How to configure an Open BAT as Access Point

- 2018-02-21 - BAT, WLC (HiLCOS)

This lesson describes how to configure a BAT as Access Point and define basic radio settings and logical settings.

The lesson describes only the ""basic"" of such configuration. It doesn't details all the possible options.

LANconfig is used as configuration tool.
To follow this lesson you need this tool. You can find it either on the CD delivered with each product either on the Hirschmann Website.

We'll see in this lesson how to:
- Enable a radio module
- Select the indoor/outdoor mode
- Select the country
- Define the Radio band
- Define the channels
- Configure an SSID
- Define the security for this SSID

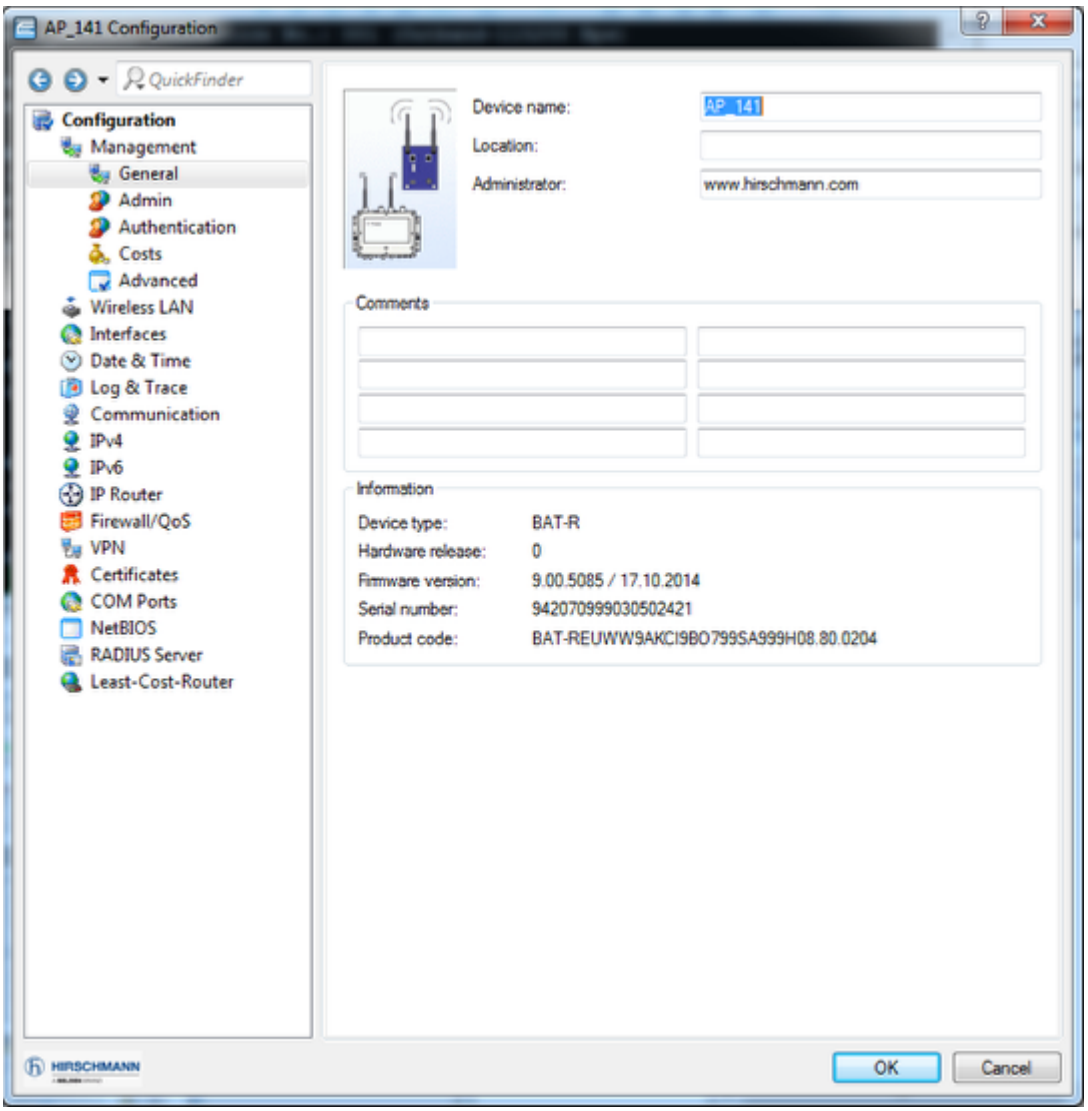
In this example we'll do the following configuration:
An AP in Germany outdoor.
2 Radio modules, the first one in the 2.4 Ghz band, the second one in the 5 Ghz band
Limitations of channels in 2.4Ghz: 1,6 and 11
Limitations of channels in 5Ghz: 100,108 and 116
SSID : RESEAU_TOTO
Security: WPA-PSK

