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 “ebtables -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.

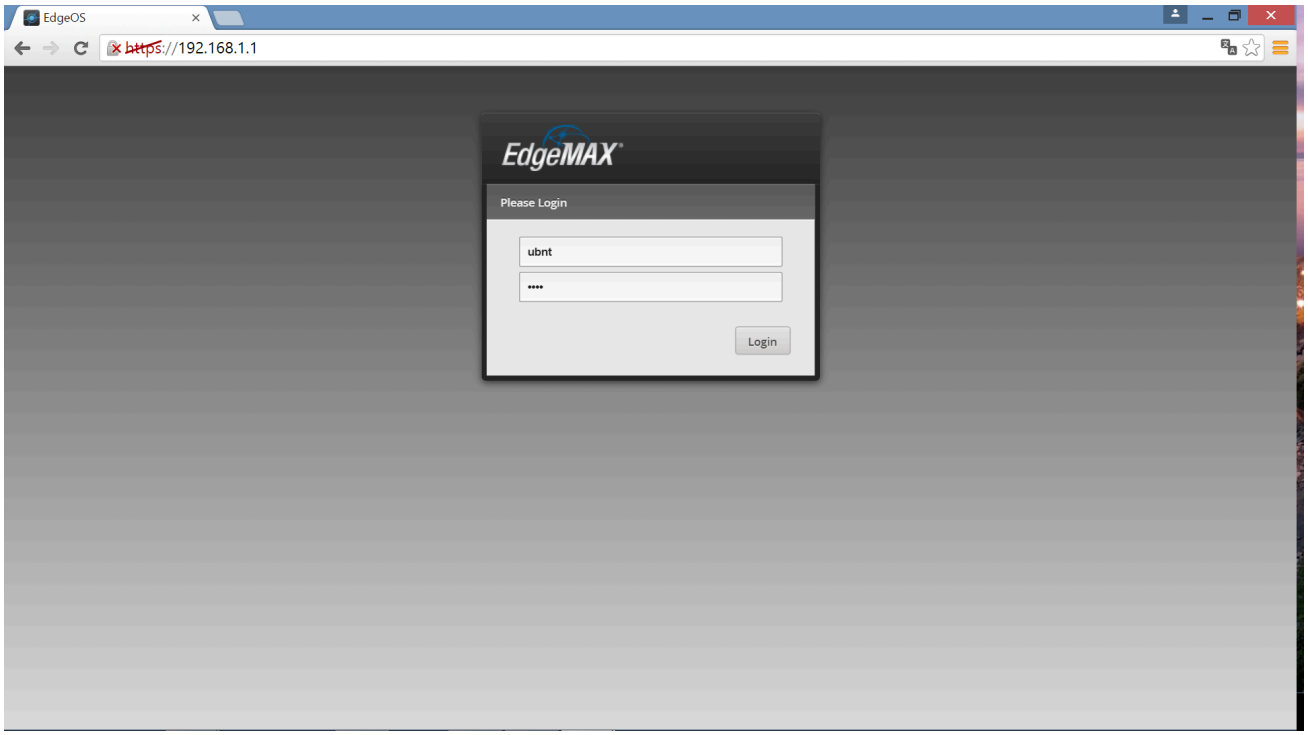
Der Zugriff darauf erfolgt optimalerweise per PPTP/VPN auf router.<node>.wien.funkfeuer.at bzw. die gesetzte Funkfeuer IP-Adresse. Bei Verbindung dann die Mgmt-IP im Browser aufrufen.
In diesem Beispiel wäre das router.bec2.wien.funkfeuer.at mit Benutzername “funkfeuer” und dem zuvor definierten Passwort, dann z.B. auf https://10.1.69.19 zugreifen um die 5GHz Nord-Ost Antenne zu erreichen.

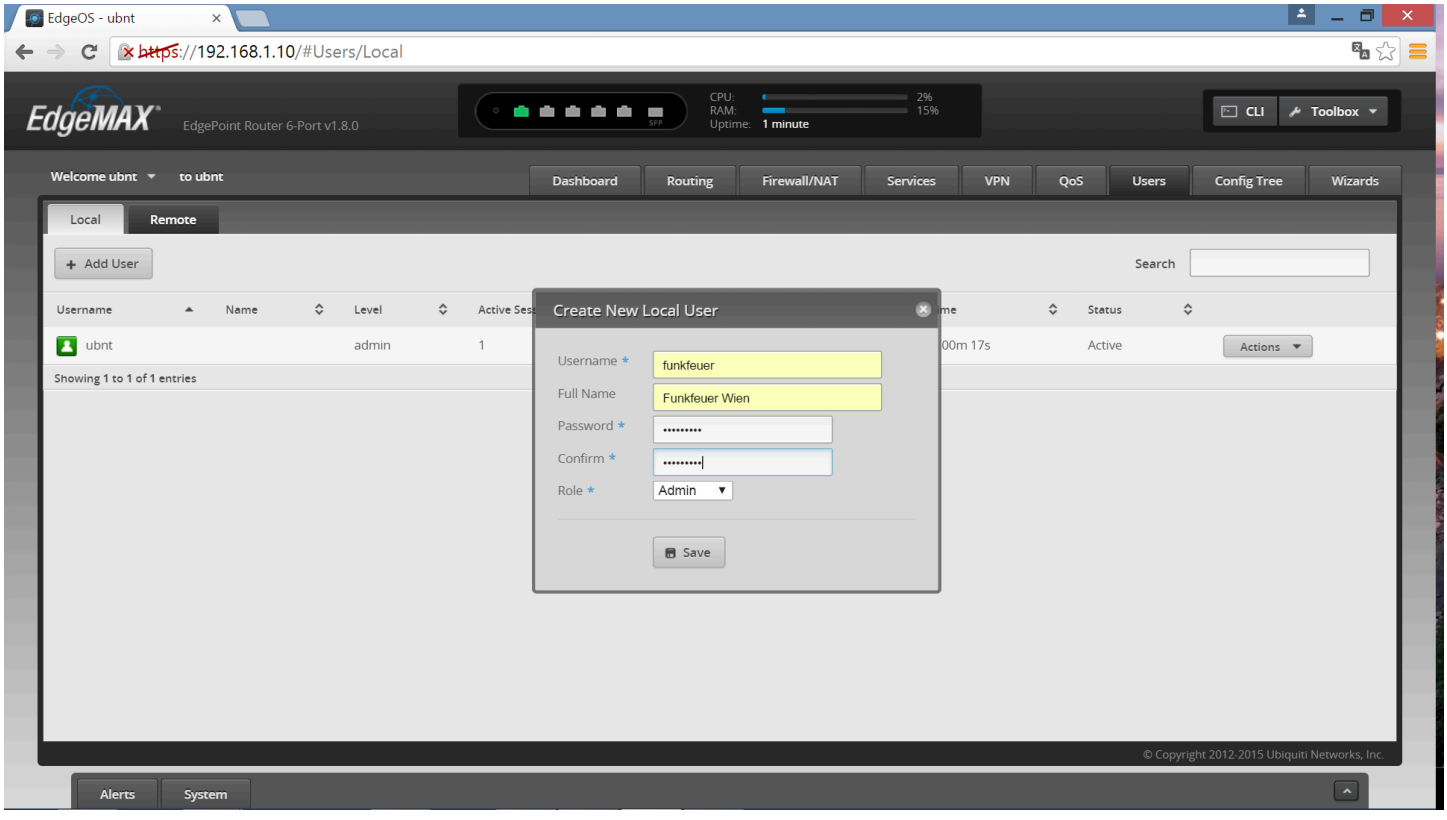
Alternativ kann man auch Port-Forwards setzen, wie auf Seite 21 auf dem zweiten Screenshot zu sehen.
Dies sollte aber eher vermieden und nur in Situationen wo kein PPTP/VPN möglich ist genutzt werden, weil sobald Port-Forwards oder NAT aktiv sind, wird von Vyatta das IPTables Conntrack Modul geladen, das CPU Leistung benötigt und es somit zu Performance-Einbußen kommt.

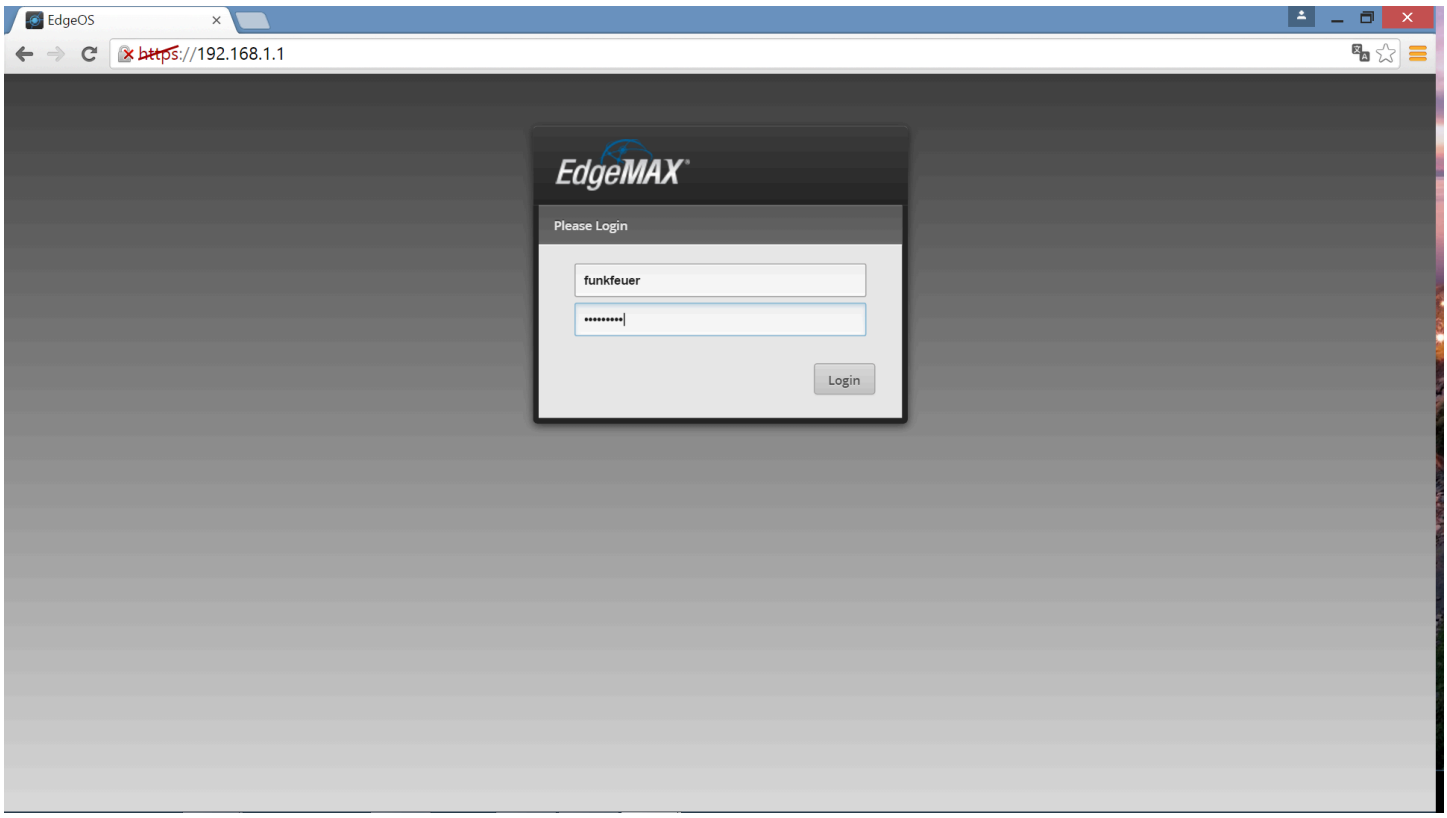
Verweise / Quellen:

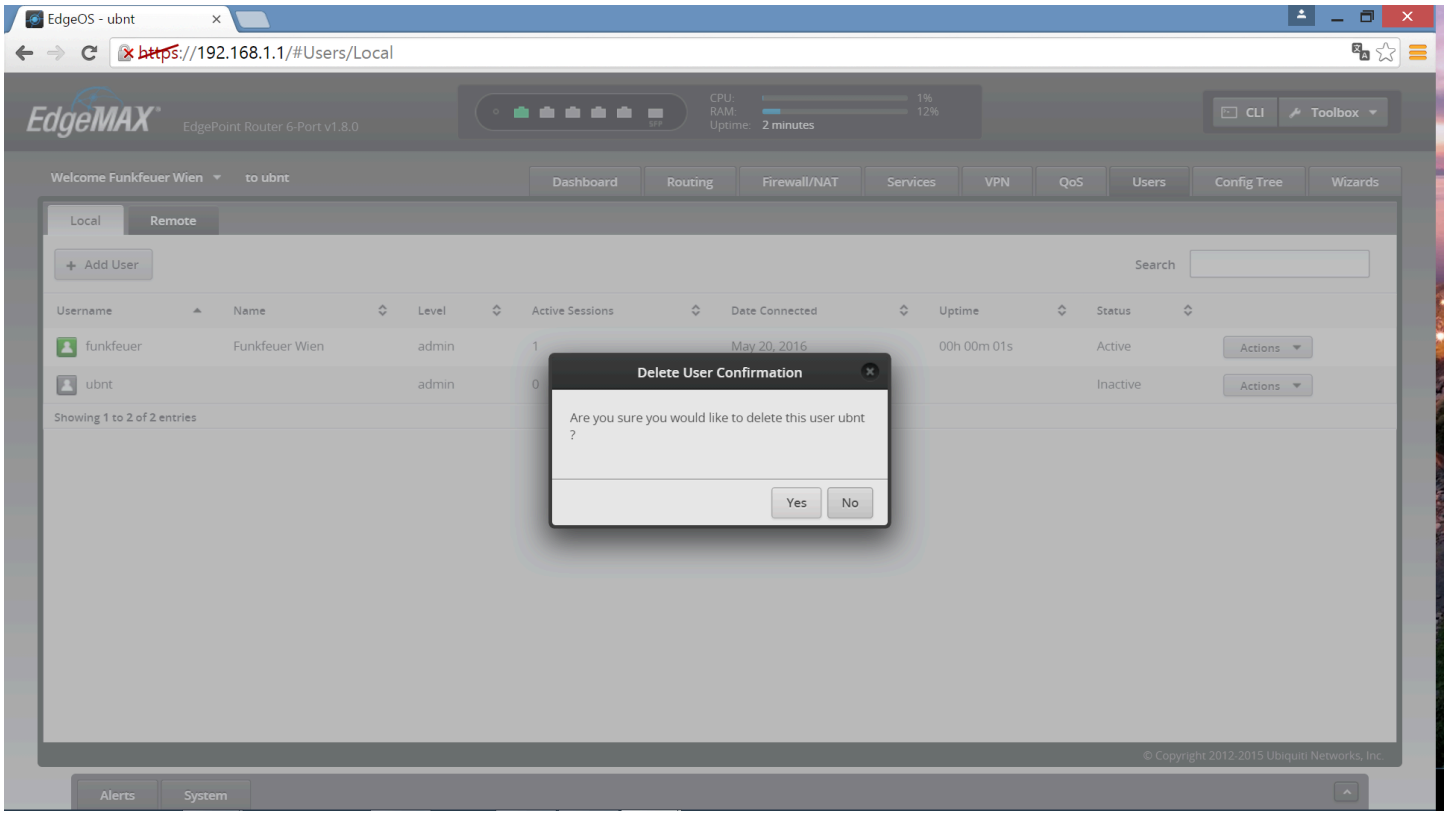
[1] https://dl.ubnt.com/guides/edgemax/EdgeRouter_ER-X_QSG.pdf
[2] https://dl.ubnt.com/guides/edgemax/EdgeRouter_ER-X-SFP_QSG.pdf
[3] https://dl.ubnt.com/guides/edgemax/EdgePoint_EP-R6_QSG.pdf
[4] https://community.ubnt.com/t5/EdgeMAX-Beta/Feature-Wizard-RFC3626-OLSR-daemon-v1/m-p/1507389
[5] https://chil.at/downloads/ER-wizard-OLSRd_V1.tar
[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
https://192.168.1.1
EdgeMAX
Please Login
funkfeuer
Login


EdgeOS - ubnt
https://192.168.1.1/#Users/Local
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 1%
RAM: 12%
Uptime: 2 minutes
CLI
Toolbox
Welcome Funkfeuer Wien
to ubnt
Dashboard
Routing
Firewall/NAT
Services
VPN
QoS
Users
Config Tree
Wizards
Local
Remote
Add User
Search
Username
Name
Level
Active Sessions
Date Connected
Uptime
Status
funkfeuer
Funkfeuer Wien
admin
May 20, 2016
00h 00m 01s
Active
Actions
ubnt
admin
Inactive
Actions
Showing 1 to 2 of 2 entries
Delete User Confirmation
Are you sure you would like to delete this user ubnt ?
Yes
No
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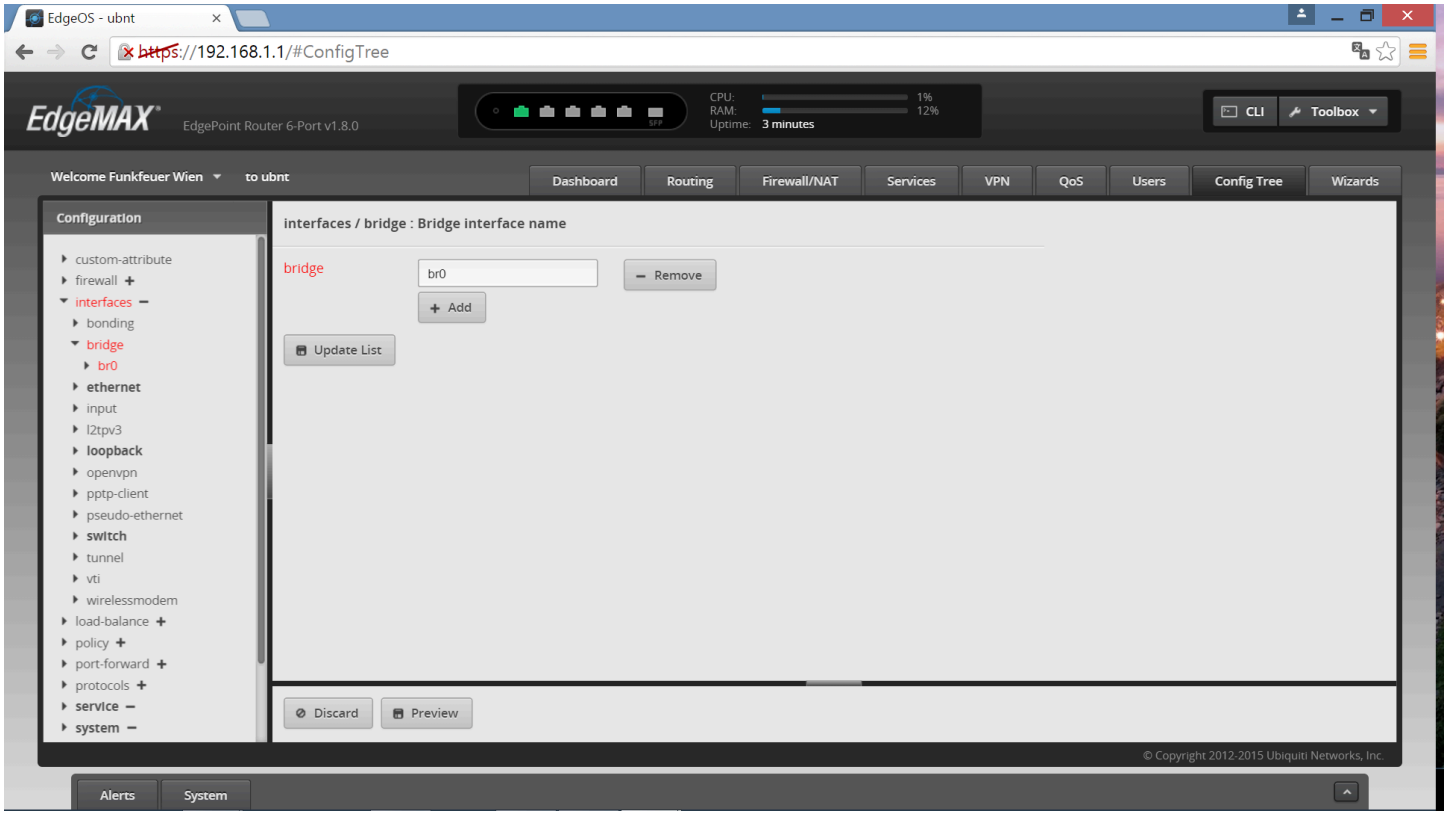
Alerts
System

