

System

Here you can configure the system like its hostname or the timezone.

System Properties

General Settings

- System
- Administration
- Software
- Startup
- Scheduled Tasks
- LED Configuration
- Backup / Flash Firmware
- Reboot

Local Time: 2018 Sync with browser

Hostname:

Timezone:

Time Synchronization

Enable NTP client

Provide NTP server

- NTP server candidates
- ✖
 - ✖
 - ✖
 - ✖ +

Save & Apply Save Reset

System

Here you can configure the basic aspects of your device like its hostname or the timezone.

System Properties

General Settings

Logging

Language and Style

Local Time Wed May 16 23:51:19 2018 Hostname Timezone

Time Synchronization

Enable NTP client Provide NTP server

NTP server candidates

0.openwrt.pool.ntp.org	<input type="button" value="✖"/>
1.openwrt.pool.ntp.org	<input type="button" value="✖"/>
2.openwrt.pool.ntp.org	<input type="button" value="✖"/>
3.openwrt.pool.ntp.org	<input type="button" value="📄"/>

Interfaces

Interface Overview

- Interfaces**
- Wireless
- Switch
- DHCP and DNS
- Hostnames
- Static Routes
- Firewall
- Diagnostics

Network	Status	Actions
LAN br-lan	Uptime: 0h 32m MAC-Address: RX: 1.74 MB (13 TX: 3.89 MB (11522 Pkts.) IPv4: 10.10.10.1/24	Connect Stop Edit Delete
WAN eth0.2	Uptime: 0h 32m 28s MAC-Address: 70:4F:57:AF:0F:2D RX: 5.92 MB (26433 Pkts.) TX: 1.97 MB (11527 Pkts.) IPv4: 192.168.178.120/24	Connect Stop Edit Delete
WAN6 eth0.2	Uptime: 0h 58m 45s MAC-Address: 70:4F:57:AF:0F:2D RX: 5.92 MB (26433 Pkts.) TX: 1.97 MB (11527 Pkts.) IPv6: 2003:d4:b70c:c300:724f:57ff:feaf:f2d/64	Connect Stop Edit Delete

Add new interface...



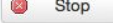
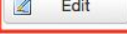
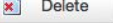


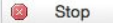



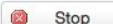


Global network options

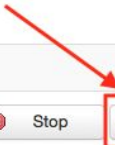
IPv6 ULA-Prefix


Save & Apply Save Reset

Interfaces

Interface Overview




Network	Status	Actions
LAN  br-lan	Uptime: 0h 33m 3s MAC-Address: 70:4F:57:AF:0F:2C RX: 1.75 MB (13702 Pkts.) TX: 3.90 MB (11355 Pkts.) IPv4: 10.10.10.1/24	 Connect  Stop  Edit  Delete
WAN  eth0.2	Uptime: 0h 32m 43s MAC-Address: 70:4F:57:AF:0F:2D RX: 5.92 MB (26516 Pkts.) TX: 1.97 MB (11534 Pkts.) IPv4: 192.168.178.120/24	 Connect  Stop  Edit  Delete
WAN6  eth0.2	Uptime: 0h 59m 0s MAC-Address: 70:4F:57:AF:0F:2D RX: 5.92 MB (26516 Pkts.) TX: 1.97 MB (11534 Pkts.) IPv6: 2003:d4:b70c:c300:724f:57ff:feaf:f2d/64	 Connect  Stop  Edit  Delete



 Add new interface...


Global network options

IPv6 ULA-Prefix

Common Configuration

General Setup **Advanced Settings** Physical Settings Firewall Settings

Status  **Uptime:** 0h 35m 32s
 br-lan **MAC-Address:** 70:4F:57:AF:0F:2C
RX: 1.79 MB (14198 Pkts.)
TX: 4.17 MB (11825 Pkts.)
IPv4: 10.10.10.1/24