Preliminary steps

Give the BAT an IP address
You can refer to the lesson ""How to give an Open BAT or a WLC an IP address""

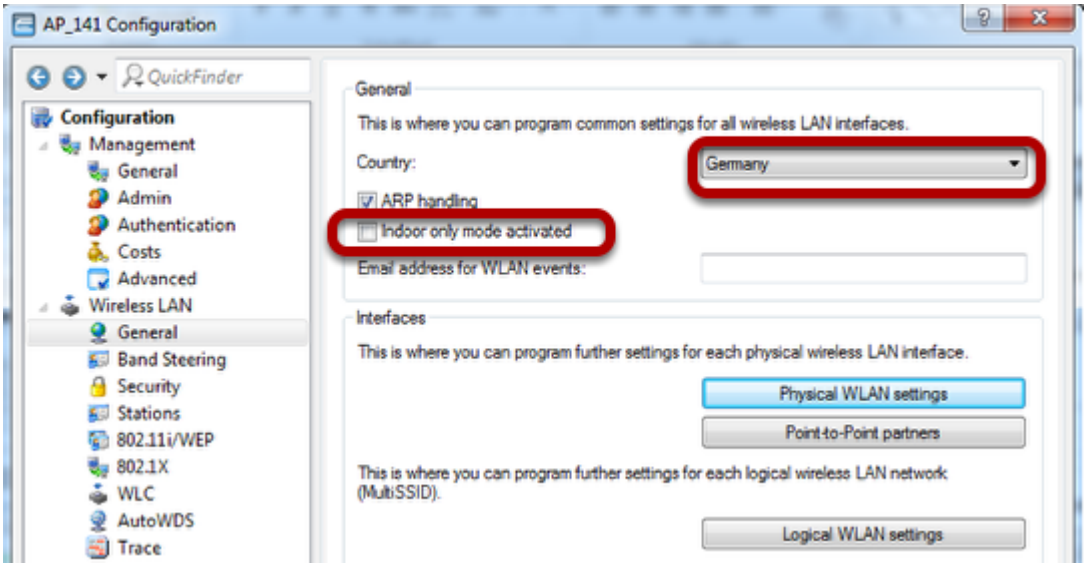
Add the BAT in LANconfig
You can refer to the lesson ""How to discover a BAT or a WLC in LANconfig""

Select the BAT and open a configuration dialog



You can open the configuration dialog selecting the device > right clic > configure