FUNKFEUER


EdgeOS - ubnt
https://192.168.1.1/#ConfigTree
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 1%
RAM: 12%
Uptime: 3 minutes
CLI
Toolbox
Welcome Funkfeuer Wien
to ubnt
Dashboard
Routing
Firewall/NAT
Services
VPN
QoS
Users
Config Tree
Wizards
Configuration
interfaces / bridge : Bridge interface name
bridge
br0
Remove
Add
Update List
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
Discard
Preview
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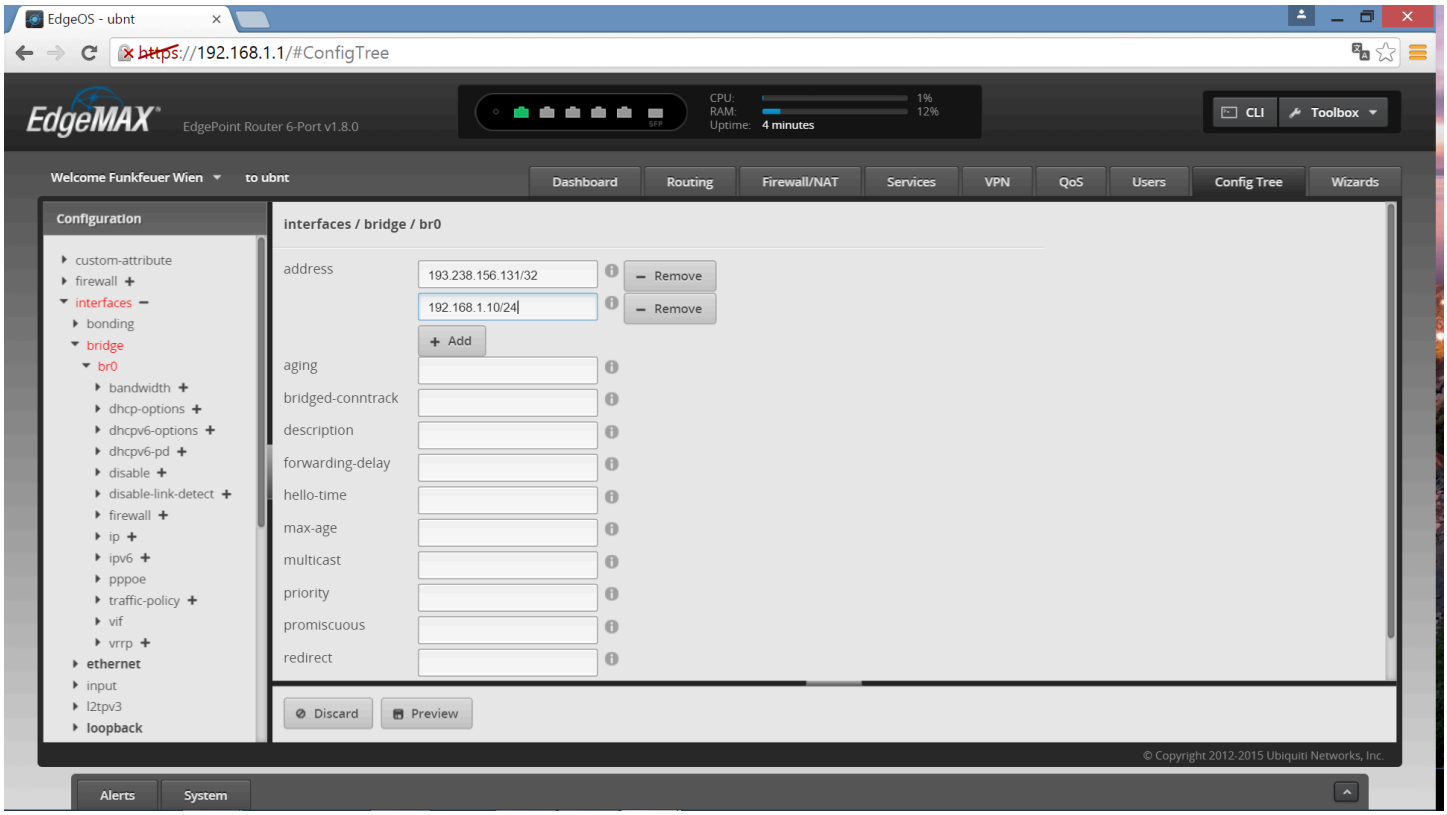
Alerts
System


EdgeOS - ubnt
https://192.168.1.1/#ConfigTree
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 1%
RAM: 12%
Uptime: 4 minutes
CLI
Toolbox
Welcome Funkfeuer Wien
to ubnt
Dashboard
Routing
Firewall/NAT
Services
VPN
QoS
Users
Config Tree
Wizards
Configuration
interfaces / bridge / br0
address
193.238.156.131/32
192.168.1.10/24
Remove
Add
aging
bridged-conntrack
description
forwarding-delay
hello-time
max-age
multicast
priority
promiscuous
redirect
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
Discard
Preview
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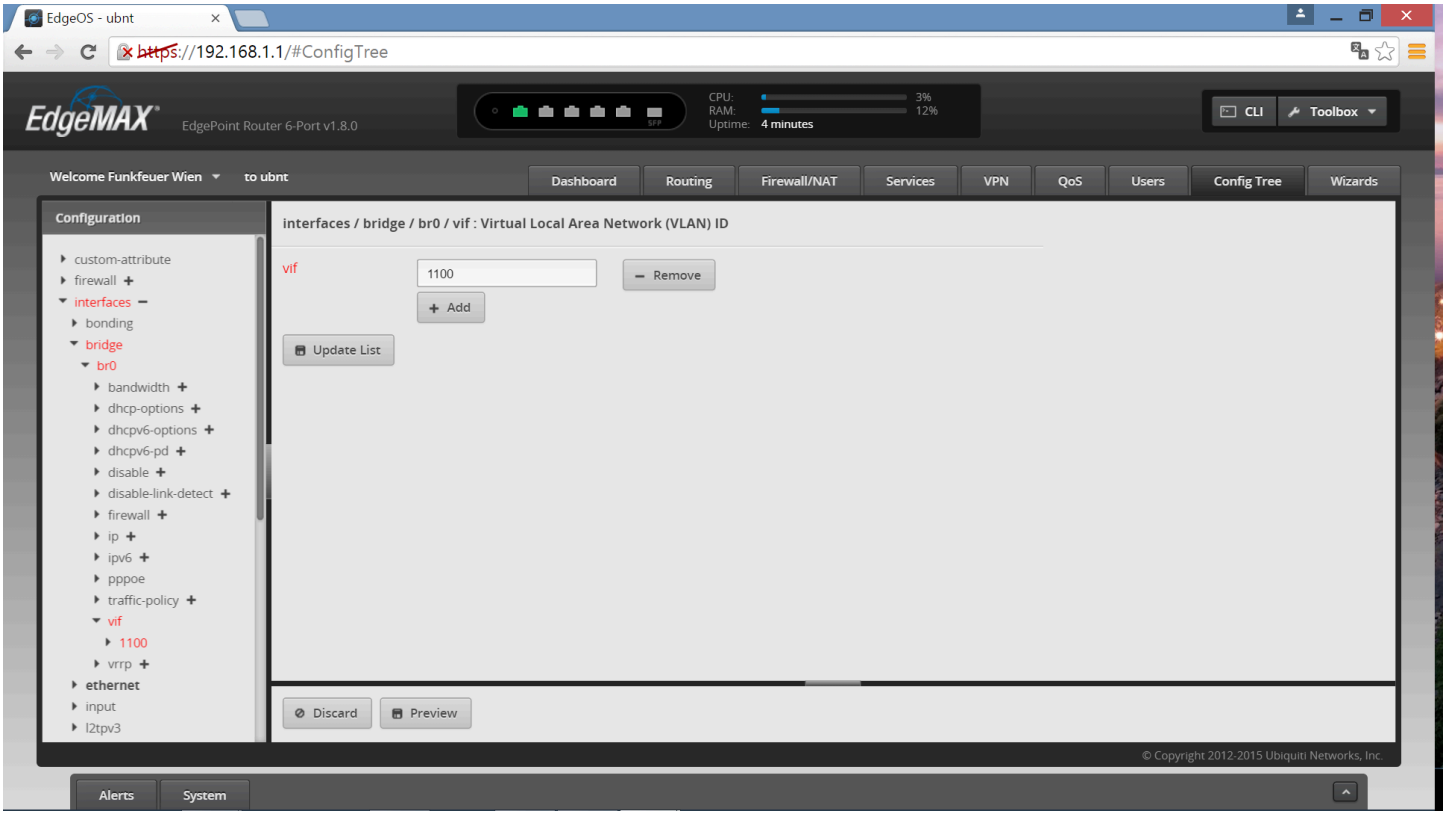
EdgeOS - ubnt
https://192.168.1.1/#ConfigTree
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 3%
RAM: 12%
Uptime: 4 minutes
CLI
Toolbox
Welcome Funkfeuer Wien
to ubnt
Dashboard
Routing
Firewall/NAT
Services
VPN
QoS
Users
Config Tree
Wizards
Configuration
custom-attribute
firewall
interfaces
bonding
bridge
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
1100
Remove
Add
Update List
Discard
Preview
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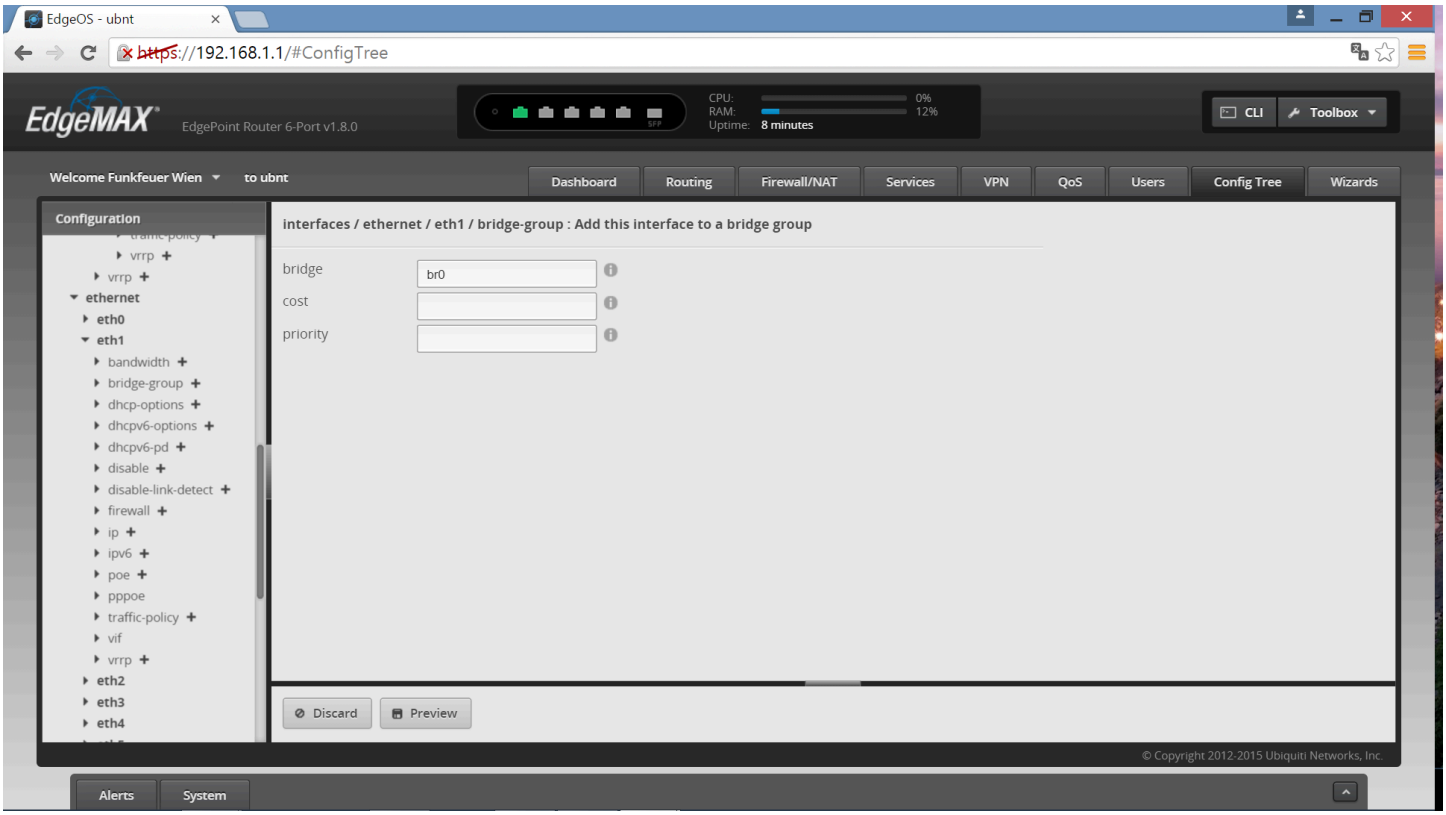
System


