 29 minutes

Welcome Funkfeuer Wien to router-bec2

Dashboard Routing Firewall/NAT Services VPN QoS Users Config Tree Wizards

Configuration

- custom-attribute
- firewall +
- Interfaces -
- load-balance +
- policy +
- port-forward +
- protocols +
- service -
 - dhcp-relay +
 - dhcp-server +
 - dhcpv6-relay +
 - dhcpv6-server +
 - dns +
 - gui -
 - debug +
 - lldp +
 - mdns +
 - nat -
 - pppoe-server +
 - snmp -
 - ssh -
 - telnet +
 - ubnt-discover +

service / gui : Web GUI settings

https-port: 10443

listen-address: + Add

Discard Preview

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[bec2.no5] - Network

https://10.1.69.19/network.cgi

NanoBridge M5 airOS™

MAIN WIRELESS NETWORK ADVANCED SERVICES SYSTEM

Tools Logout

Network Role

Network Mode: Bridge

Disable Network: None

Configuration Mode

Configuration Mode: Simple

Management Network Settings

Management IP Address: DHCP Static

IP Address: 10.1.69.19

Netmask: 255.255.255.0

Gateway IP: 10.1.69.100

Primary DNS IP: 8.8.8.8

Secondary DNS IP: 8.8.4.4

MTU: 1500

Management VLAN: Enable

VLAN ID: 1100

Auto IP Aliasing: Enable

STP: Enable

IPv6: Enable

Change

GENUINE PRODUCT

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