Select the country and the outdoor mode

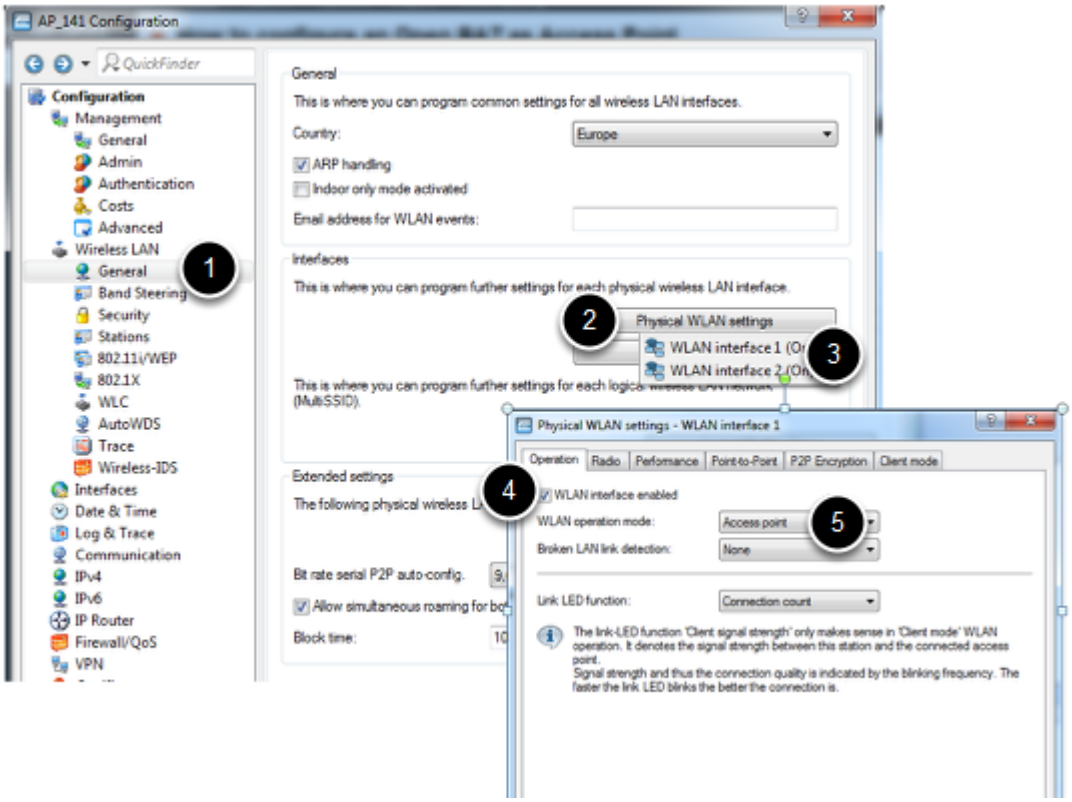


Configuration > Wireless LAN > General >

Select the country Germany

untick ""Inddor only mode activated""