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
vrrp
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
br0
cost
priority
Discard
Preview
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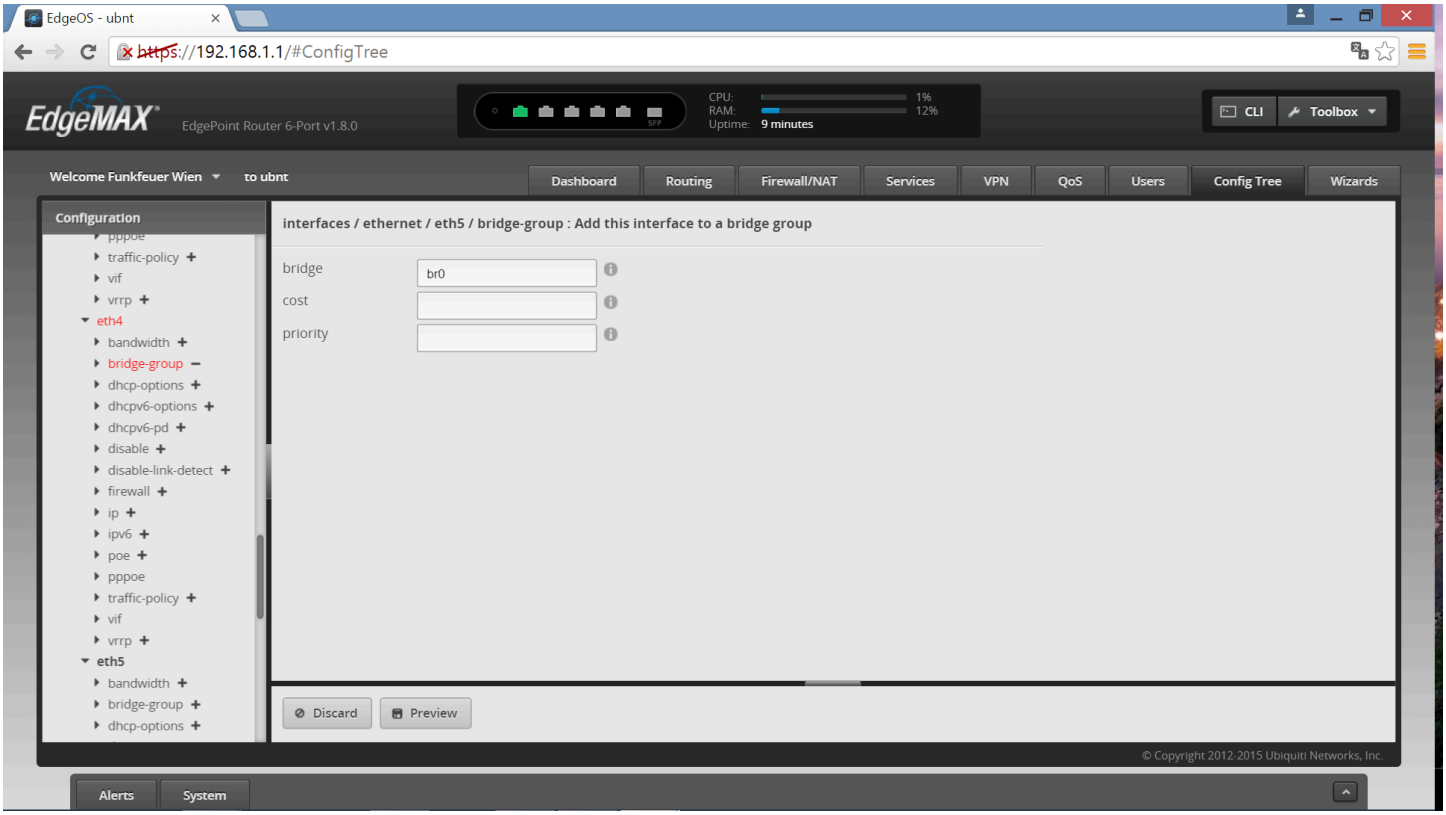
EdgeOS - ubnt
https://192.168.1.1/#ConfigTree
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 1%
RAM: 12%
Uptime: 9 minutes
CLI
Toolbox
Welcome Funkfeuer Wien
to ubnt
Dashboard
Routing
Firewall/NAT
Services
VPN
QoS
Users
Config Tree
Wizards
Configuration
interfaces / ethernet / eth5 / bridge-group : Add this interface to a bridge group
bridge
br0
cost
priority
Discard
Preview
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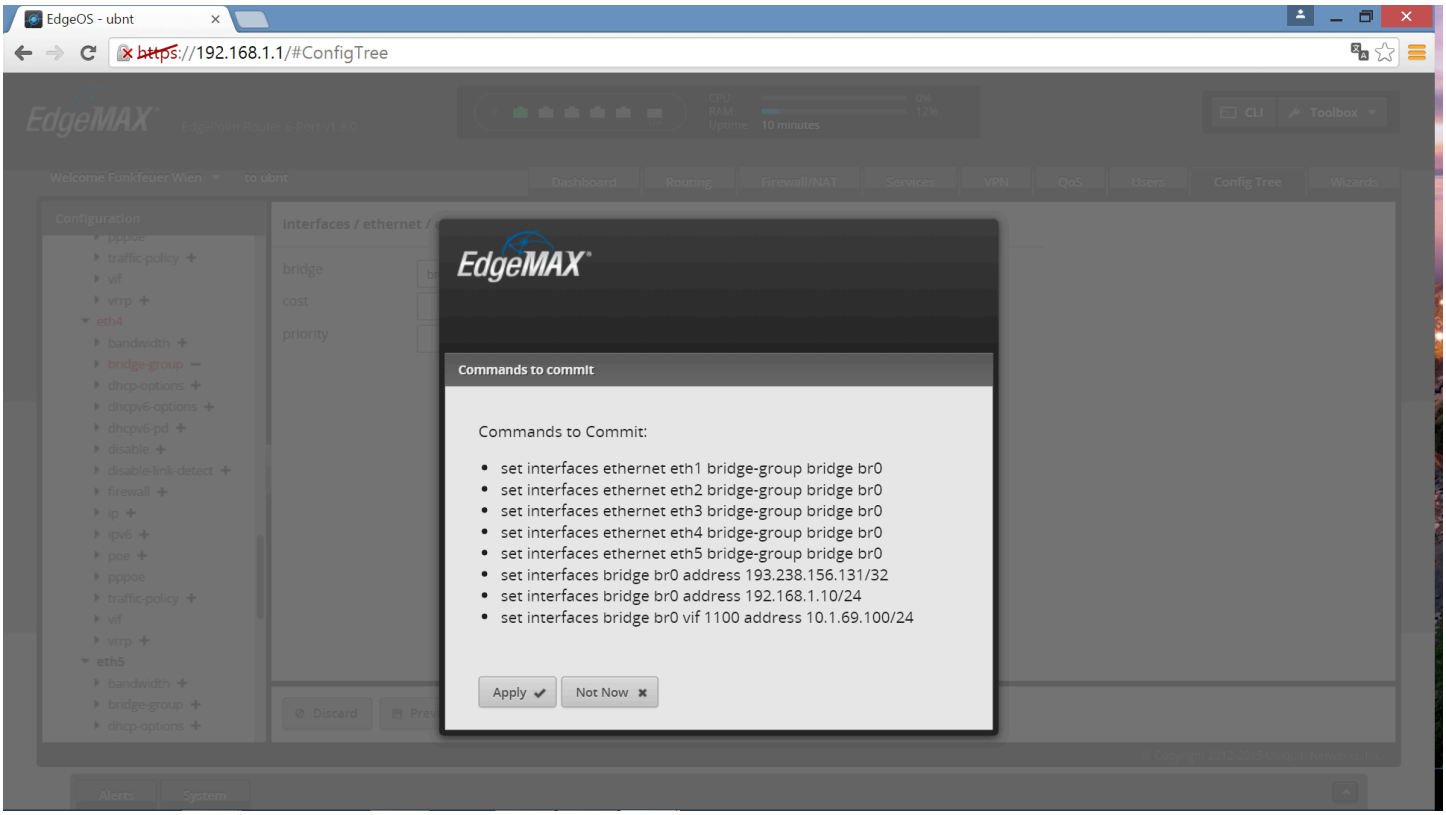
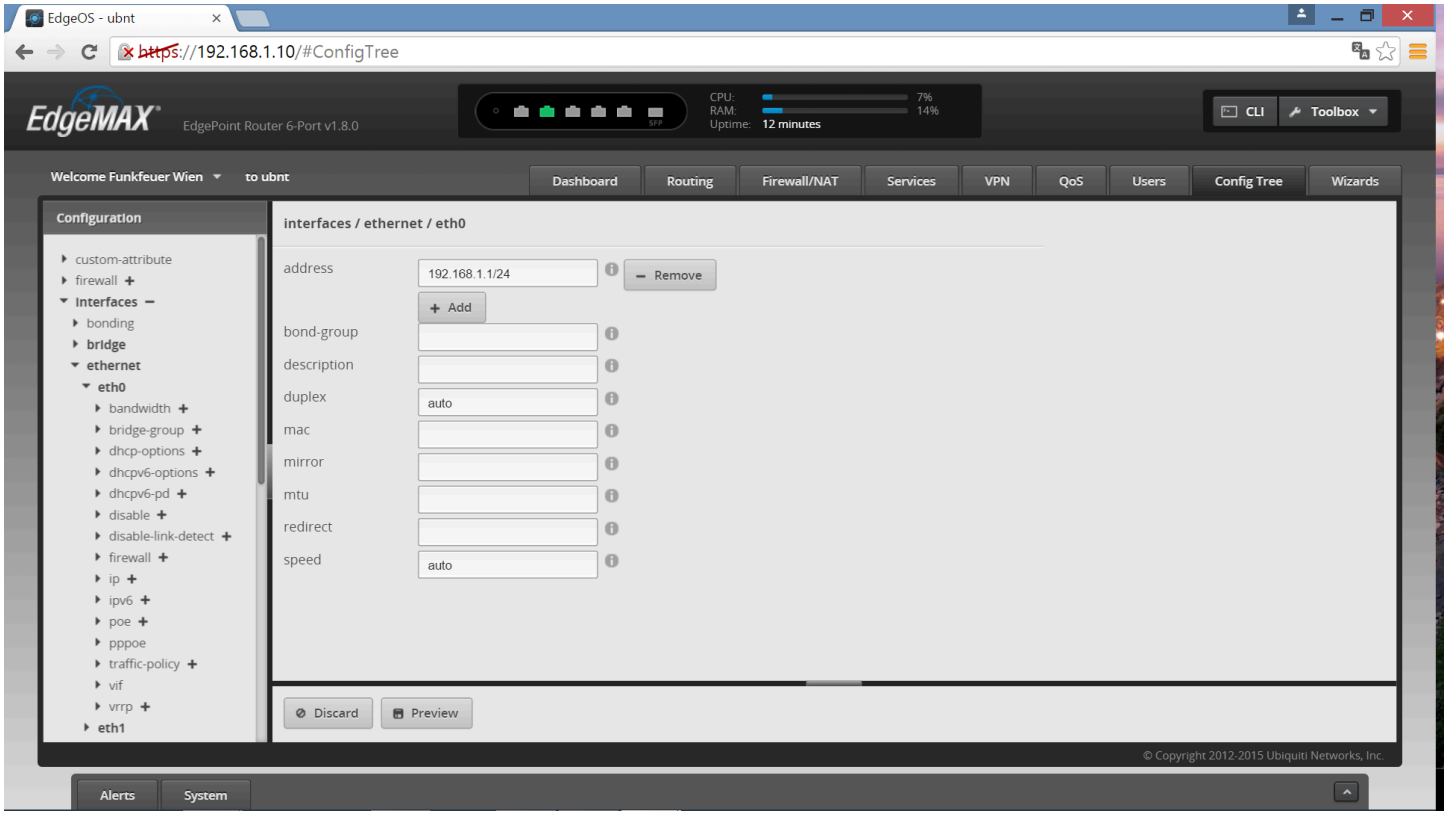
System


EdgeOS - ubnt
https://192.168.1.1/#ConfigTree
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

FUNKFEUER


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
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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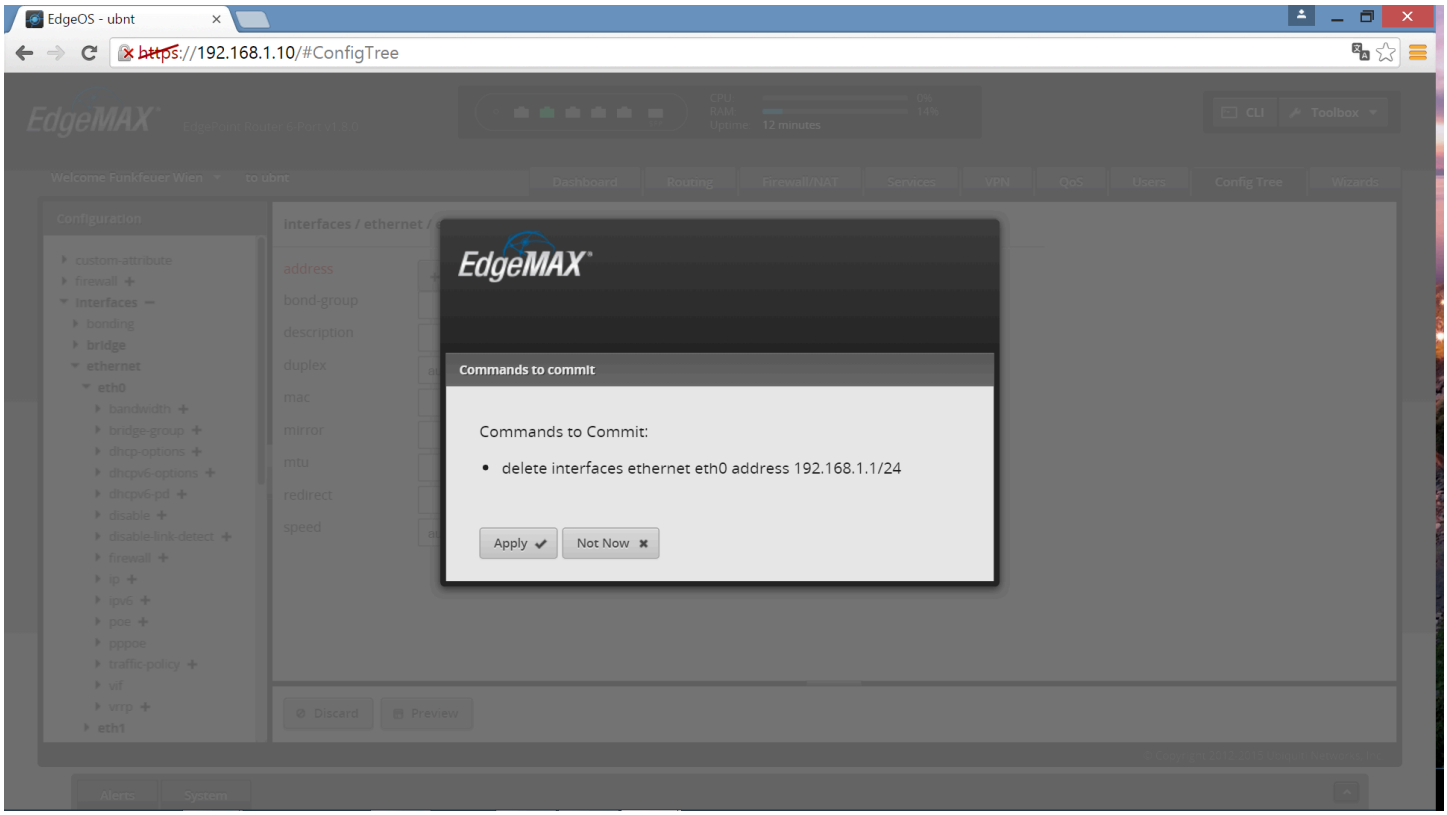
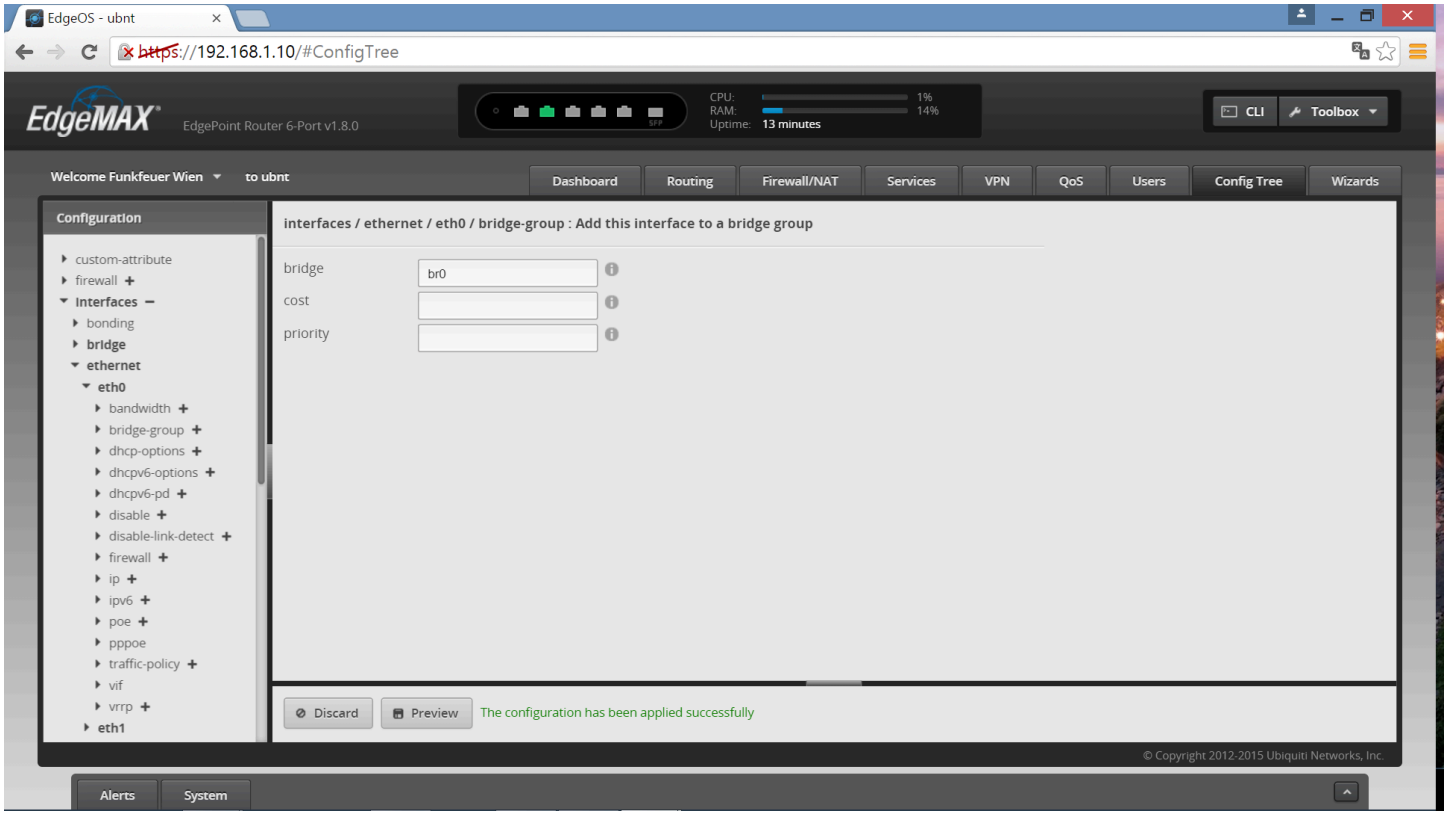
System


EdgeOS - ubnt
https://192.168.1.10/#ConfigTree
EdgeMAX
Commands to commit
Commands to Commit:
delete interfaces ethernet eth0 address 192.168.1.1/24
Apply
Not Now

FUNKFEUER


EdgeOS - ubnt
https://192.168.1.10/#ConfigTree
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 1%
RAM: 14%
Uptime: 13 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 / bridge-group : Add this interface to a bridge group
bridge
br0
cost
priority
Discard
Preview
The configuration has been applied successfully
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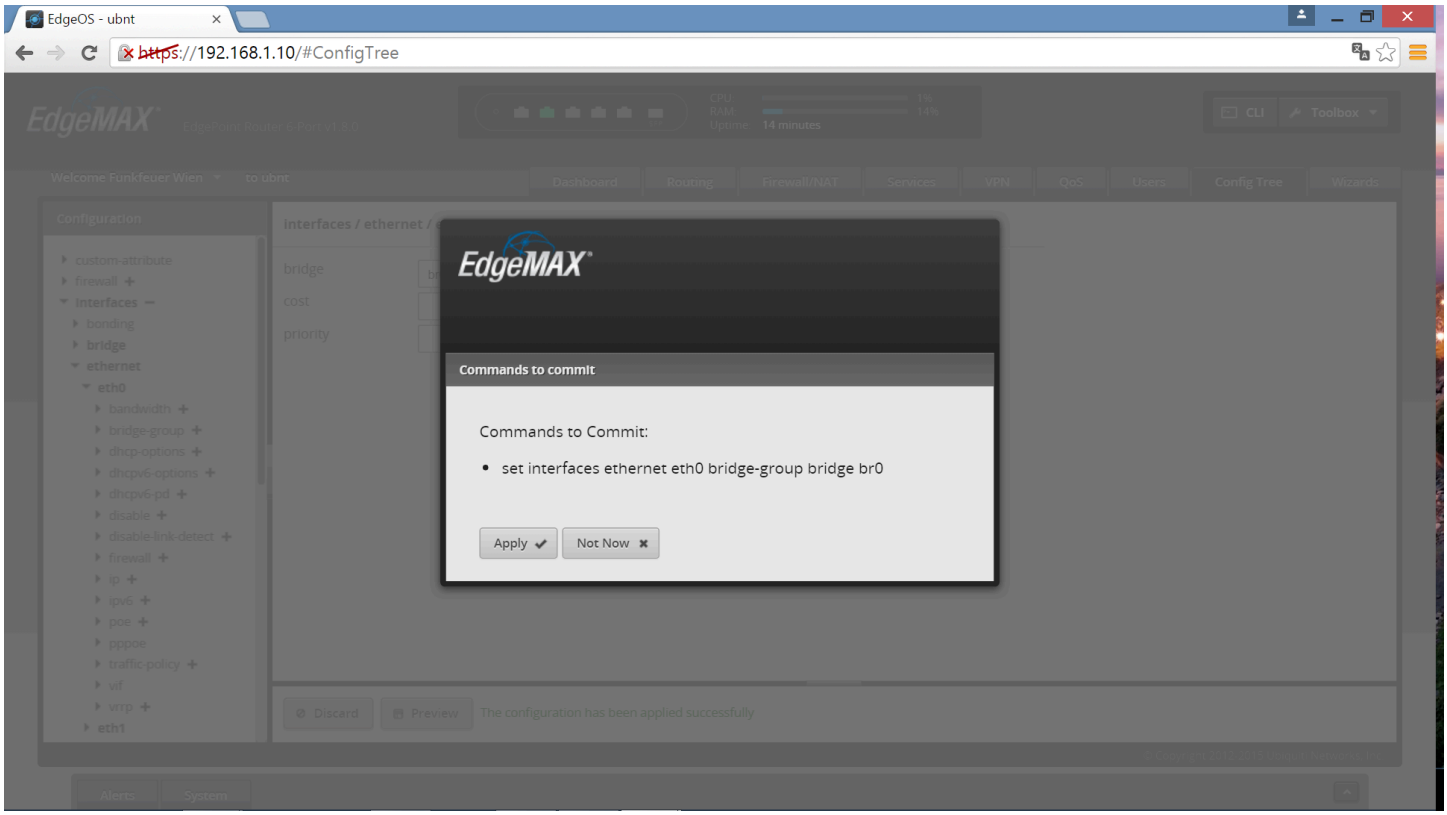
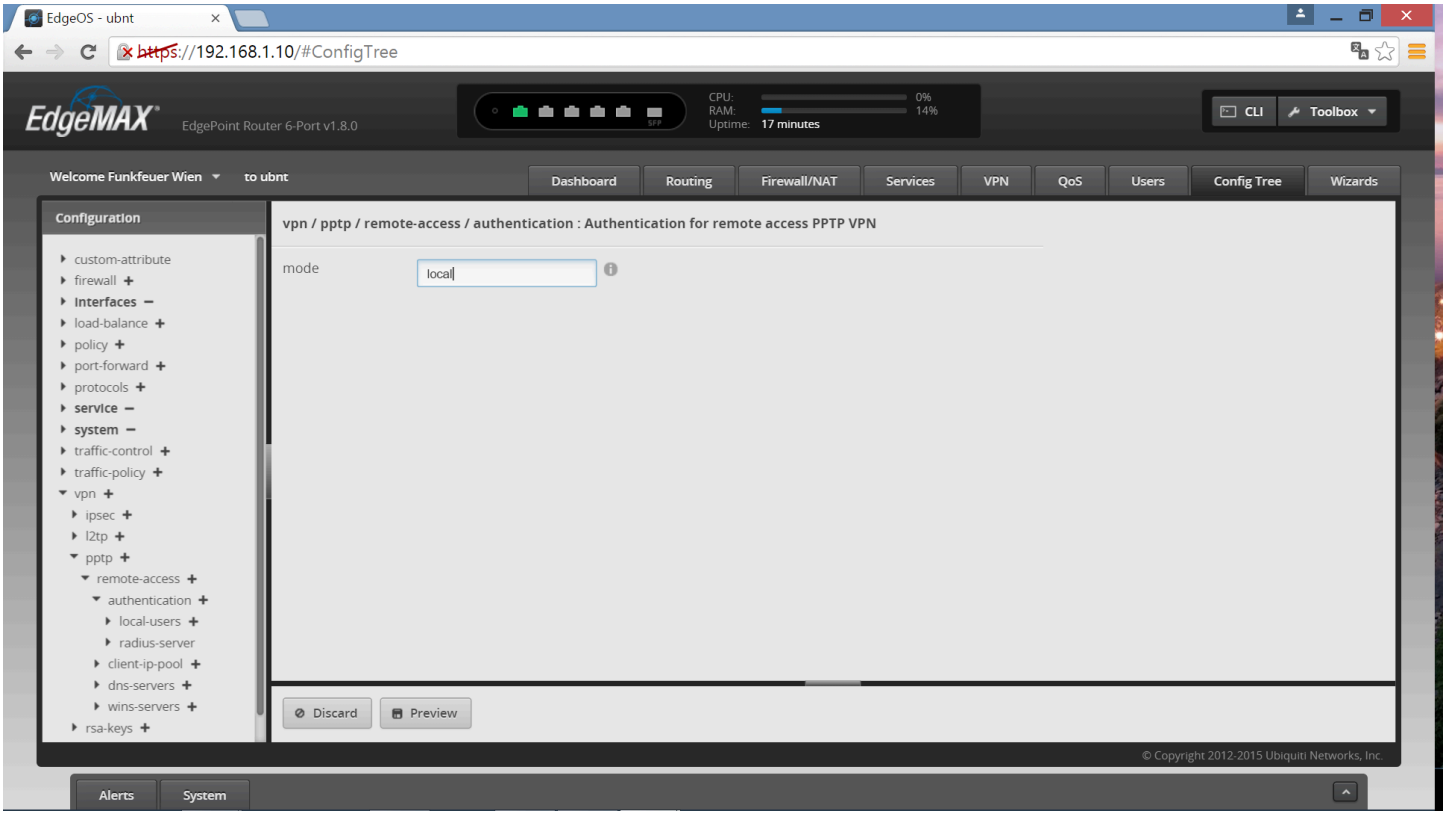
Alerts
System