Protocol

IPv4 address

IPv4 netmask

IPv4 gateway

IPv4 broadcast

Use custom DNS servers

IPv6 assignment length

Assign a part of given length of every public IPv6-prefix to this interface

IPv6 address

IPv6 gateway

IPv6 routed prefix

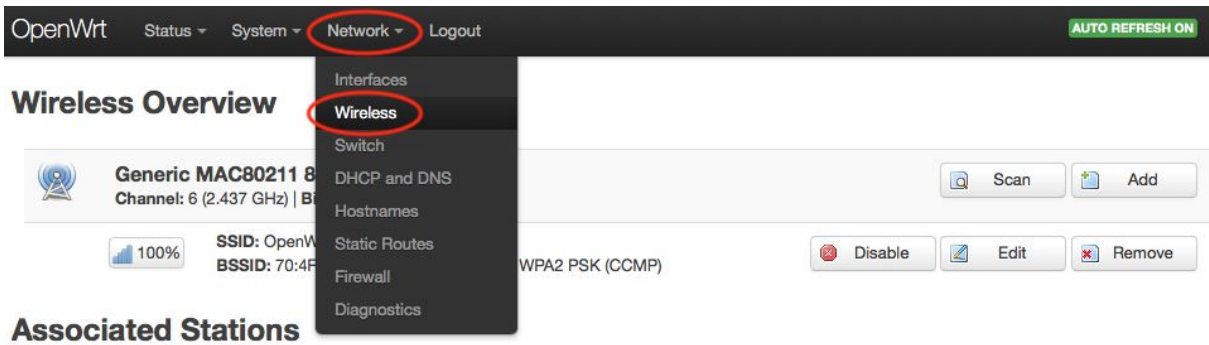
Public prefix routed to this device for distribution to clients.

IPv6 suffix

Optional. Allowed values: 'eui64', 'random', fixed value like '::1' or '::1:2'. When IPv6 prefix (like 'a:b:c:d::') is received from a delegating server, use the suffix (like '::1') to form the IPv6 address ('a:b:c:d::1') for the interface.

Die lokale Adresse bzw. das Local Net des OpenWRT Routers muss in einem anderen Subnet als das eigene vorhandene Netzwerk angelegt werden.
 In meinem Beispiel ist Symcon über die Adresse 192.168.178.8 erreichbar und damit im Subnetz 192.168.178.xxx enthalten.
 Ich habe mich als getrenntes Subnetz für 10.10.10.xxx entschieden.

Weiterhin habe ich die Zuweisung einer IPv6 Adresse deaktiviert, weil das bei mir Probleme bereitet hat.



The screenshot shows the OpenWrt web interface. At the top, there is a navigation bar with 'OpenWrt', 'Status', 'System', 'Network', and 'Logout'. The 'Network' menu is open, showing options like 'Interfaces', 'Wireless', 'Switch', 'DHCP and DNS', 'Hostnames', 'Static Routes', 'Firewall', and 'Diagnostics'. The 'Wireless' option is highlighted. Below the menu, the 'Wireless Overview' section is visible, showing a card for 'Generic MAC80211 802.11bgn (radio0)' with a 100% signal strength indicator, SSID 'OpenWrt', and BSSID '70:4F:57:AF:0F:2C'. There are buttons for 'Scan', 'Add', 'Disable', 'Edit', and 'Remove'.

Hier kann man das WLAN des Routers einstellen.

Ich habe mich für die SSID OpenWrt entschieden.




The screenshot shows the OpenWrt web interface with the 'Wireless Overview' section. The card for 'Generic MAC80211 802.11bgn (radio0)' is expanded, showing details: 'Channel: 6 (2.437 GHz) | Bitrate: 65 Mbit/s', 'SSID: OpenWrt | Mode: Master', and 'BSSID: 70:4F:57:AF:0F:2C | Encryption: WPA2 PSK (CCMP)'. There are buttons for 'Scan', 'Add', 'Disable', 'Edit', and 'Remove'.

Wireless Network: Master "OpenWrt" (wlan0)

The *Device Configuration* section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which are shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the *Interface Configuration*.

Device Configuration

General Setup **Advanced Settings**

Status  **Mode:** Master | **SSID:** OpenWrt
 100% **BSSID:** 70:4F:57:AF:0F:2C | **Encryption:** WPA2 PSK (CCMP)
Channel: 6 (2.437 GHz) | **Tx-Power:** 14 dBm
Signal: -26 dBm | **Noise:** -91 dBm
Bitrate: 65.0 Mbit/s | **Country:** DE

Wireless network is enabled




Operating frequency **Mode:** N | **Channel:** auto | **Width:** 20 MHz
Transmit Power: auto
 dBm


Interface Configuration

General Setup **Wireless Security** MAC-Filter **Advanced Settings**

Mode: Access Point

ESSID: OpenWrt

Network: lan:  wan:  wan6:  create:

 Choose the network(s) you want to attach to this wireless interface or fill out the *create* field to define a new network.

Hide ESSID:

WMM Mode:

 Back to Overview

Save & Apply

Save

Reset

Modus: Access Point

Wireless Network: Master "OpenWrt" (wlan0)

The *Device Configuration* section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which are shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the *Interface Configuration*.