Enable the radio modules and configure them as Access Points

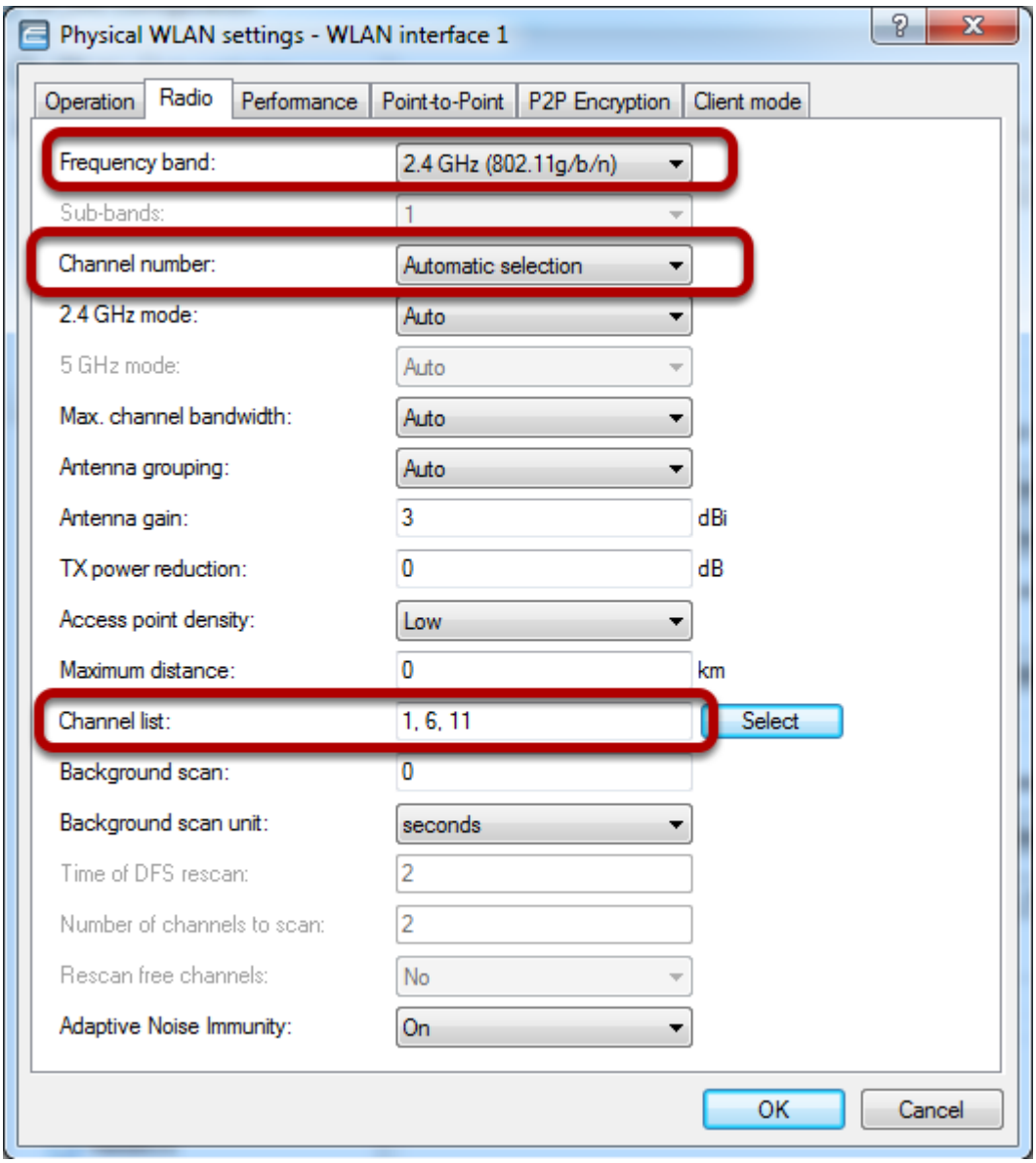


Configuration > Wireless LAN > General > Physical WLAN settings > WLAN interface 1 > tick ""WLAN interface enabled""

Select WLAN operation mode ""Access point""

Repeat this step for WLAN interface 2

Define the radio band and limit the channel list (optional)