EdgeOS - ubnt
https://192.168.1.10/#ConfigTree
EdgeMAX
Commands to commit
Commands to Commit:
set interfaces ethernet eth0 bridge-group bridge br0
Apply
Not Now

FUNKFEUER


EdgeOS - ubnt
https://192.168.1.10/#ConfigTree
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 0%
RAM: 14%
Uptime: 17 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 +
radius-server
client-ip-pool +
dns-servers +
wins-servers +
rsa-keys +
vpn / pptp / remote-access / authentication : Authentication for remote access PPTP VPN
mode
local
Discard
Preview
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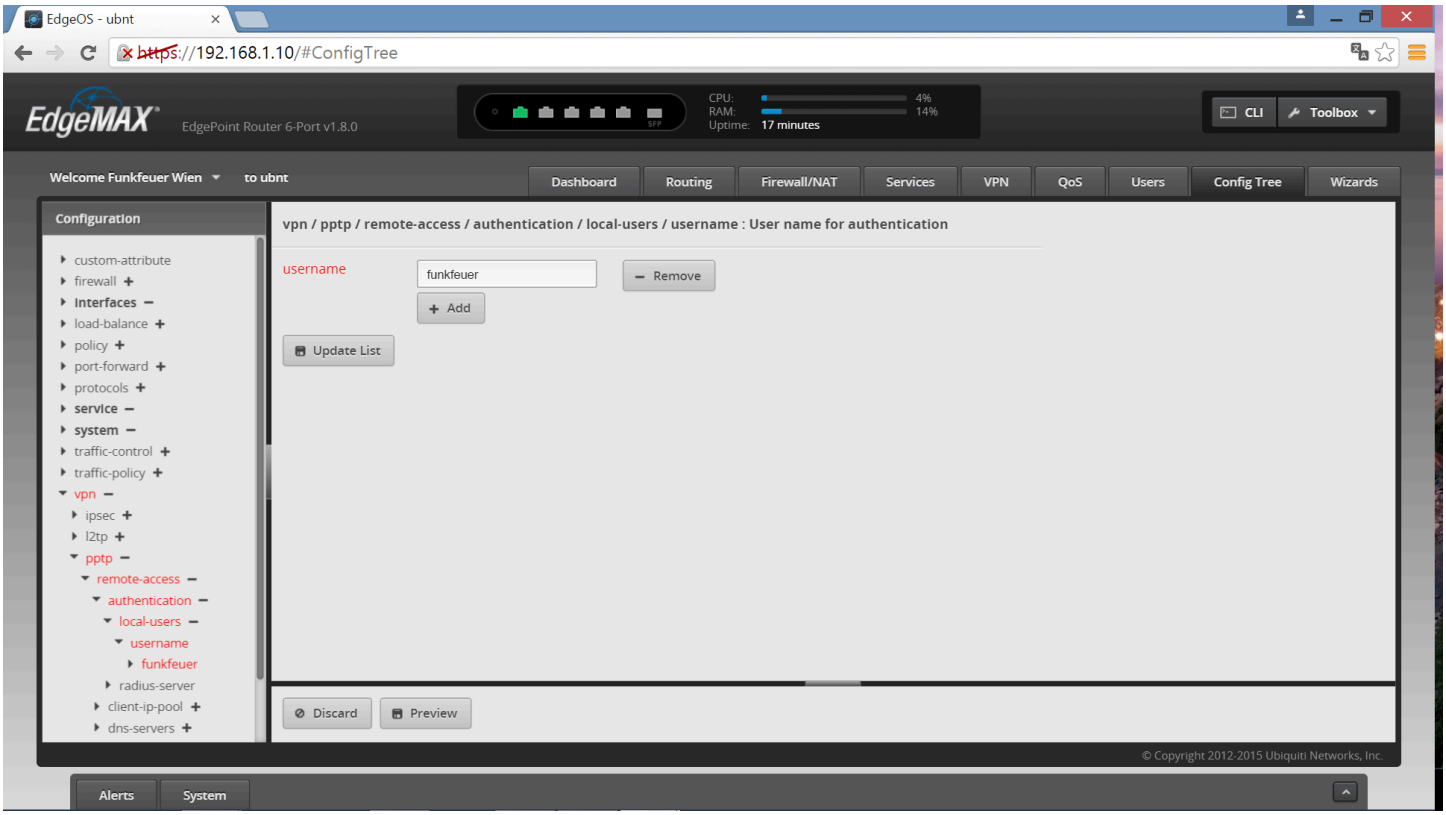
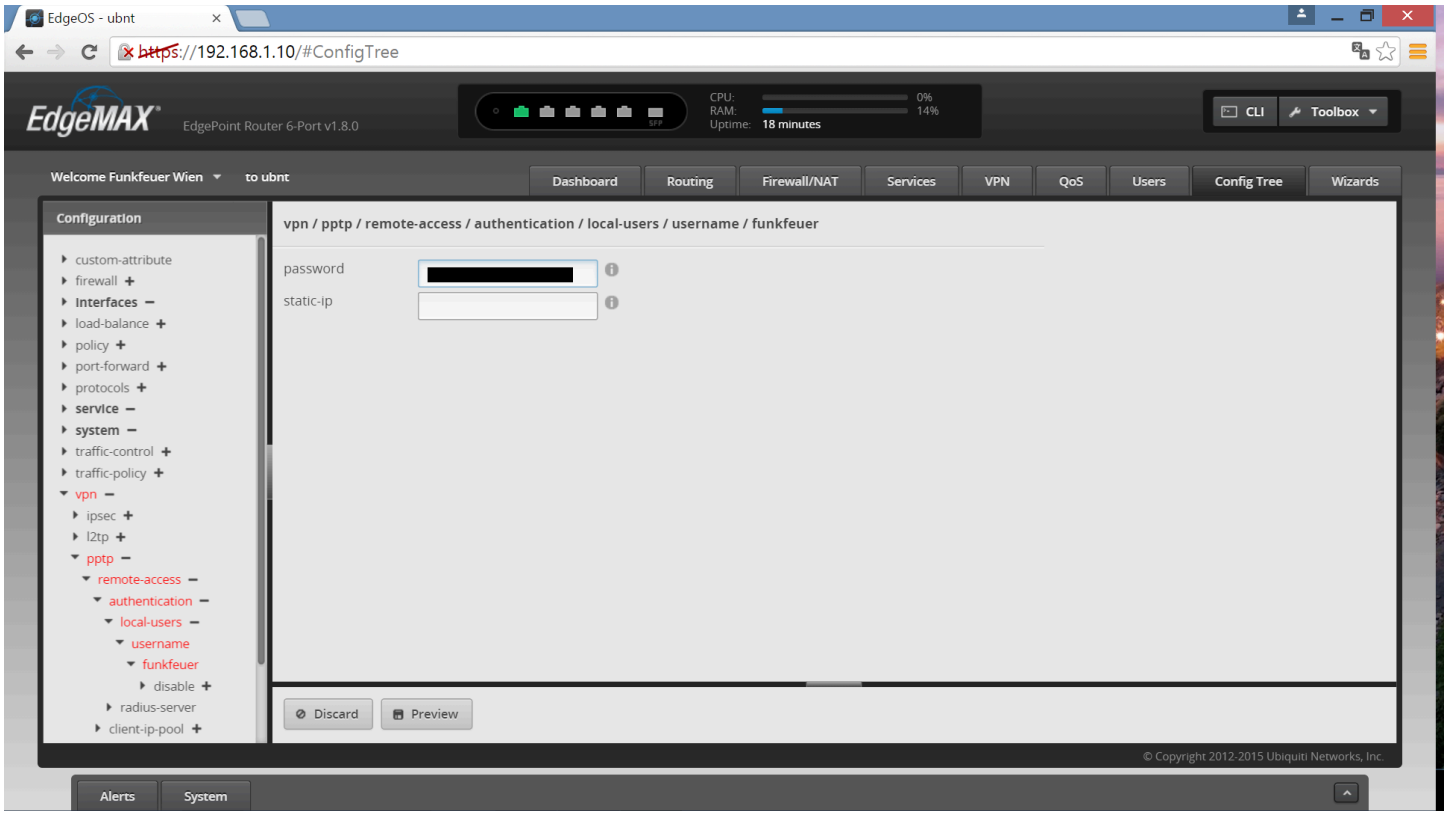
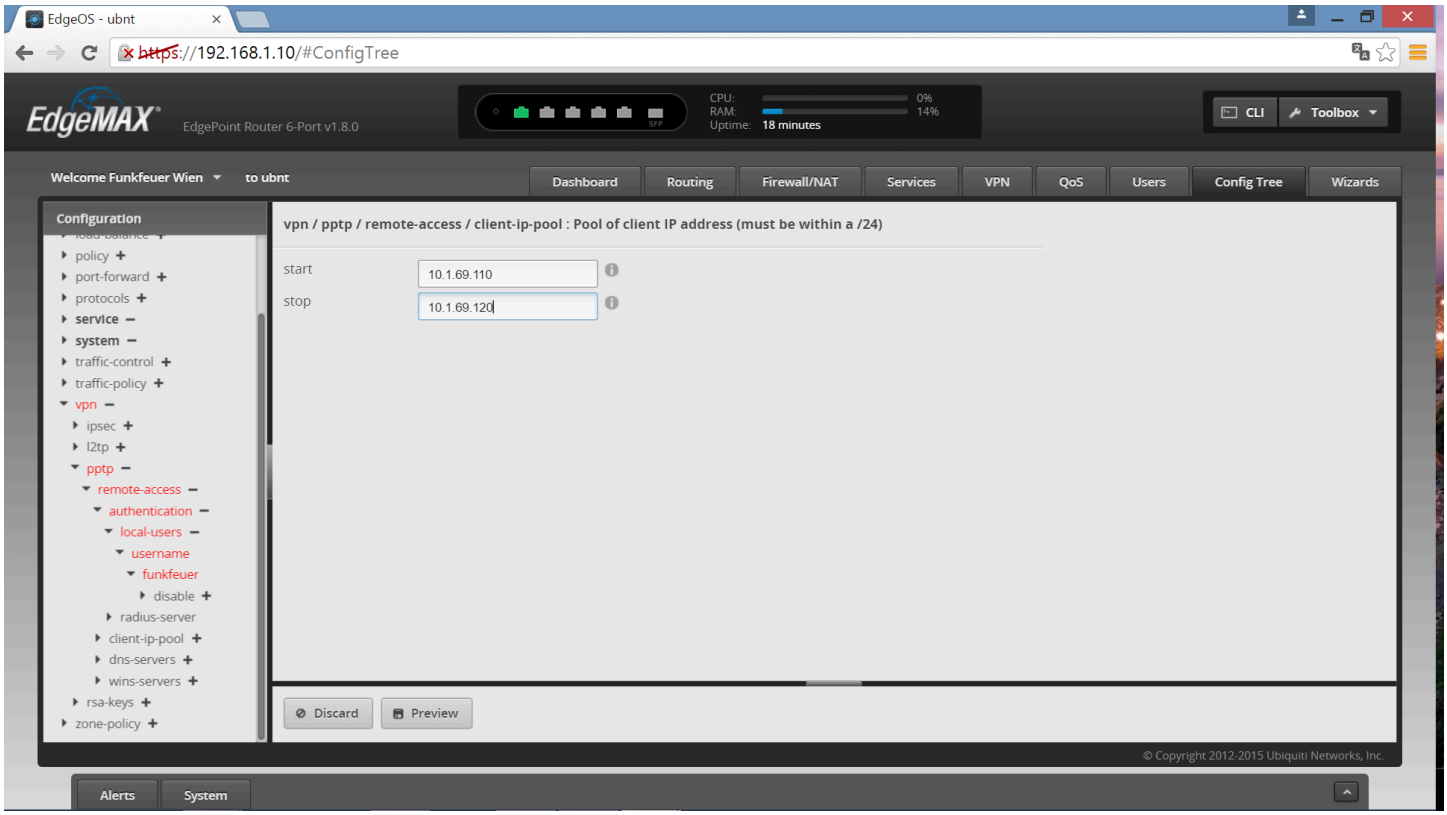
Alerts
System


EdgeOS - ubnt
https://192.168.1.10/#ConfigTree
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 4%
RAM: 14%
Uptime: 17 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
radius-server
client-ip-pool +
dns-servers +
vpn / pptp / remote-access / authentication / local-users / username : User name for authentication
username
funkfeuer
Remove
Add
Update List
Discard
Preview
© Copyright 2012-2015 Ubiquiti Networks, Inc.
Alerts
System

FUNKFEUER


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
© Copyright 2012-2015 Ubiquiti Networks, Inc.
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
10.1.69.110
stop
10.1.69.120
Discard
Preview
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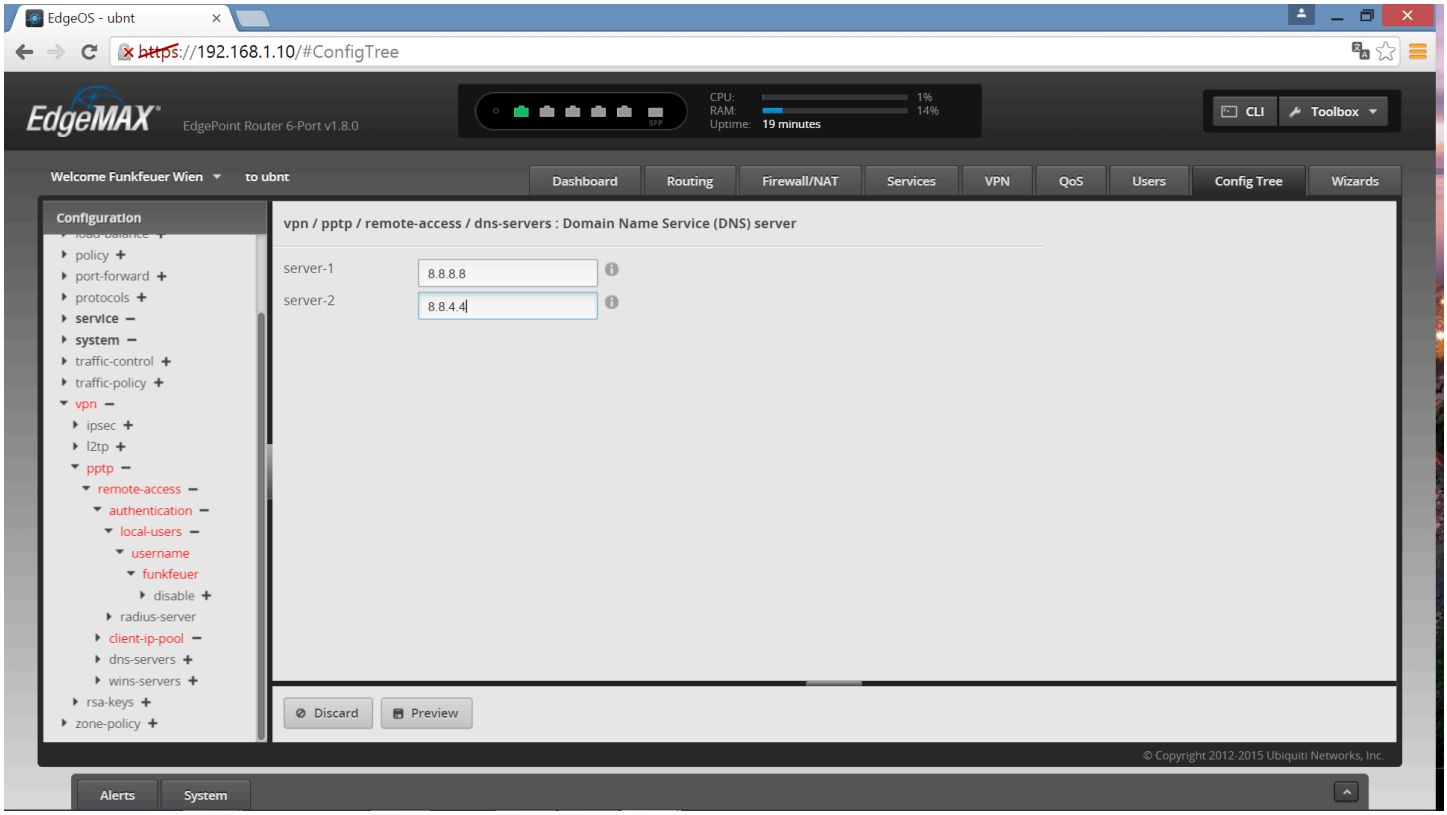
Alerts
System