Device Configuration

General Setup

Advanced Settings

Status  **Mode:** Master | **SSID:** OpenWrt
100% **BSSID:** 70:4F:57:AF:0F:2C | **Encryption:** WPA2 PSK (CCMP)
Channel: 6 (2.437 GHz) | **Tx-Power:** 14 dBm
Signal: -26 dBm | **Noise:** -91 dBm
Bitrate: 65.0 Mbit/s | **Country:** DE

Wireless network is enabled Disable

Operating frequency	Mode	Channel	Width
	N	auto	20 MHz

Transmit Power auto
 dBm

Interface Configuration

General Setup

Wireless Security


MAC-Filter

Advanced Settings

Encryption WPA2-PSK

Cipher Force CCMP (AES)

Key

Enable key reinstallation (KRACK) countermeasures  Complicates key reinstallation attacks on the client side by disabling retransmission of EAPOL-Key frames that are used to install keys. This workaround might cause interoperability issues and reduced robustness of key negotiation especially in environments with heavy traffic load.

und dann noch die Wireless Security für die Sicherheit mit einem WLAN-PW bestücken.



Hier könnt Ihr noch dafür sorgen, dass die Wetterstation immer die gleiche IP-Adresse bekommt.

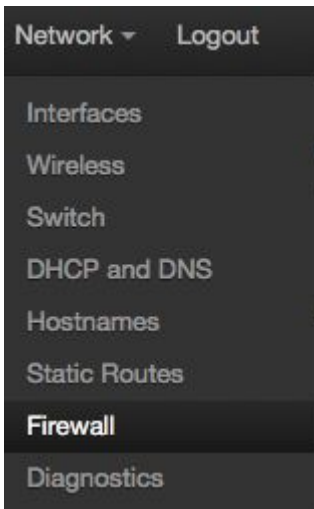
Static Leases

Static leases are used to assign fixed IP addresses and symbolic hostnames to DHCP clients. They are also required for non-dynamic interface configurations where only hosts with a correct MAC-Address are allowed. Use the *Add* Button to add a new lease entry. The *MAC-Address* identifies the host, the *IPv4-Address* specifies the fixed address to use, and the *Hostname* is assigned as a symbolic name to the lease. An optional *Lease time* can be used to set non-standard host-specific lease time, e.g. 12h, 3d or infinite.

Hostname	MAC-Address	IPv4-Address	Lease time	DUID	IPv6-Suffix (hex)
<input type="text" value="WetterStation"/>	<input type="text" value="MAC-Adresse der (WetterStation.lan)"/>	<input type="text" value="10.10.10.150"/>	<input type="text" value="720"/>	<input type="text"/>	<input type="text"/>



← An dieser Stelle unter Network > DHCP and DNS kann man im Bereich Static Leases der WetterStation eine feste IP-Adresse zuweisen.



Zu guter letzt noch das Wichtigste überhaupt, nämlich das Umleiten des Traffics über die Iptables unter Network > Firewall > Custom Rules

OpenWrt Status System Network Logout

General Settings Port Forwards Traffic Rules Custom Rules

Firewall - Custom Rules

Custom rules allow you to execute arbitrary iptables commands which are not otherwise covered by the firewall framework. The commands are executed after each firewall restart, right after the default ruleset has been loaded.

```
# This file is interpreted as shell script.
# Put your custom iptables rules here, they will
# be executed with each firewall (re-)start.

# Internal uci firewall chains are flushed and recreated on reload, so
# put custom rules into the root chains e.g. INPUT or FORWARD or into the
# special user chains, e.g. input_wan_rule or postrouting_lan_rule.

iptables -t nat -A PREROUTING -s 10.10.10.150 -p tcp --dport 80 -j DNAT --to-destination 192.168.178.8:45000
iptables -t nat -A POSTROUTING -j MASQUERADE
```

An dieser Stelle noch die iptables eintragen, wobei in meinem Beispiel die 10.10.10.150 die IP-Adresse der Wetterstation, und 192.168.178.8 die IP-Adresse meines Symcon-Servers darstellt. Der Port 45000 ist im Server Socket einzustellen, der durch das Anlegen der Instanz bei Fonzos Modul erzeugt wird. Ich habe 45000 gewählt, aber Ihr könnt auch einen anderen Port wählen.

Danach noch die Firewall neu starten mit dem Button „Restart Firewall“

Restart Firewall Reset