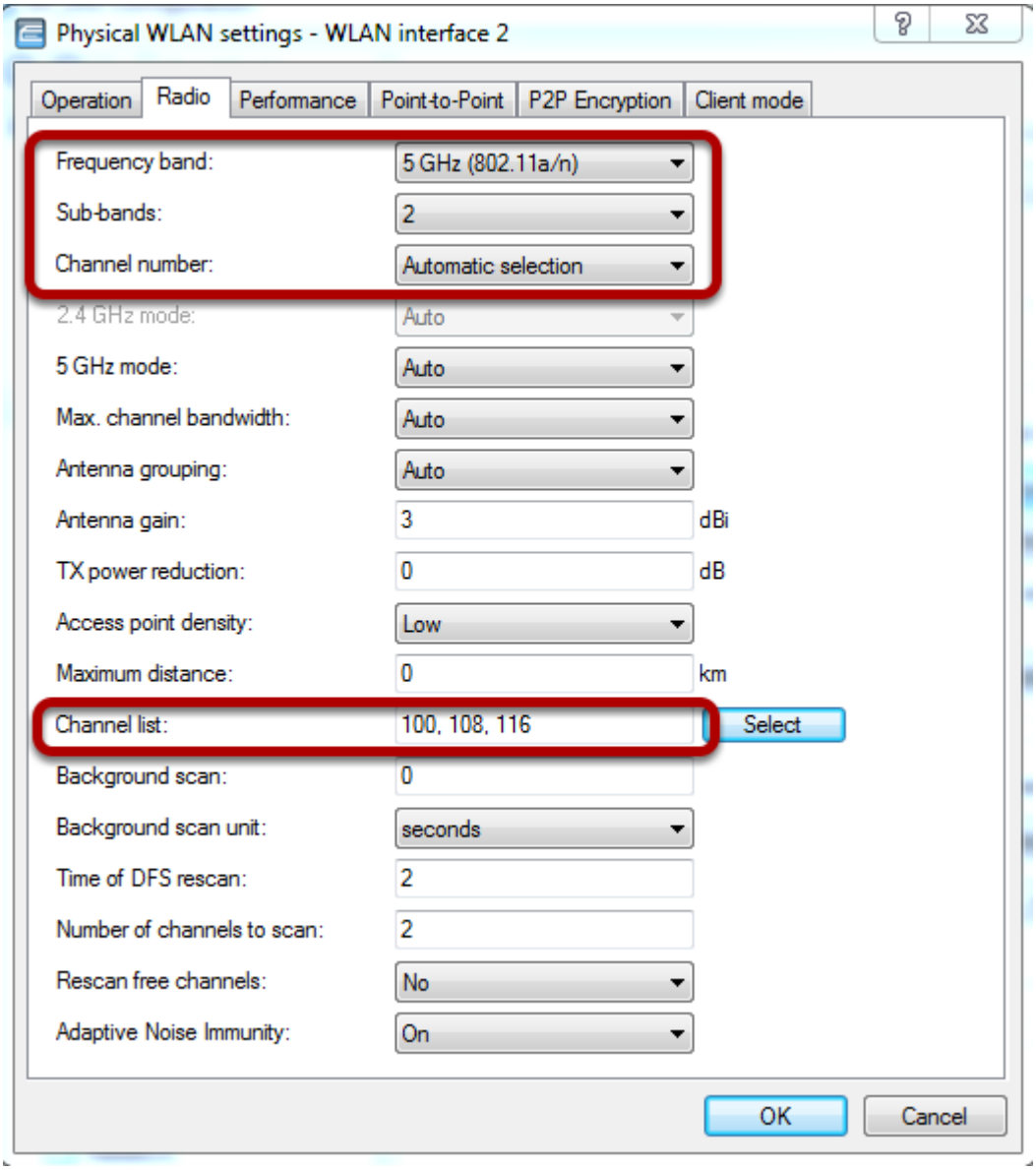
Configuration > Wireless LAN > General > Physical WLAN settings > WLAN interface 1 > Radio tab

Select the Frequency band 2.4 Ghz

Select the channel number to ""Automatic selection"" and the channel list to 1,6 and 11