EdgeOS - ubnt
https://192.168.1.10/#ConfigTree
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 1%
RAM: 14%
Uptime: 19 minutes
CLI
Toolbox
Welcome Funkfeuer Wien
to ubnt
Dashboard
Routing
Firewall/NAT
Services
VPN
QoS
Users
Config Tree
Wizards
Configuration
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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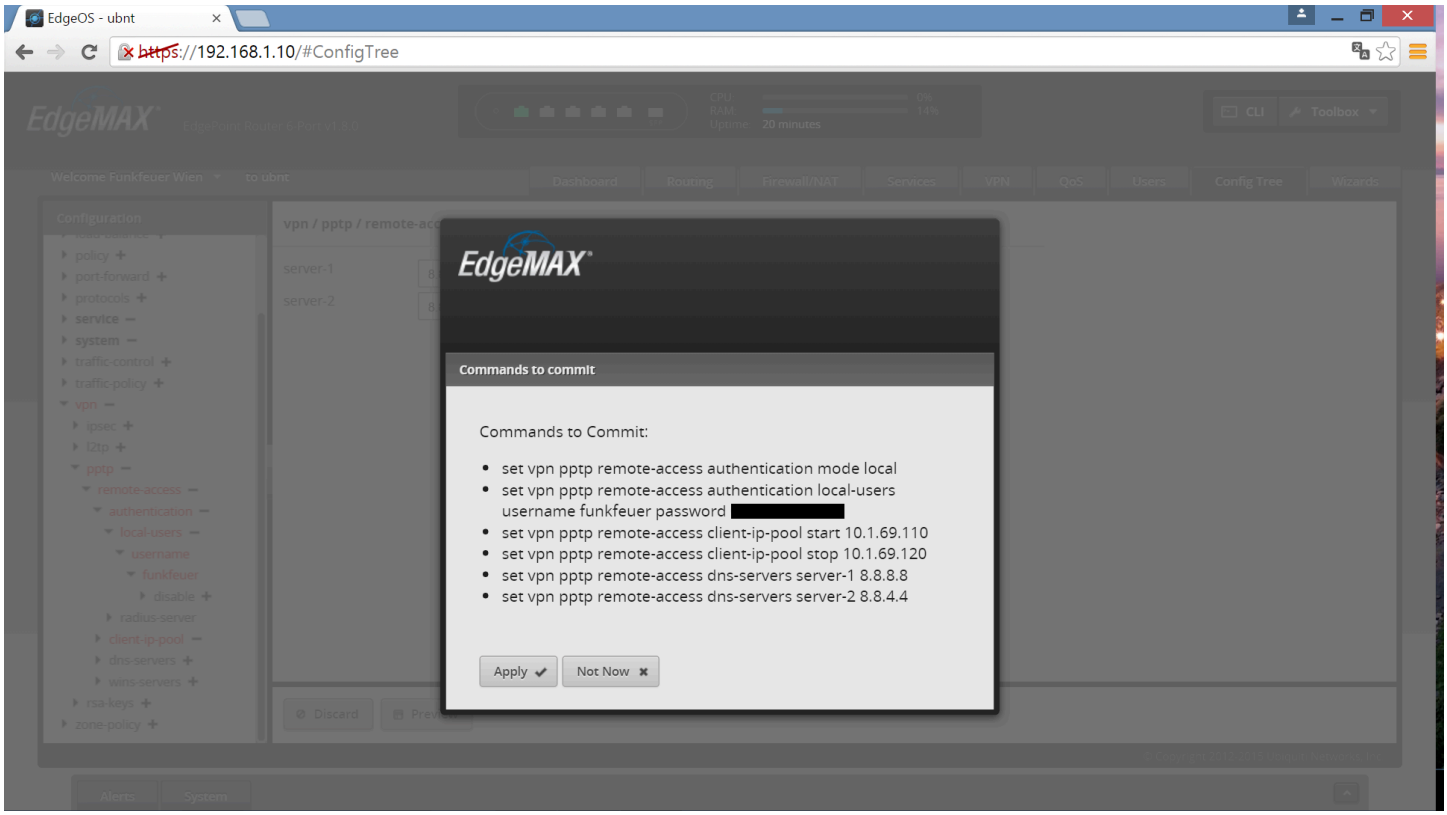
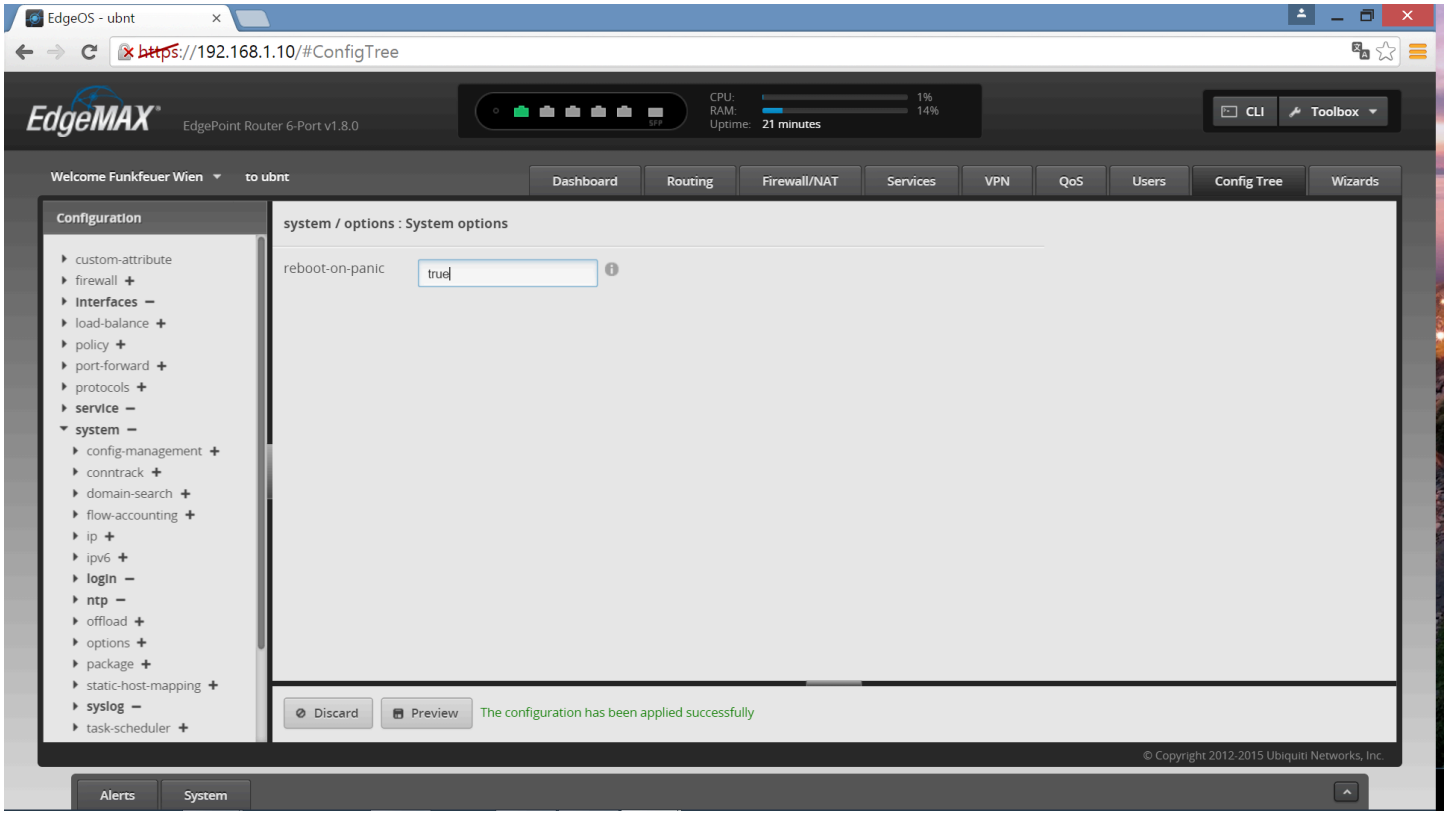
Alerts
System


EdgeOS - ubnt
https://192.168.1.10/#ConfigTree
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

FUNKFEUER


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
system / options : System options
reboot-on-panic
true
Discard
Preview
The configuration has been applied successfully
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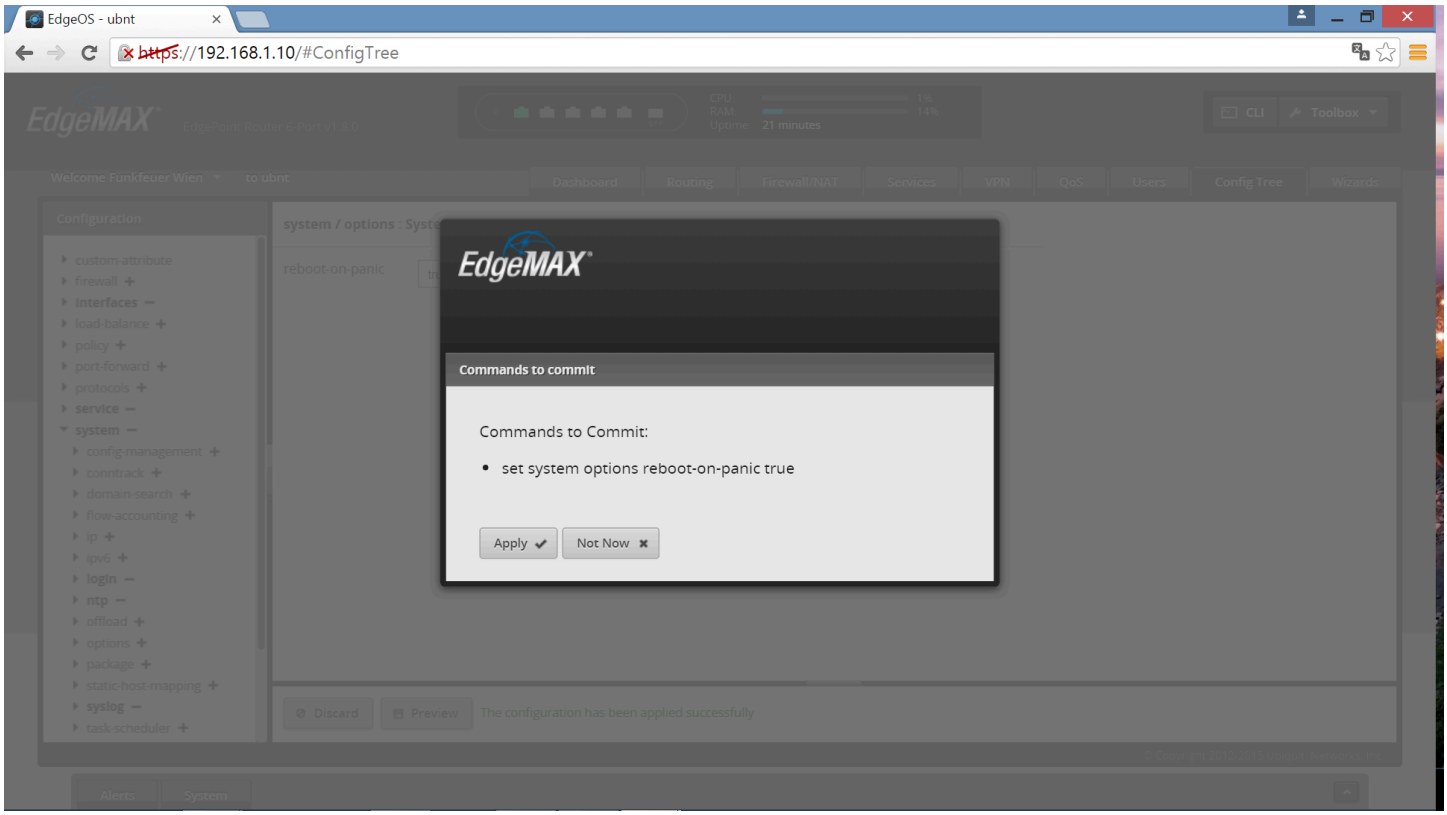
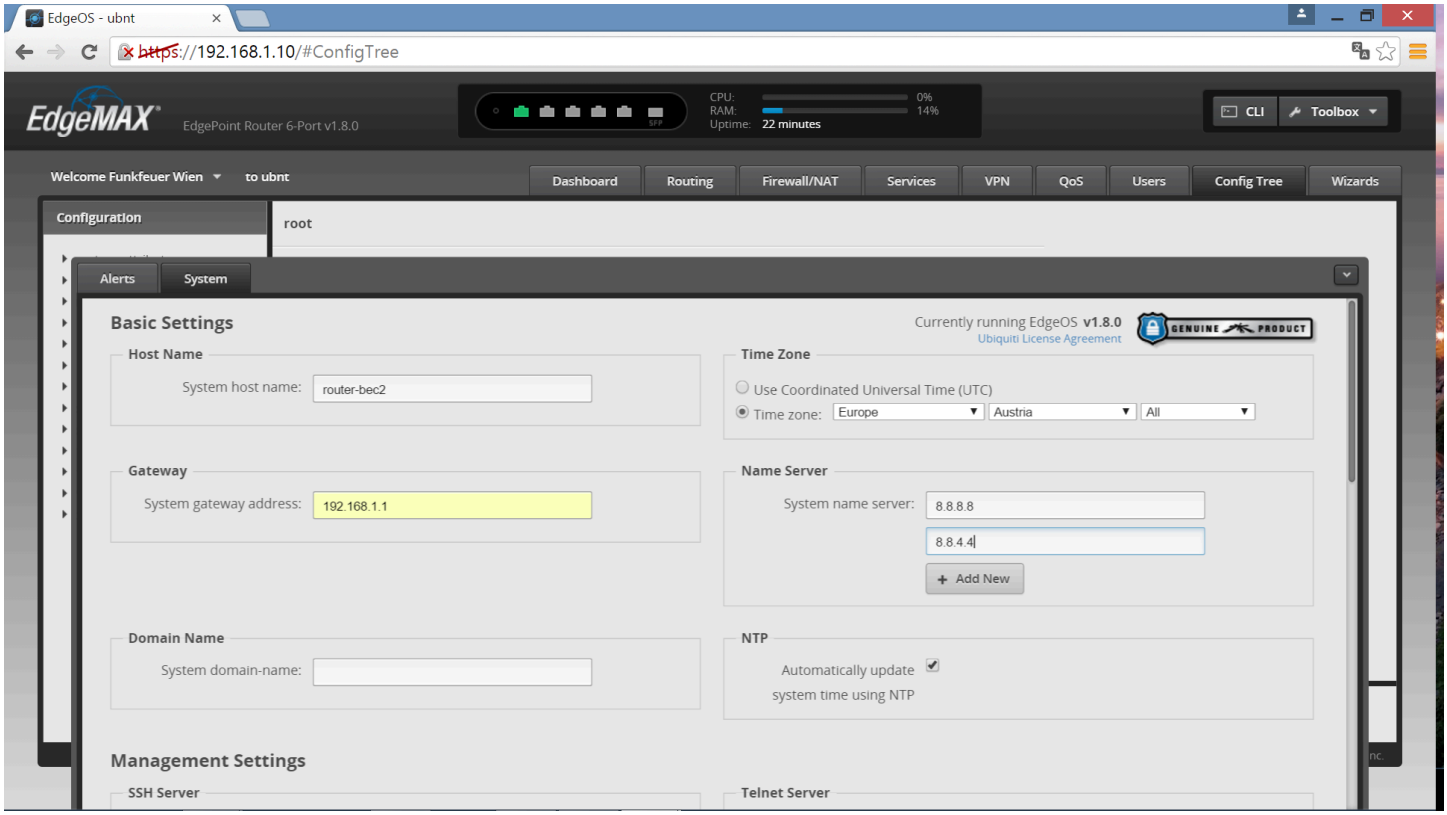
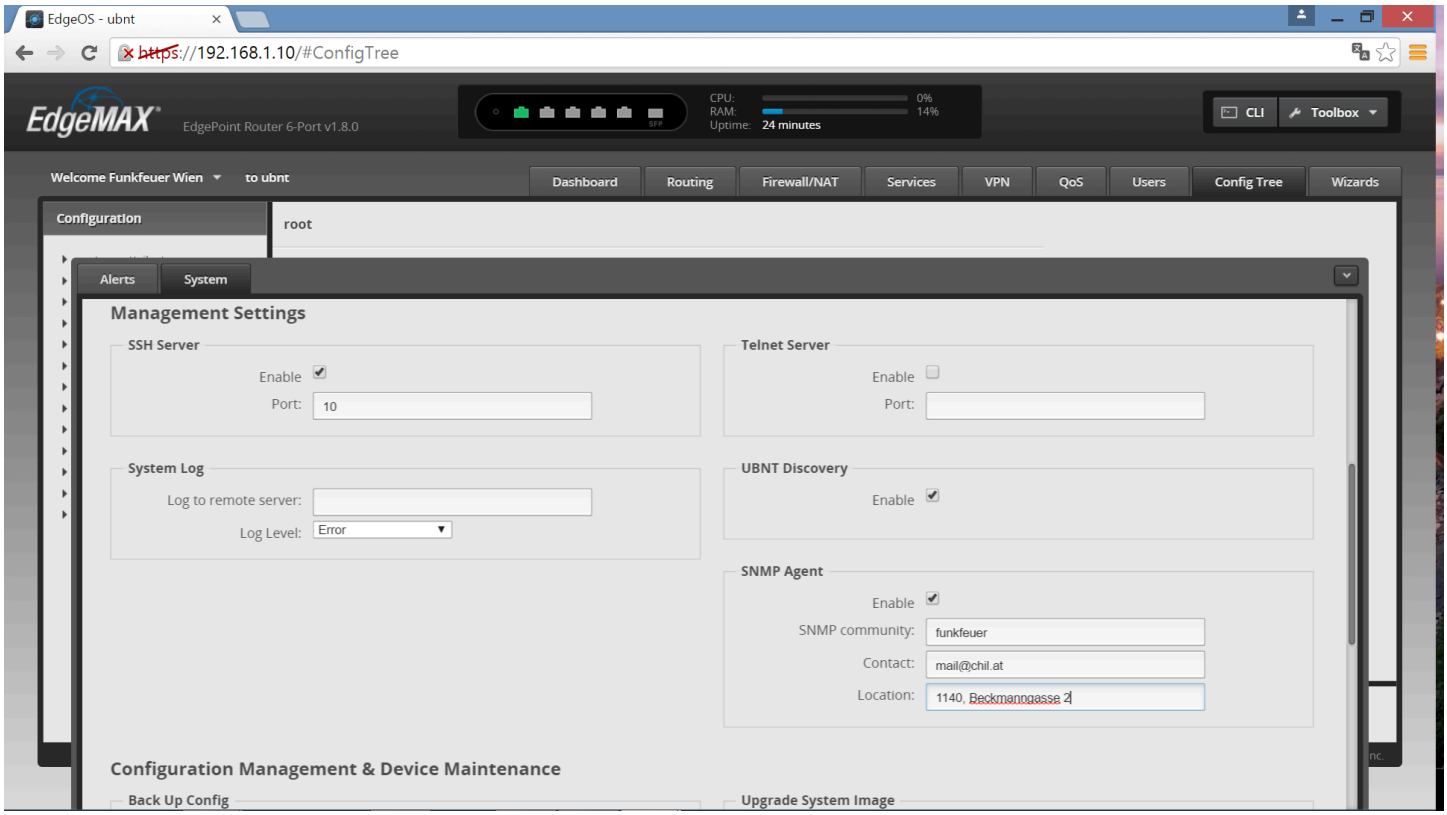
Alerts
System