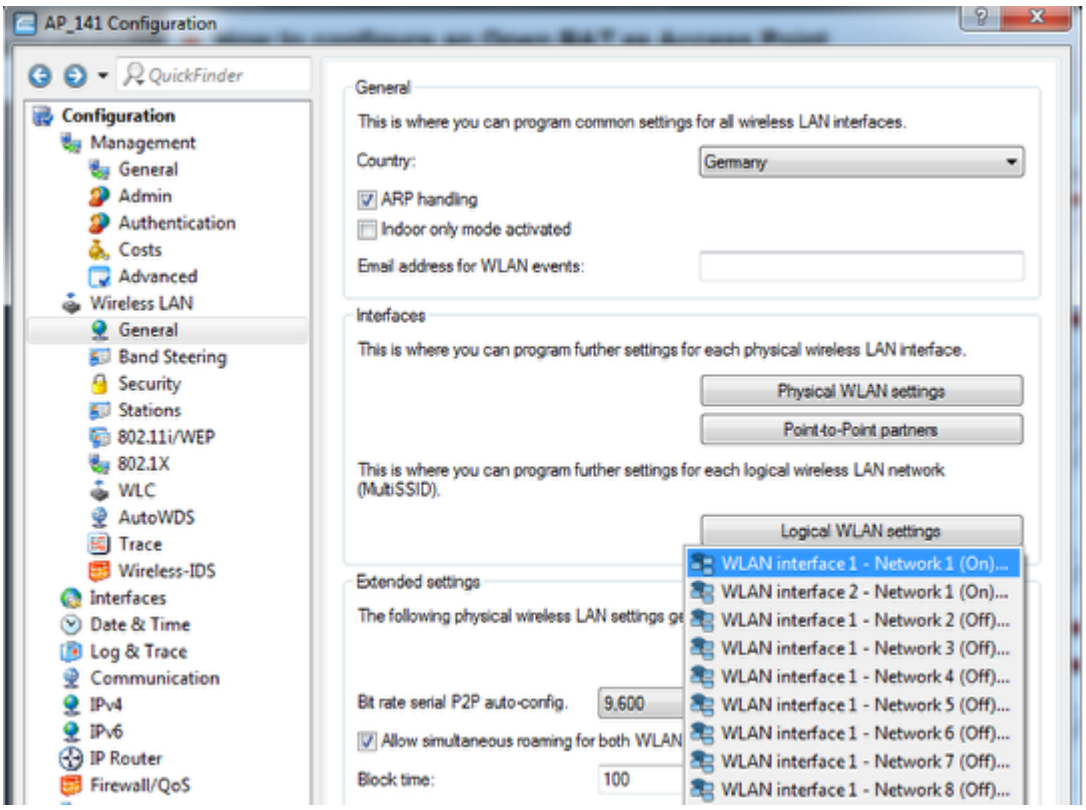
If you want to use a fix channel then fix it in ""Channel number""

Repeat this step for WLAN interface 2 changing the frequency band and the channel list (see below)



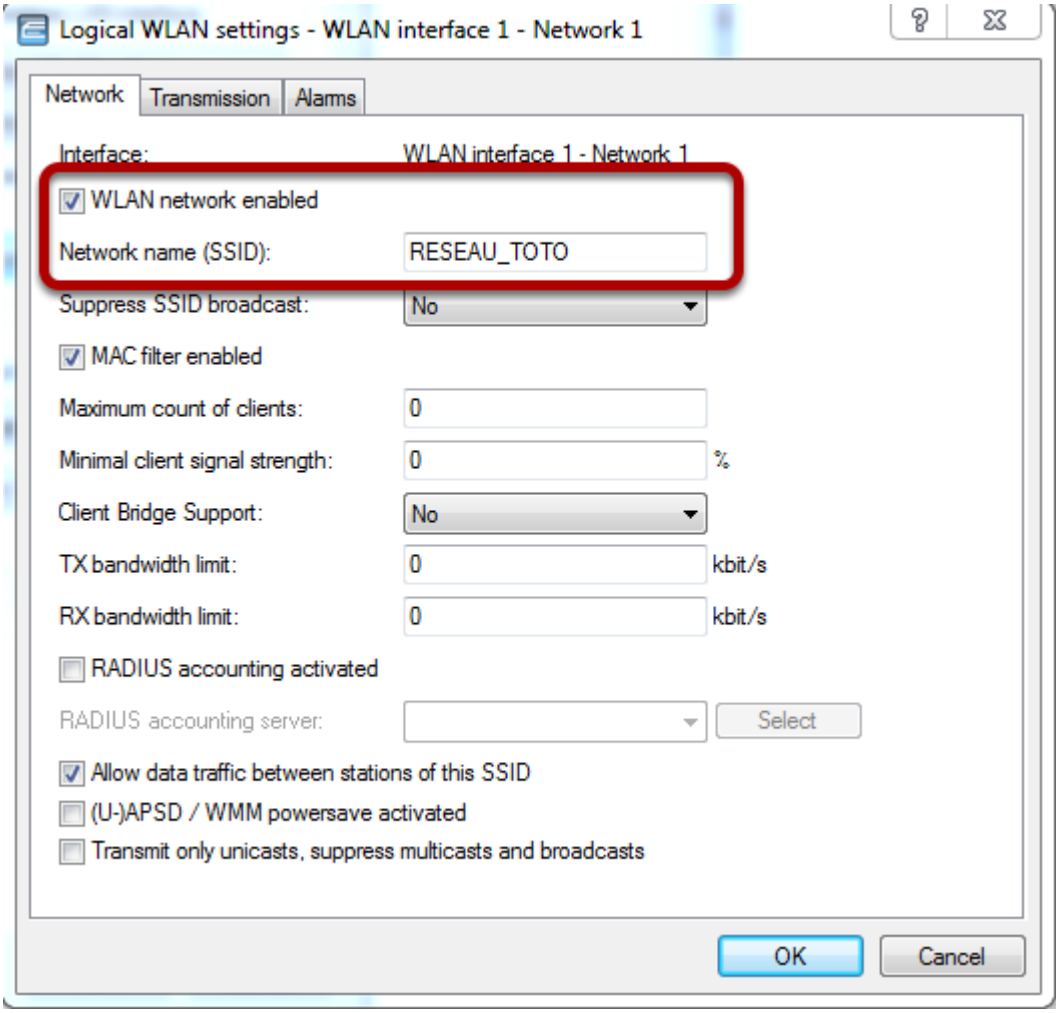
Channels 100, 108 and 116 are all in Sub band 2

Configure an SSID (1)



Configuration > Wireless LAN > General > Logical WLAN settings >
Select WLAN interface 1 - Network 1

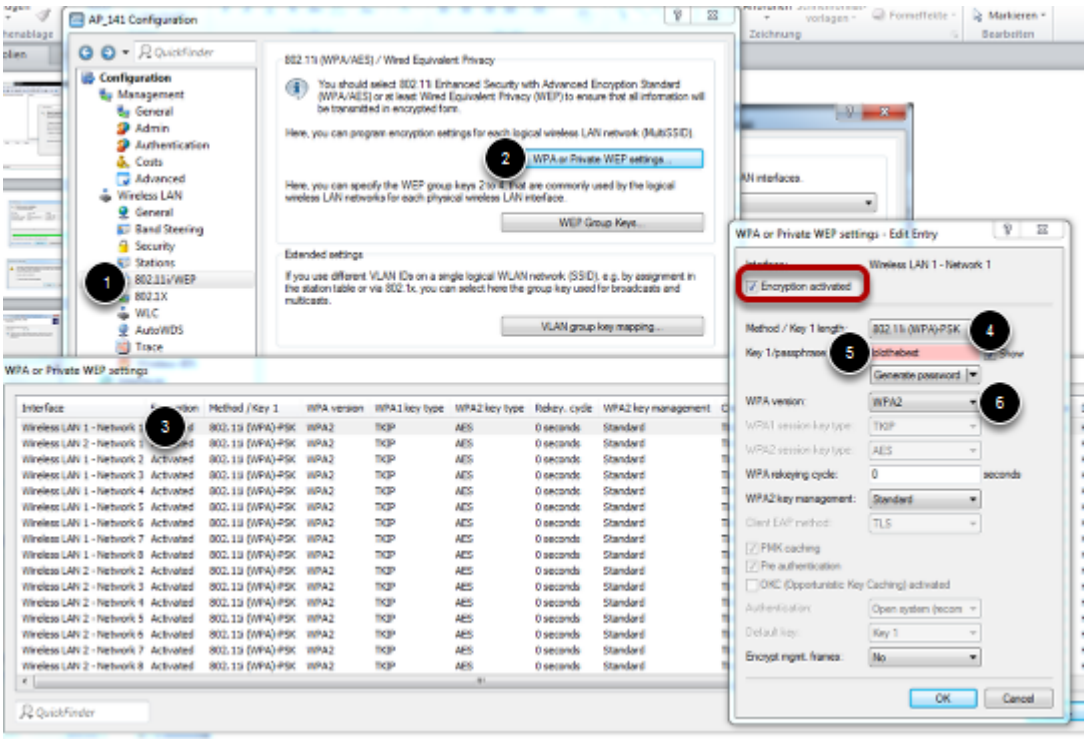
Configure an SSID (2)