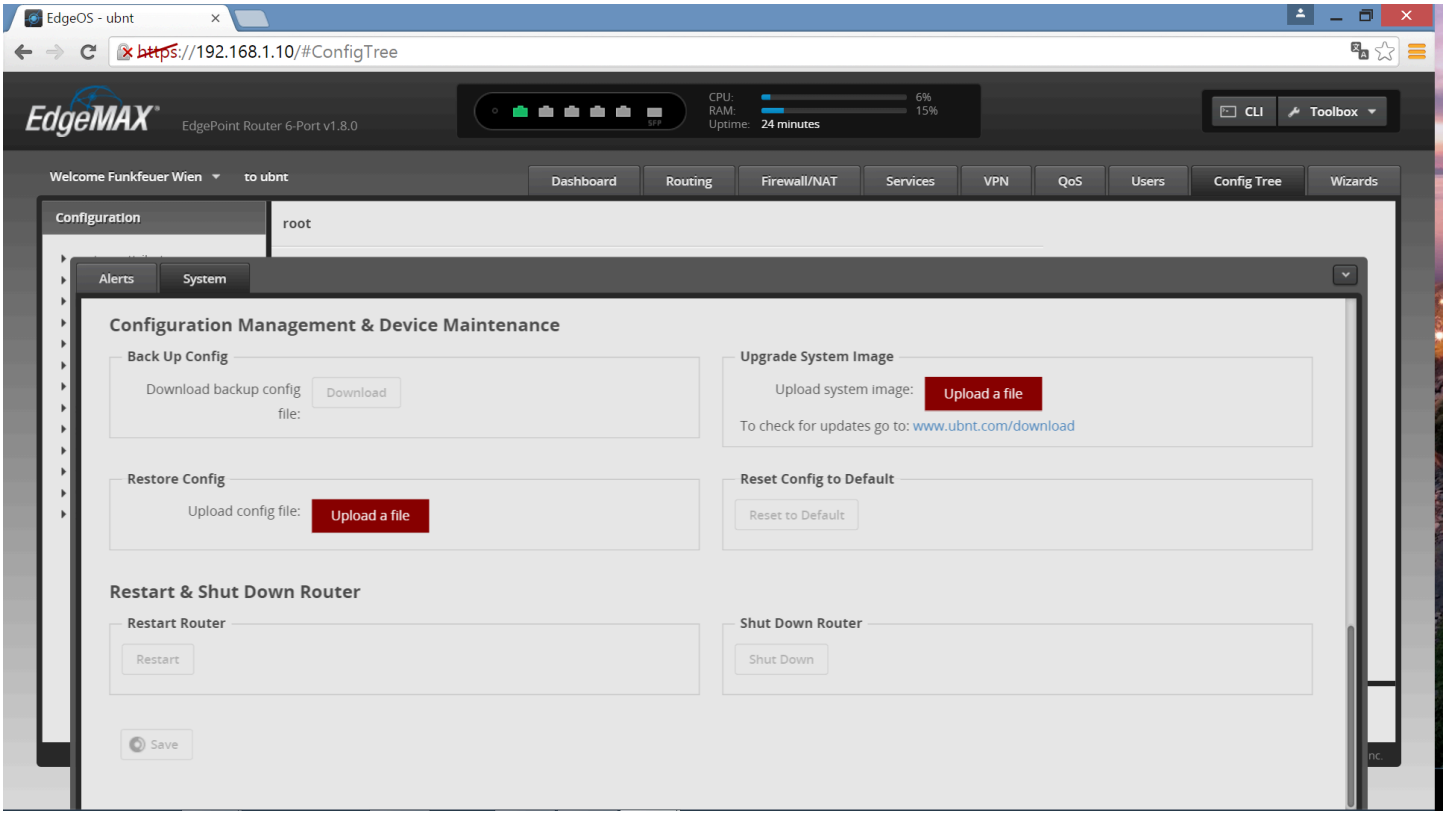

EdgeOS - ubnt
https://192.168.1.10/#ConfigTree
EdgeMAX
Commands to commit
Commands to Commit:
set system options reboot-on-panic true
Apply
Not Now

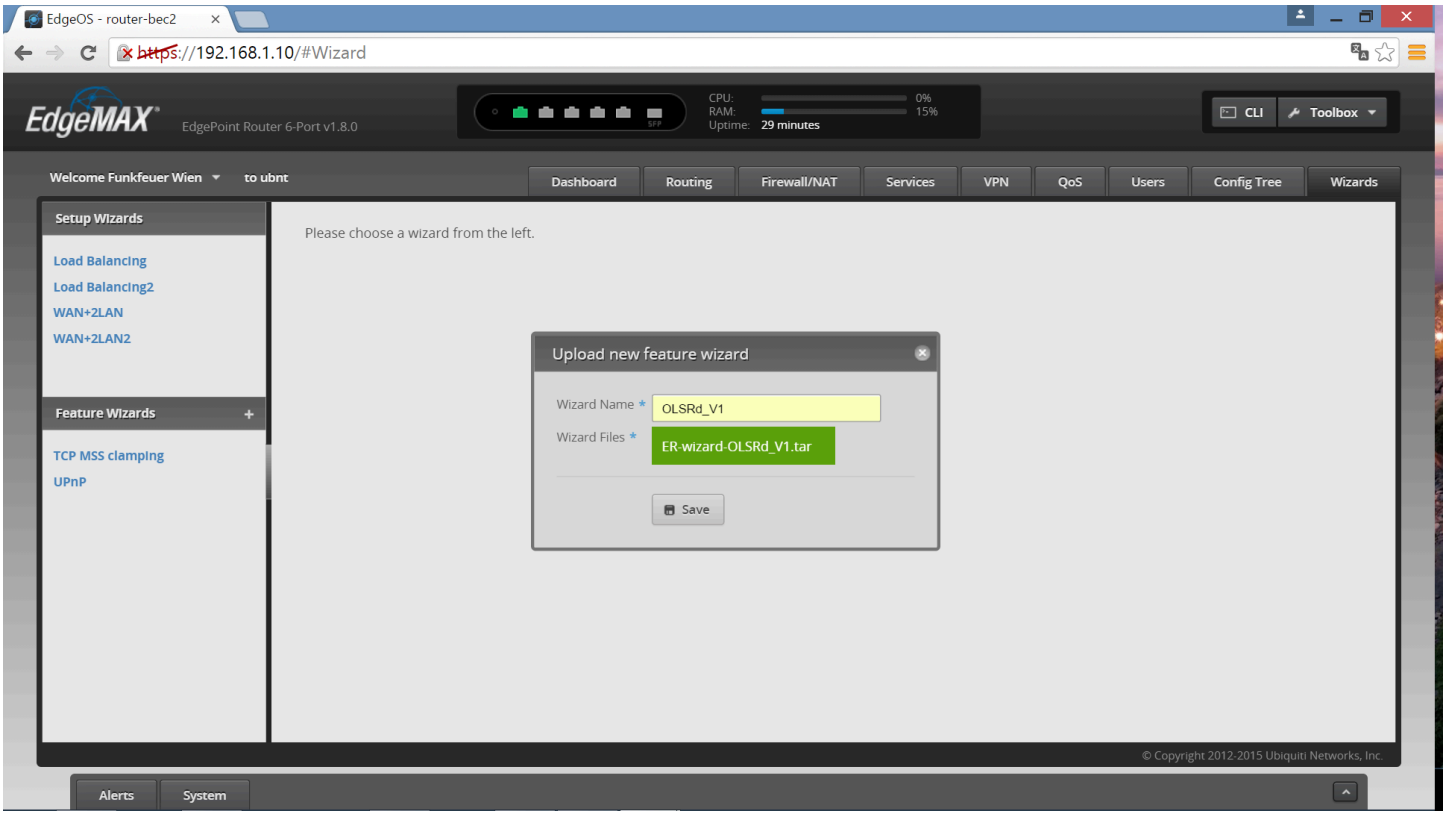
FUNKFEUER


EdgeOS - ubnt
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
GENUINE PRODUCT
Host Name
System host name:
router-bec2
Time Zone
Use Coordinated Universal Time (UTC)
Time zone:
Europe
Austria
All
Gateway
System gateway address:
192.168.1.1
Name Server
System name server:
8.8.8.8
8.8.4.4
Add New
Domain Name
System domain-name:
NTP
Automatically update system time using NTP
Management Settings
SSH Server
Telnet Server


EdgeOS - ubnt
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
Telnet Server
Enable
Port:
System Log
Log to remote server:
Log Level:
Error
UBNT Discovery
Enable
SNMP Agent
Enable
SNMP community:
funkfeuer
Contact:
mail@chil.at
Location:
1140, Beckmanngasse 2
Configuration Management & Device Maintenance
Back Up Config
Upgrade System Image

FUNKFEUER


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:
Download
Upgrade System Image
Upload system image:
Upload a file
To check for updates go to: www.ubnt.com/download
Restore Config
Upload config file:
Upload a file
Reset Config to Default
Reset to Default
Restart & Shut Down Router
Restart Router
Restart
Shut Down Router
Shut Down
Save


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 *
OLSRd_V1
Wizard Files *
ER-wizard-OLSRd_V1.tar
Save
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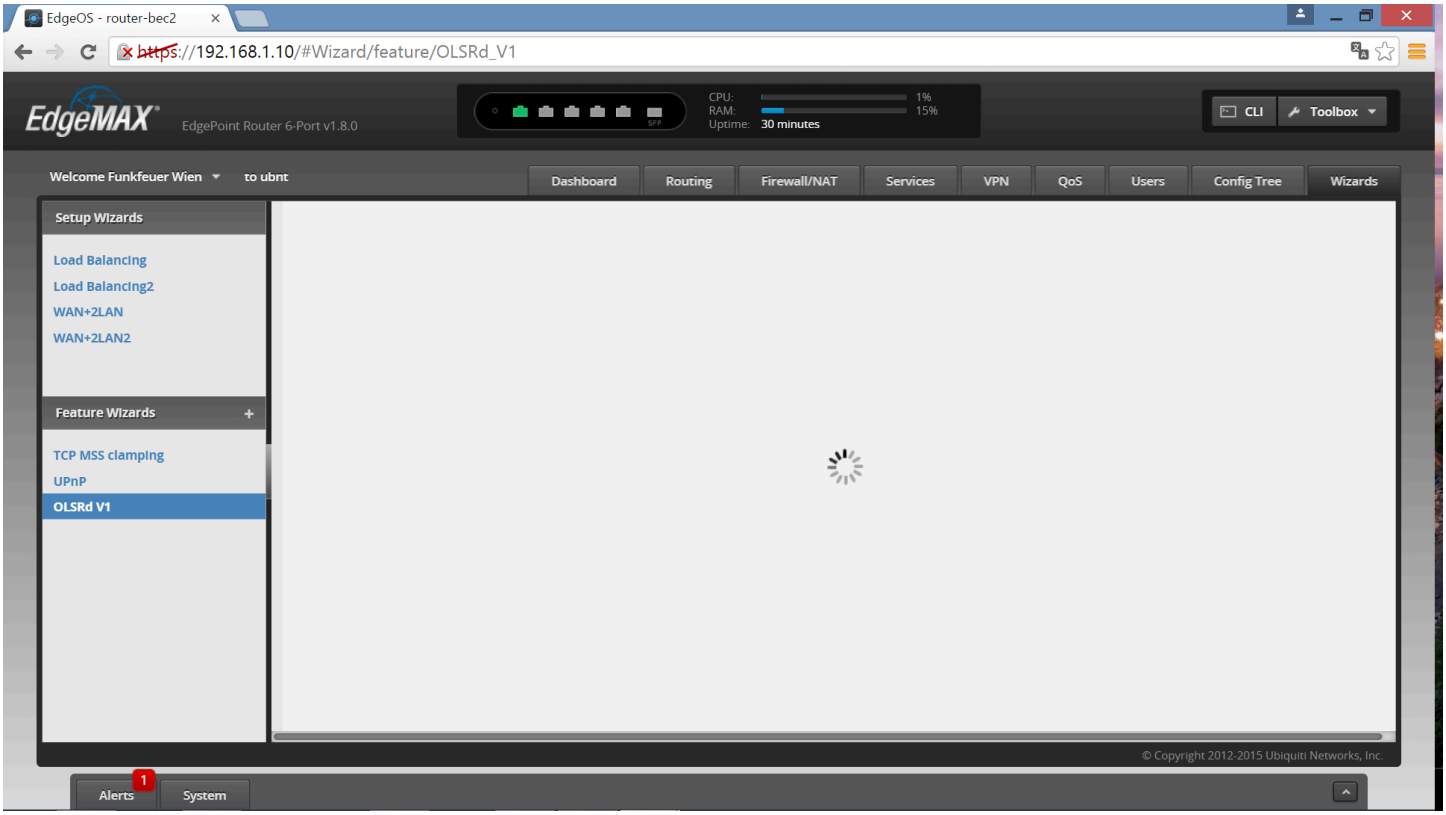
Alerts
System

FUNKFEUER


EdgeOS - router-bec2
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 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
OLSRd V1
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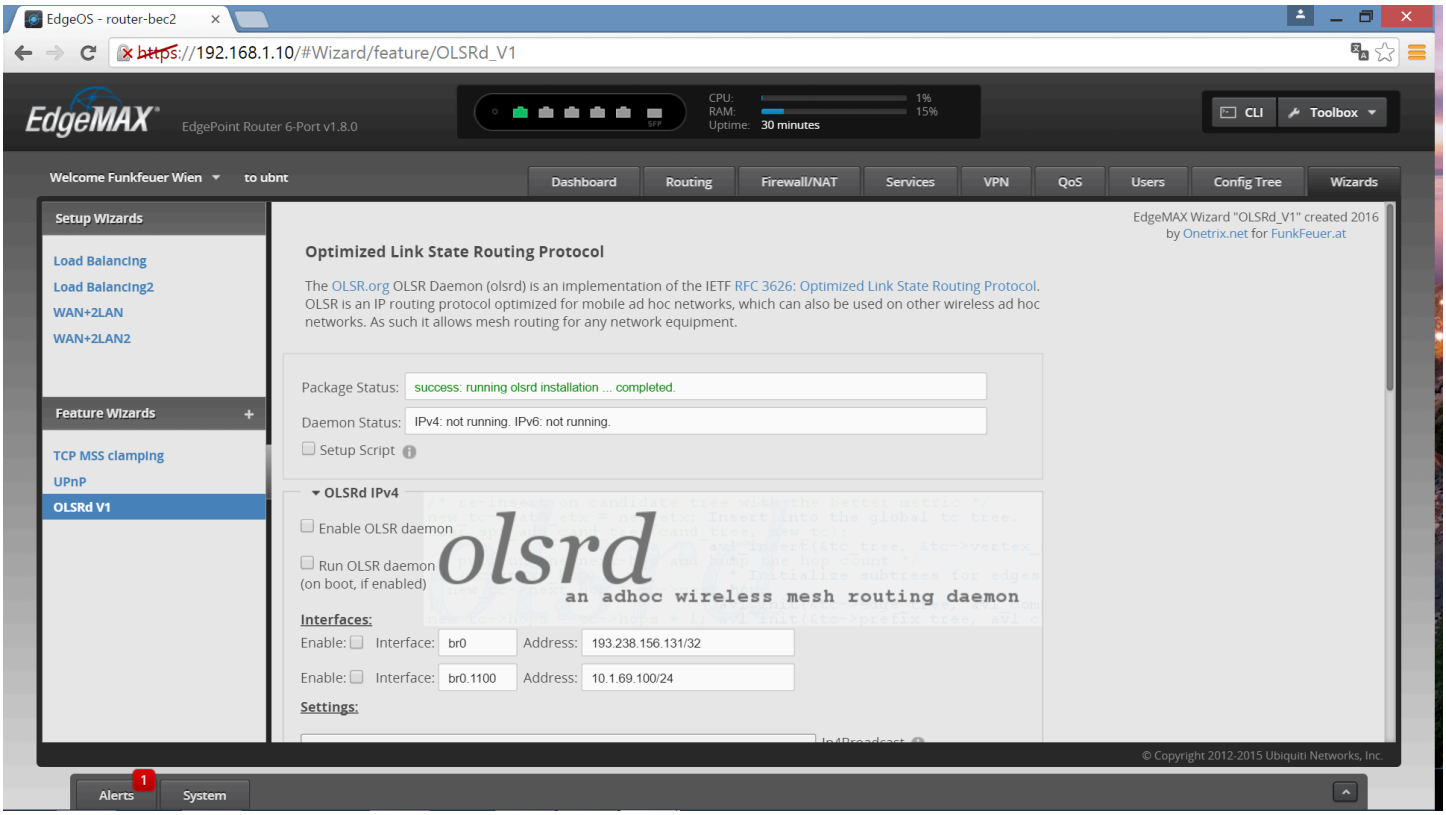
Alerts
1
System


EdgeOS - router-bec2
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 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
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: 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)
olsrd
an adhoc wireless mesh routing daemon
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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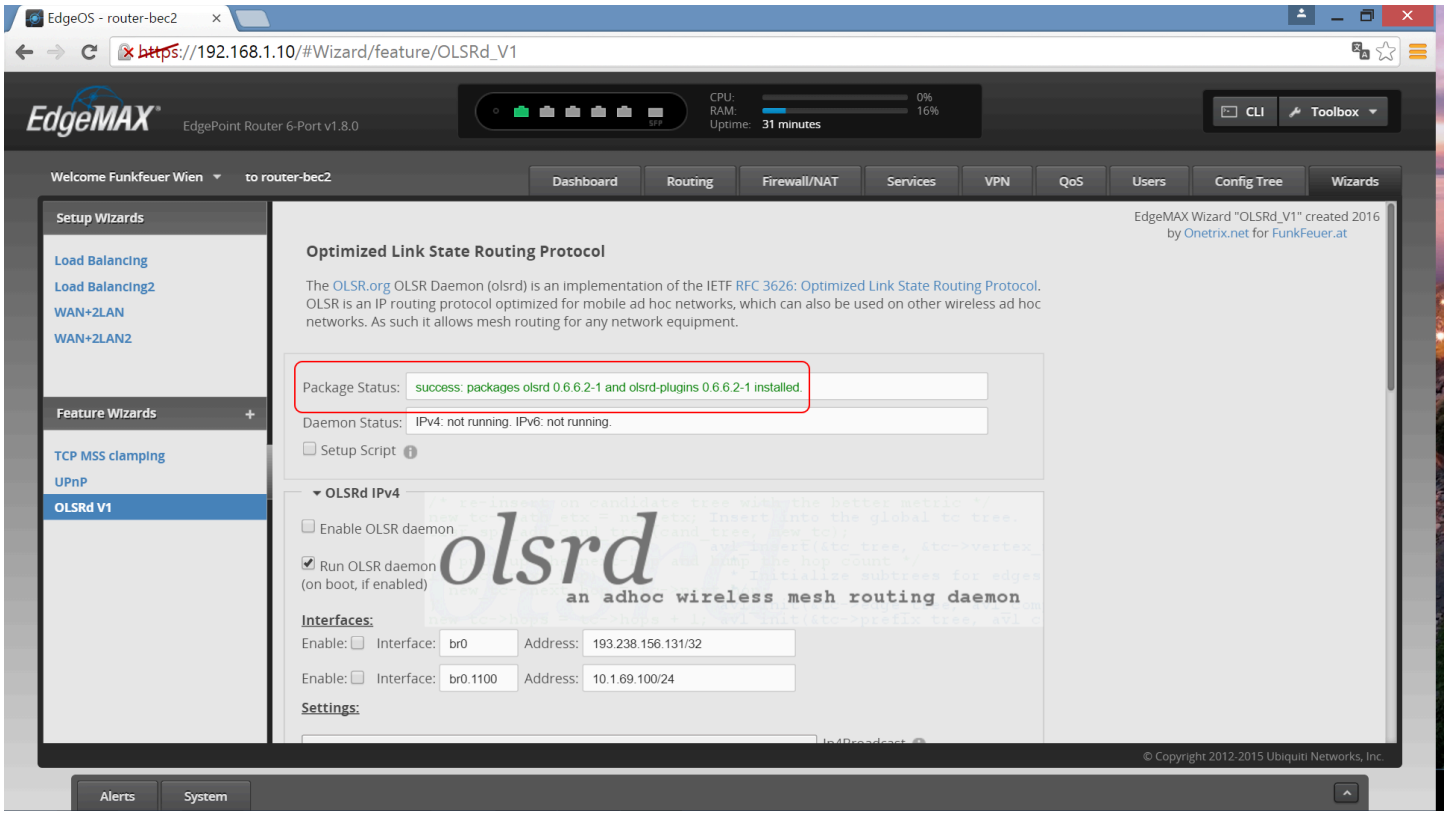
Alerts
1
System

FUNKFEUER


EdgeOS - router-bec2
https://192.168.1.10/#Wizard/feature/OLSRd_V1
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 0%
RAM: 16%
Uptime: 31 minutes
CLI
Toolbox
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
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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)
olsrd
an adhoc wireless mesh routing daemon
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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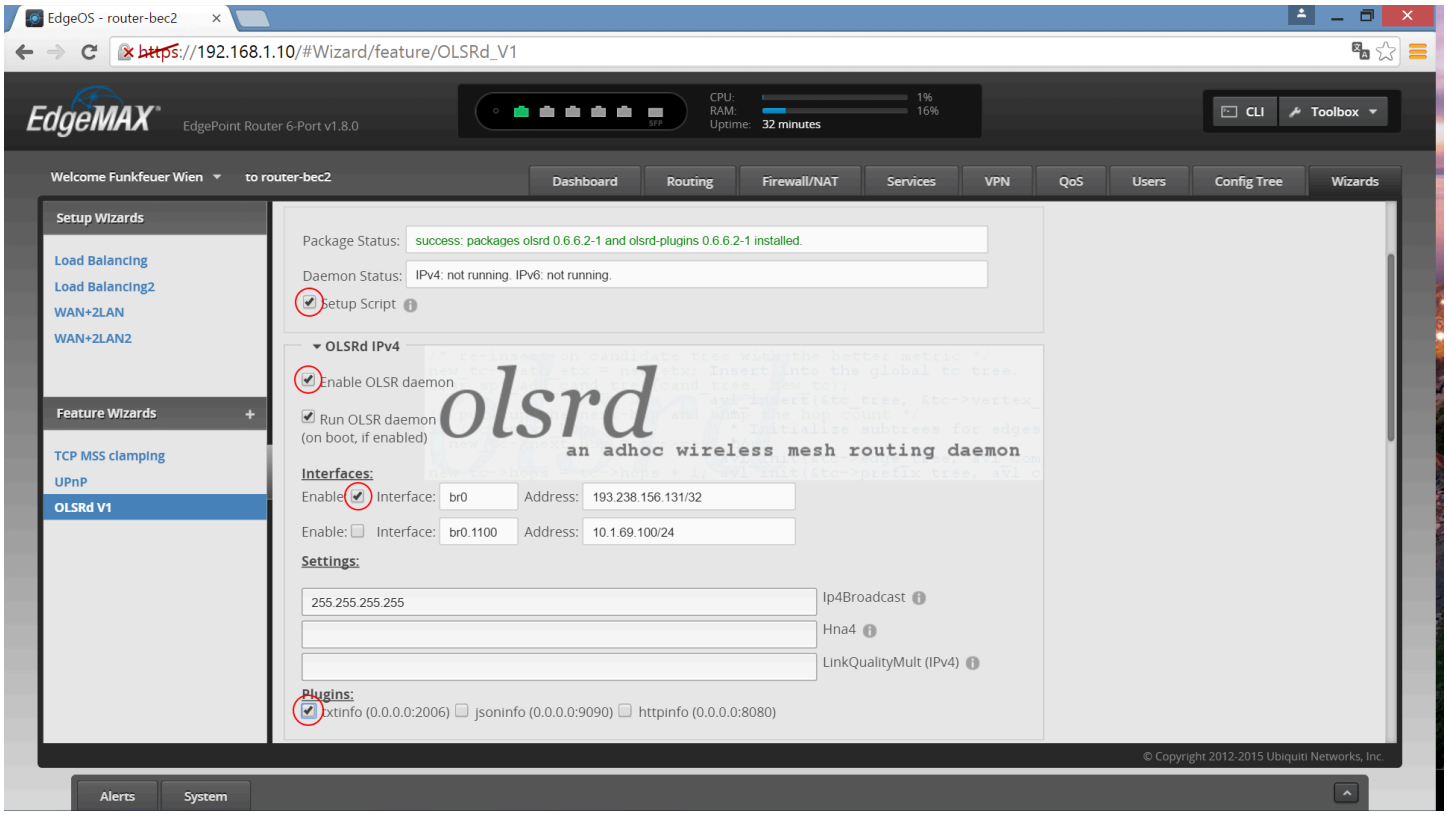
Alerts
System


EdgeOS - router-bec2
https://192.168.1.10/#Wizard/feature/OLSRd_V1
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 1%
RAM: 16%
Uptime: 32 minutes
CLI
Toolbox
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)
olsrd
an adhoc wireless mesh routing daemon
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:
txtinfo (0.0.0.0:2006) jsoninfo (0.0.0.0:9090) httpinfo (0.0.0.0:8080)
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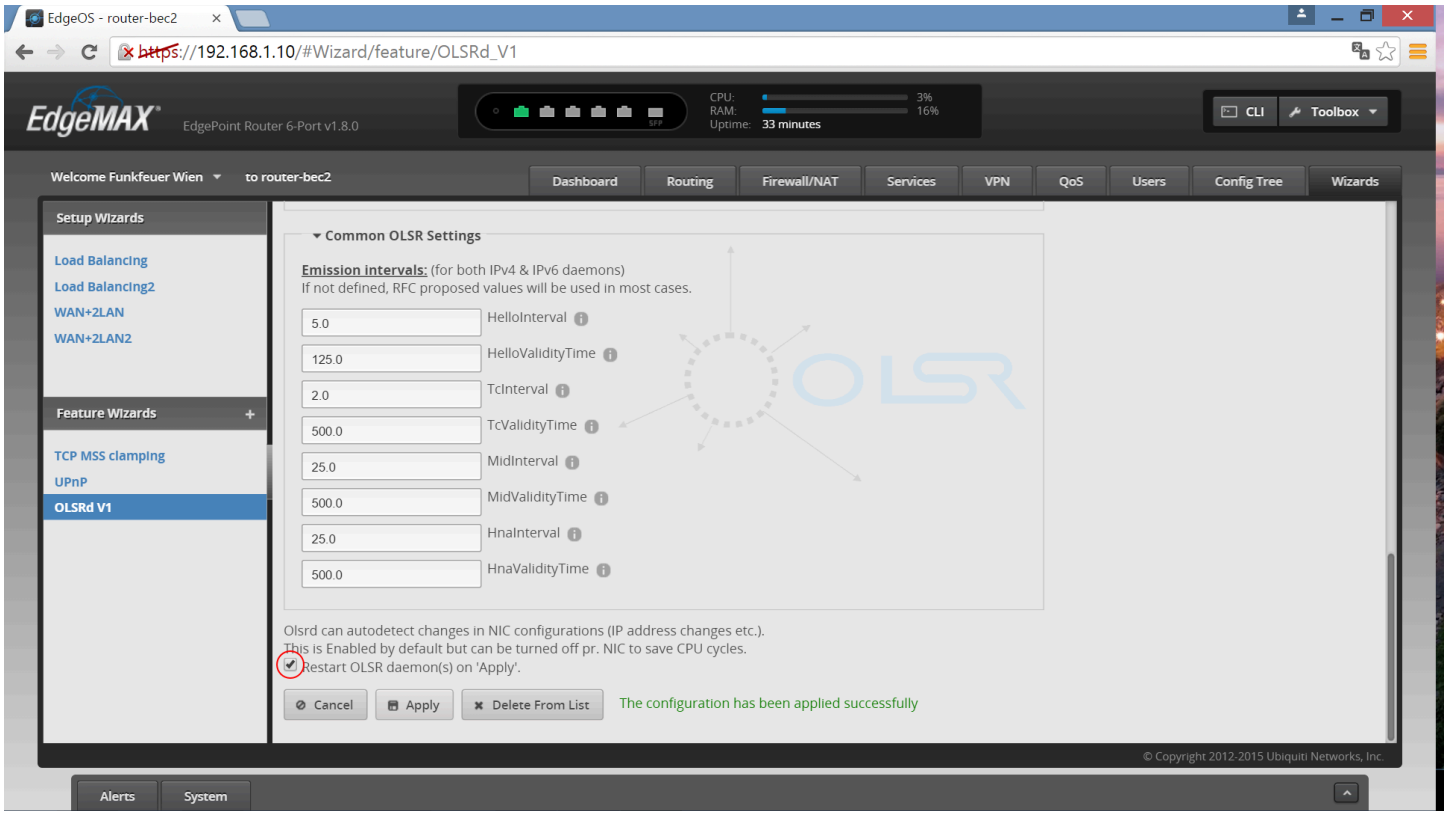
Alerts
System

FUNKFEUER


EdgeOS - router-bec2
https://192.168.1.10/#Wizard/feature/OLSRd_V1
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 3%
RAM: 16%
Uptime: 33 minutes
CLI
Toolbox
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
Olsrd 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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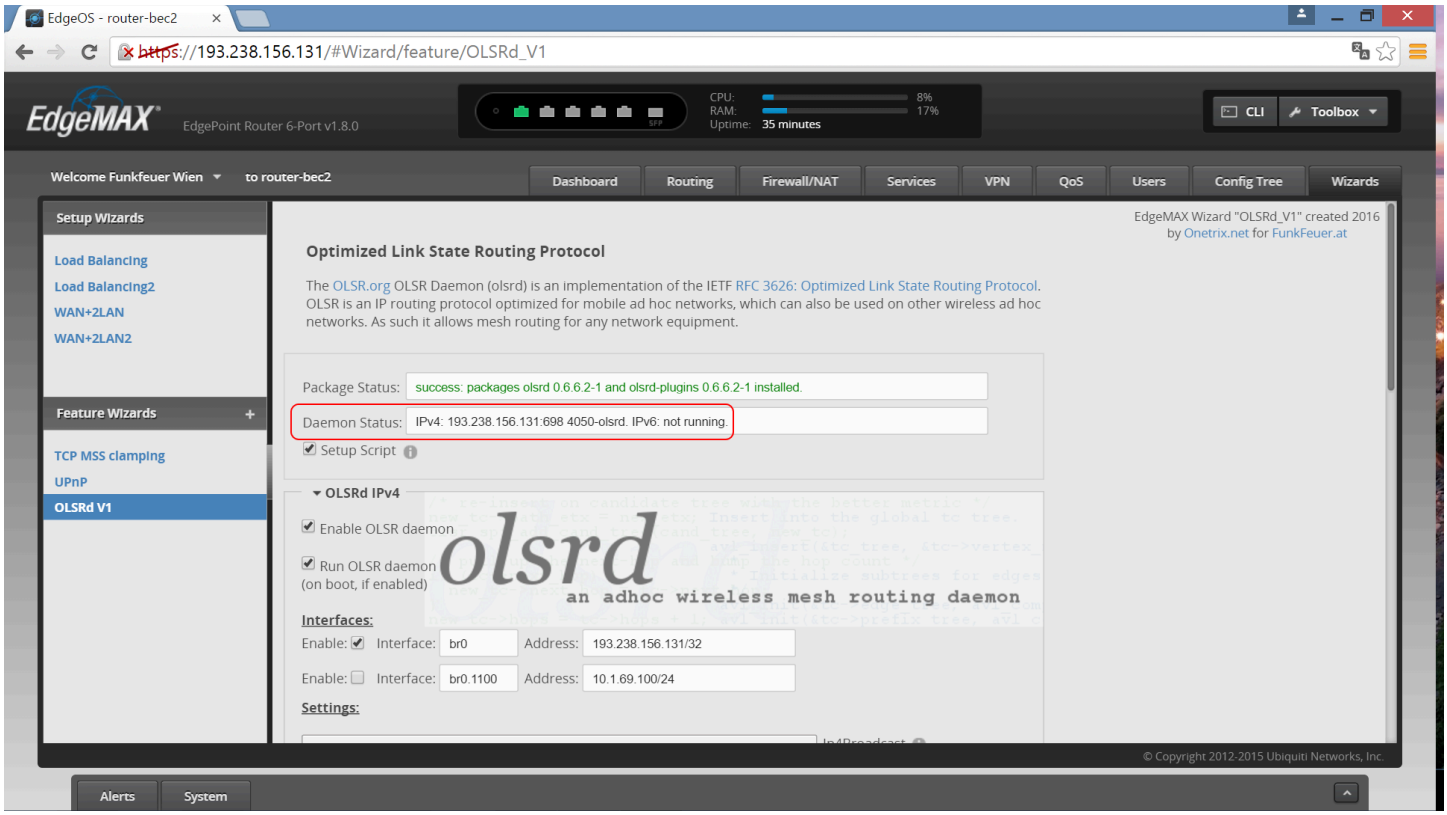
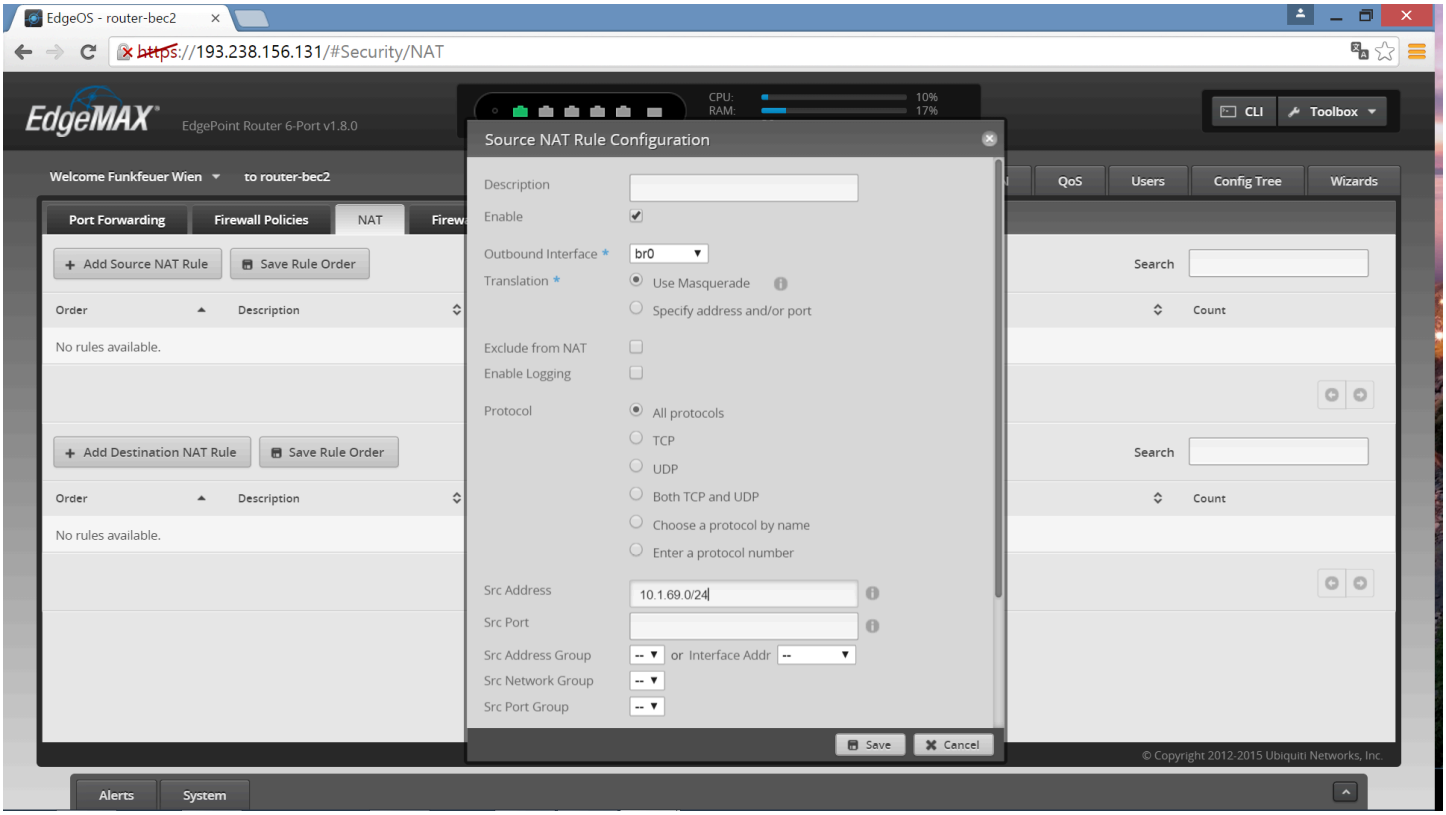
Alerts
System


EdgeOS - router-bec2
https://193.238.156.131/#Wizard/feature/OLSRd_V1
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 8%
RAM: 17%
Uptime: 35 minutes
CLI
Toolbox
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)
olsrd
an adhoc wireless mesh routing daemon
Interfaces:
Enable: Interface: br0 Address: 193.238.156.131/32
Enable: Interface: br0.1100 Address: 10.1.69.100/24
Settings:
© Copyright 2012-2015 Ubiquiti Networks, Inc.
Alerts
System

FUNKFEUER


EdgeOS - router-bec2
https://193.238.156.131/#Security/NAT
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 10%
RAM: 17%
CLI
Toolbox
Welcome Funkfeuer Wien
to router-bec2
QoS
Users
Config Tree
Wizards
Port Forwarding
Firewall Policies
NAT
Add Source NAT Rule
Save Rule Order
Search
Order
Description
Count
No rules available.
Add Destination NAT Rule
Save Rule Order
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
10.1.69.0/24
Src Port
Src Address Group
or Interface Addr
Src Network Group
Src Port Group
Save
Cancel
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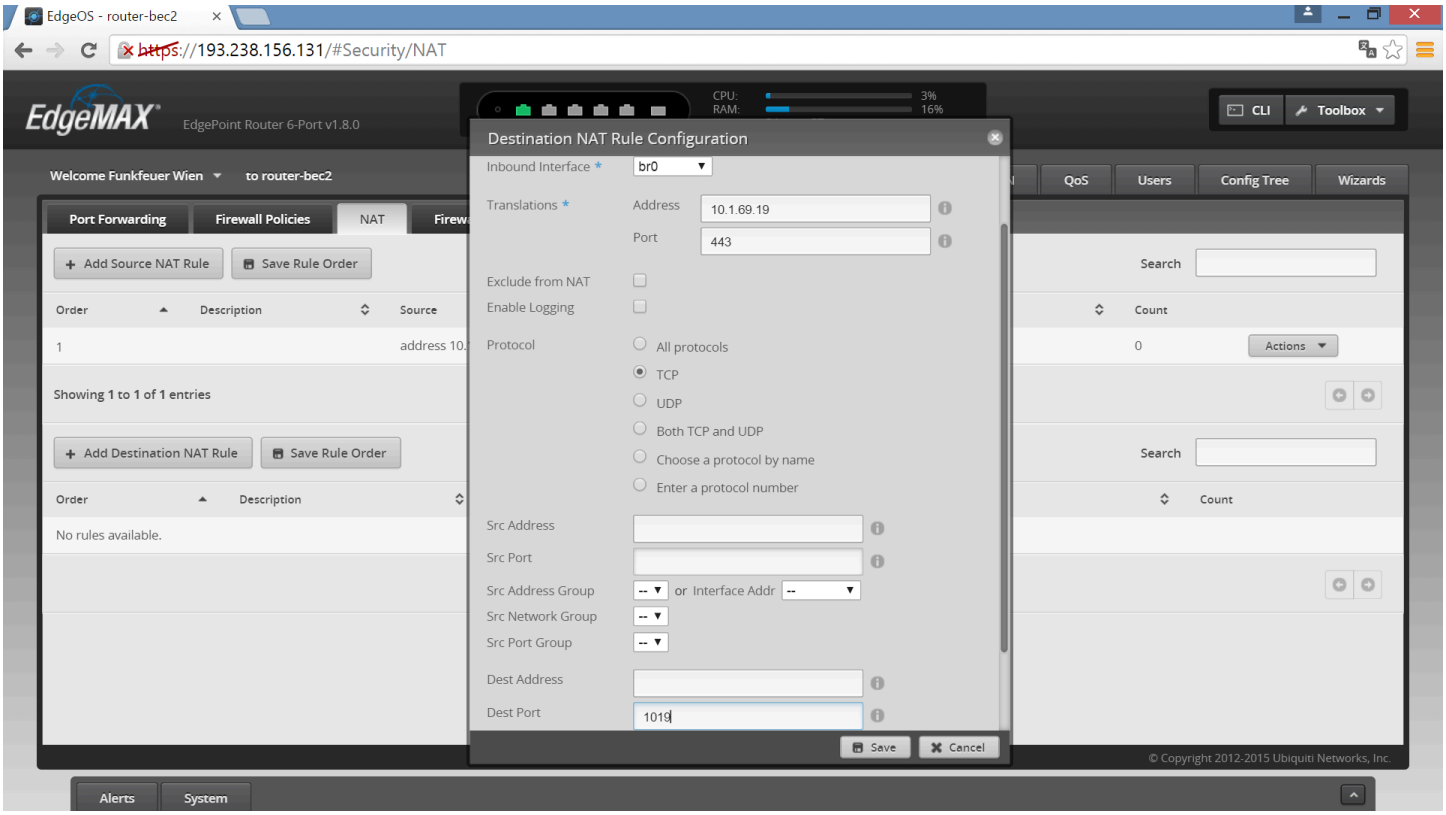
Alerts
System


EdgeOS - router-bec2
https://193.238.156.131/#Security/NAT
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 3%
RAM: 16%
CLI
Toolbox
Welcome Funkfeuer Wien
to router-bec2
QoS
Users
Config Tree
Wizards
Port Forwarding
Firewall Policies
NAT
Add Source NAT Rule
Save Rule Order
Search
Order
Description
Source
Count
1
address 10.
0
Actions
Showing 1 to 1 of 1 entries
Add Destination NAT Rule
Save Rule Order
No rules available.
Destination NAT Rule Configuration
Inbound Interface *
br0
Translations *
Address
10.1.69.19
Port
443
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
1019
Save
Cancel
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Alerts
System

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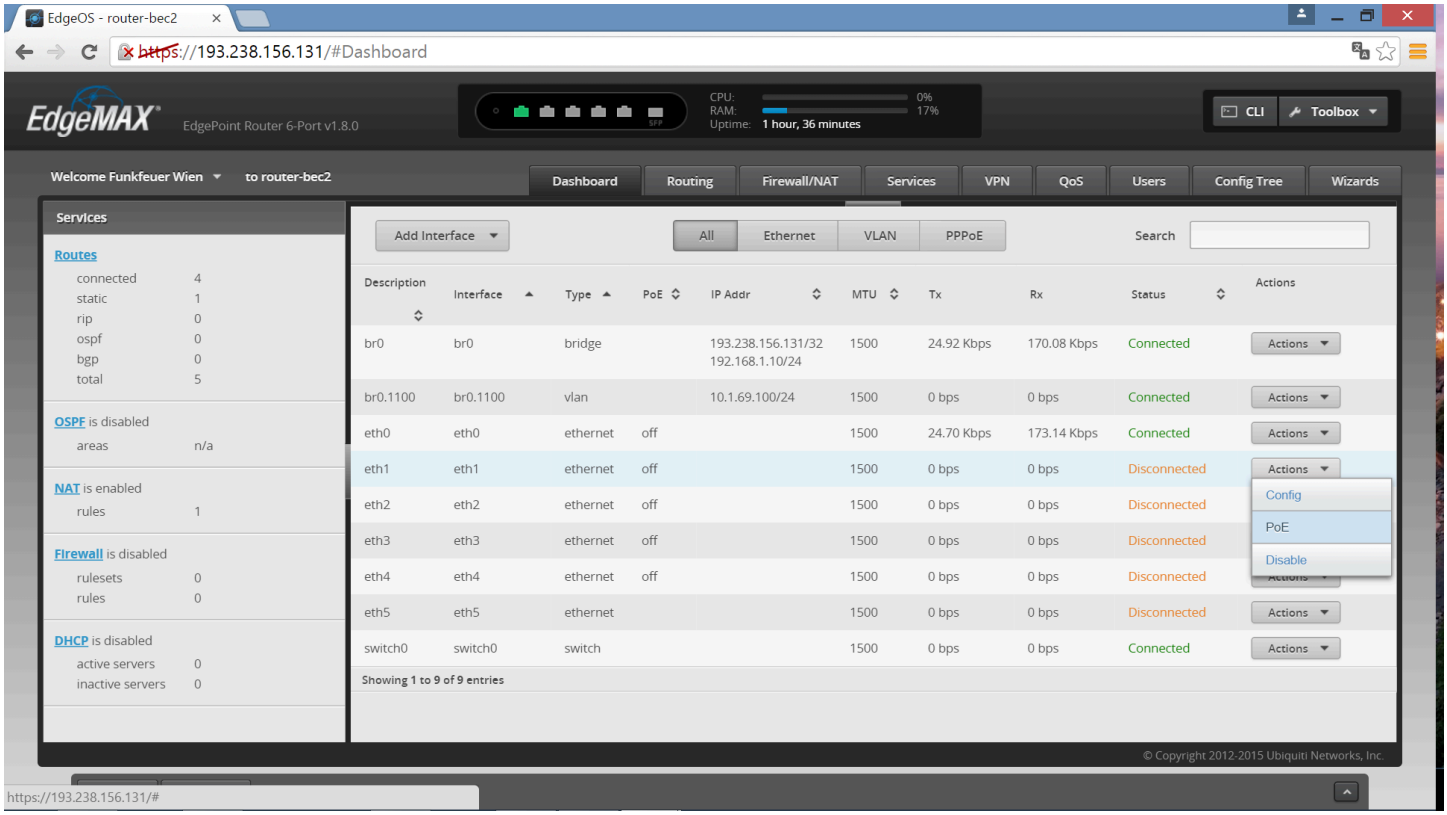
EdgeOS - router-bec2
https://193.238.156.131/#Dashboard
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 0%
RAM: 17%
Uptime: 1 hour, 36 minutes
CLI
Toolbox
Welcome Funkfeuer Wien
to router-bec2
Dashboard
Routing
Firewall/NAT
Services
VPN
QoS
Users
Config Tree
Wizards
Services
Routes
connected 4
static 1
rip 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
Search
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
eth3 eth3 ethernet off 1500 0 bps 0 bps Disconnected
eth4 eth4 ethernet off 1500 0 bps 0 bps Disconnected
eth5 eth5 ethernet 1500 0 bps 0 bps Disconnected Actions
switch0 switch0 switch 1500 0 bps 0 bps Connected Actions
Config
PoE
Disable
Showing 1 to 9 of 9 entries
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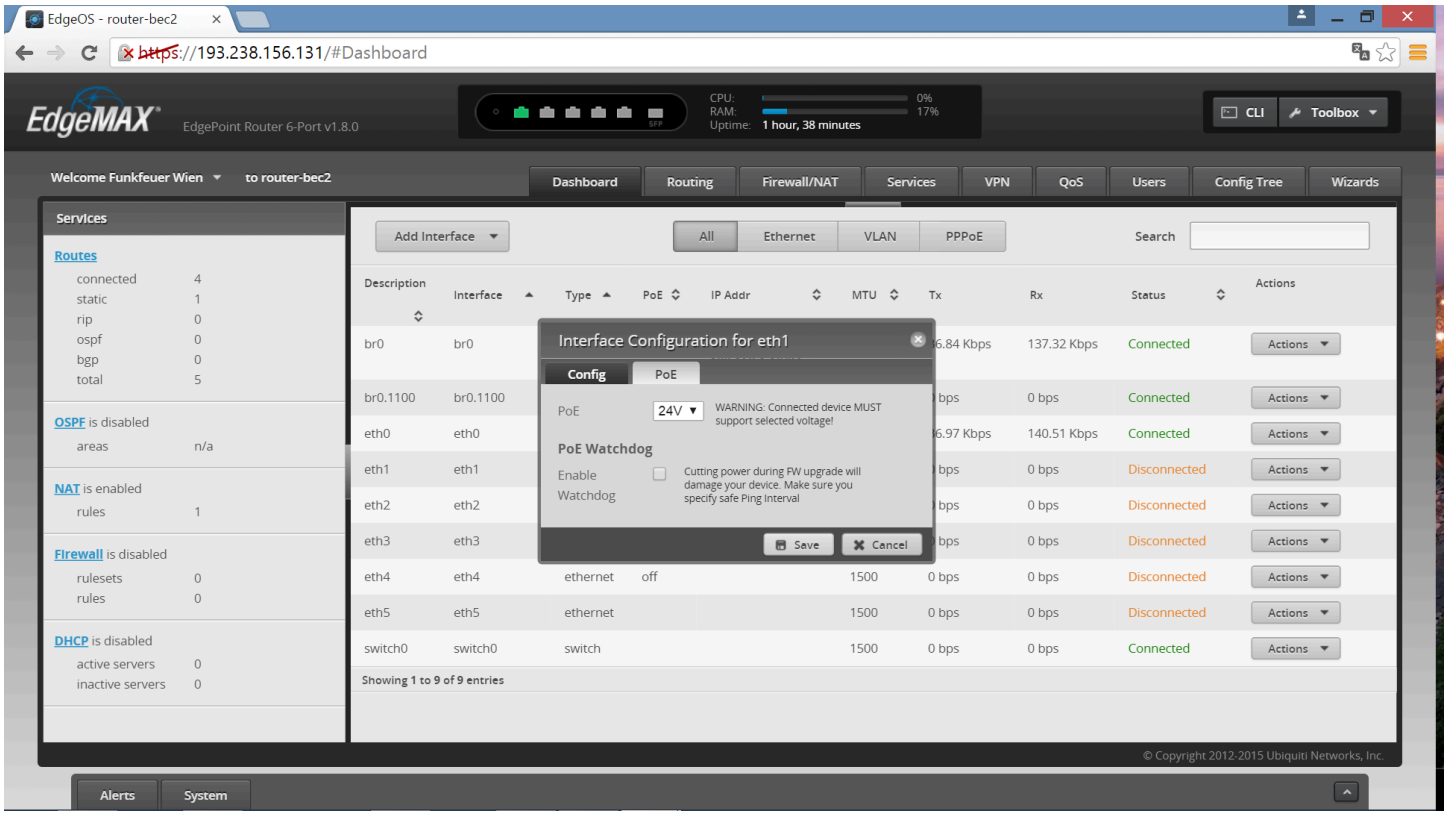
https://193.238.156.131/#


EdgeOS - router-bec2
https://193.238.156.131/#Dashboard
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 0%
RAM: 17%
Uptime: 1 hour, 38 minutes
CLI
Toolbox
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
Search
Description
Interface
Type
PoE
IP Addr
MTU
Tx
Rx
Status
Actions
Interface Configuration for eth1
Config
PoE
PoE
24V
WARNING: Connected device MUST support selected voltage!
PoE Watchdog
Enable Watchdog
Cutting power during FW upgrade will damage your device. Make sure you specify safe Ping Interval
Save
Cancel
br0 br0 137.32 Kbps Connected Actions
br0.1100 br0.1100 Connected Actions
eth0 eth0 140.51 Kbps Connected Actions
eth1 eth1 Disconnected Actions
eth2 eth2 Disconnected Actions
eth3 eth3 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

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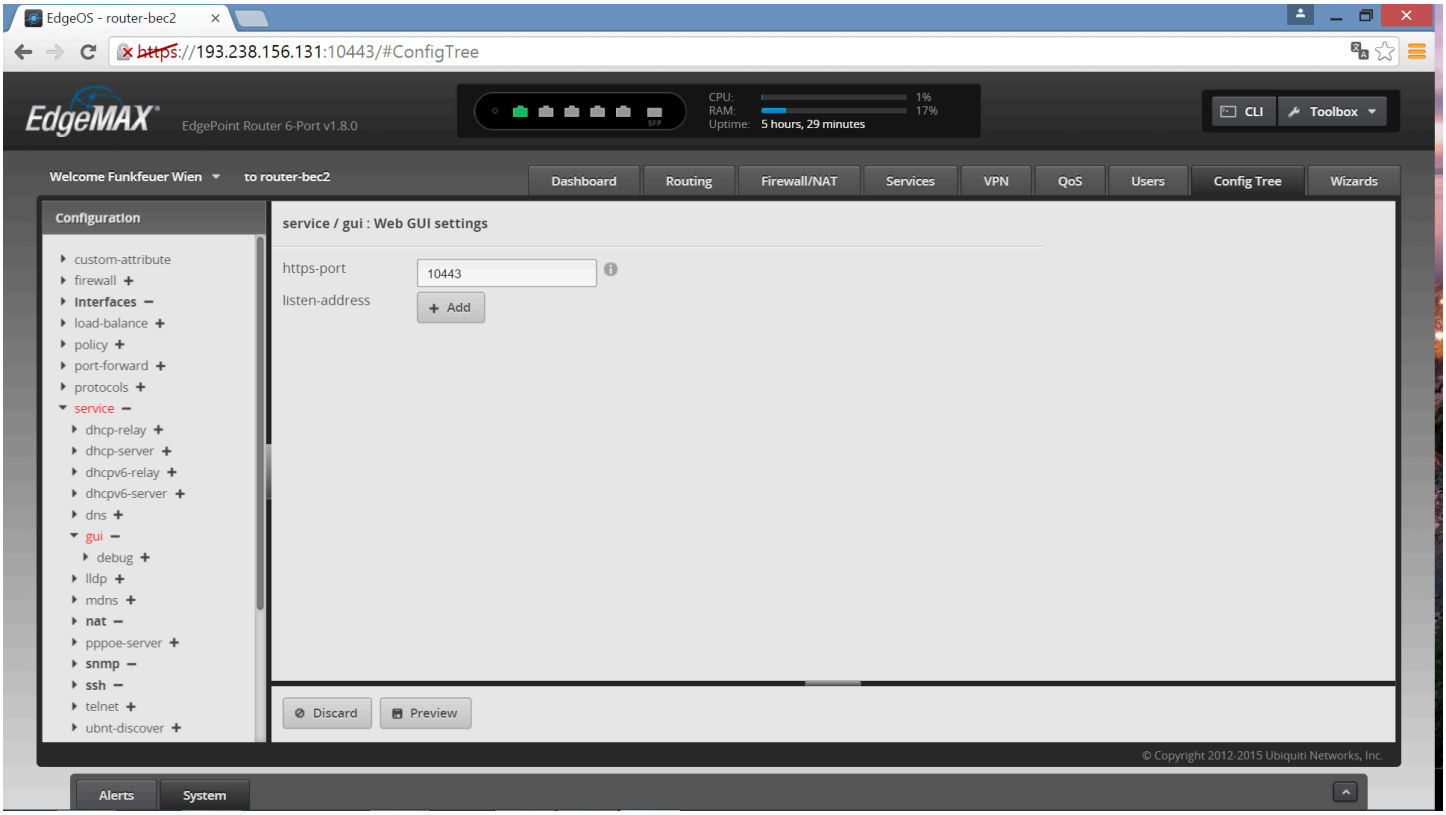
EdgeOS - router-bec2
https://193.238.156.131:10443/#ConfigTree
EdgeMAX
EdgePoint Router 6-Port v1.8.0
CPU: 1%
RAM: 17%
Uptime: 5 hours, 29 minutes
CLI
Toolbox
Welcome Funkfeuer Wien
to router-bec2
Dashboard
Routing
Firewall/NAT
Services
VPN
QoS
Users
Config Tree
Wizards
Configuration
custom-attribute
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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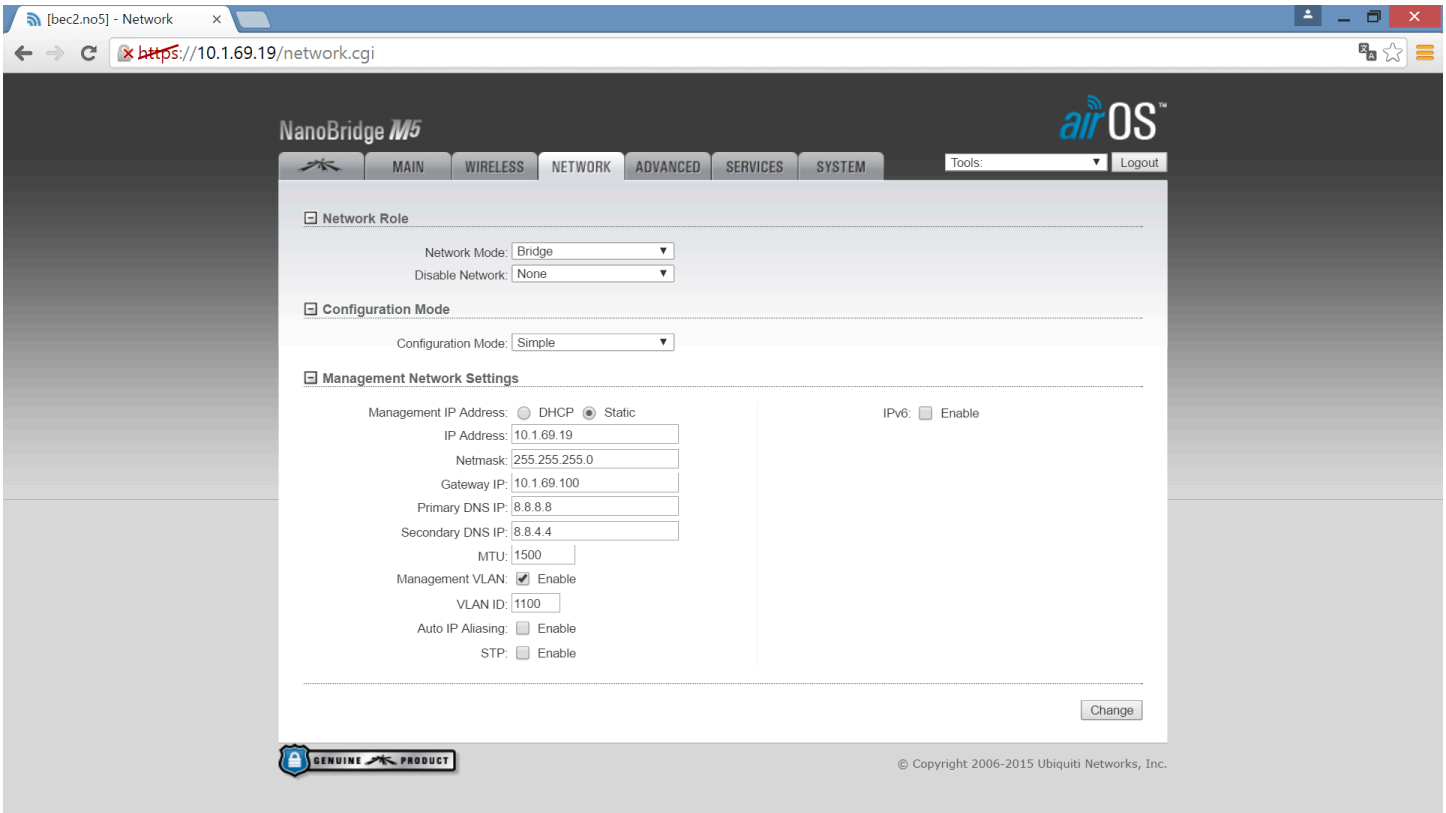
Alerts
System


[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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