Enable the WLAN network and enter the desired SSID. In our example : RESEAU_TOTO

Repeat this step for WLAN interface 2 - Network 1 (see in Configure an SSID (1) how to select this interface)

Configure the security settings



Configuration > Wireless LAN > 802:11i/WEP > WPA or Private WEP settings

In WPA or Private WEP settings window, open the security settings of Wireless LAN 1 - Network 1

Take care that the Encryption is activated

Select as method: 802.11i (WPA)-PSK

Choose a passphrase

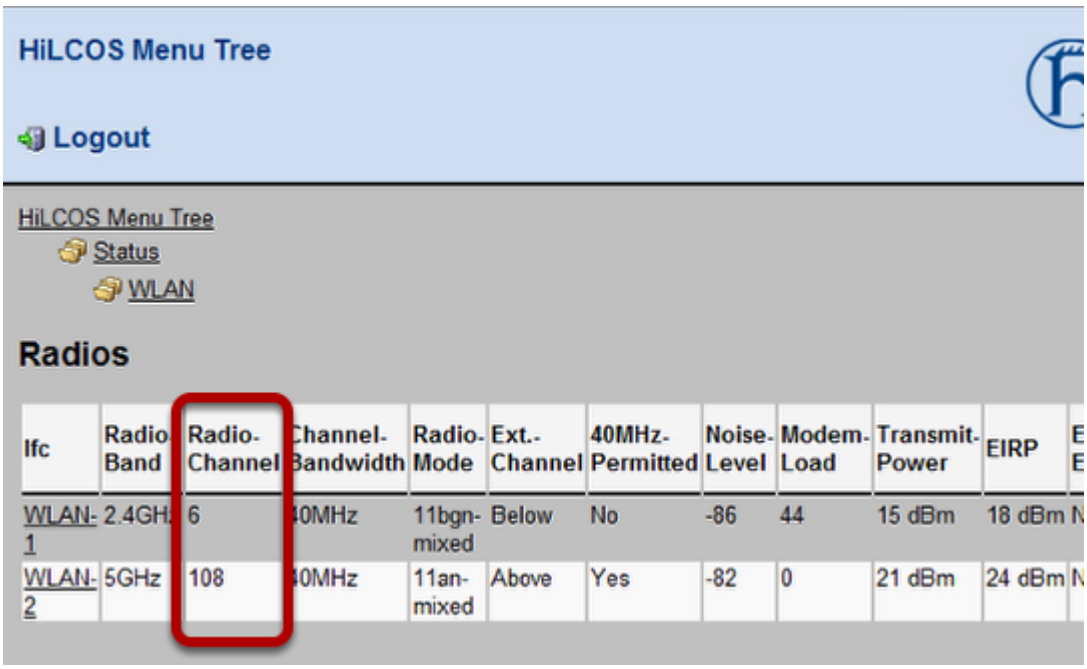
Select WPA2 as WPA version

Repeat this step for Wireless LAN 2 - Network 1 (from the WPA or Private WEP settings window)

Close all the windows by clicking OK.

Closing the main configuration dialog window, the configuration is applied on the BAT

Check the applied config in the web interface (1)

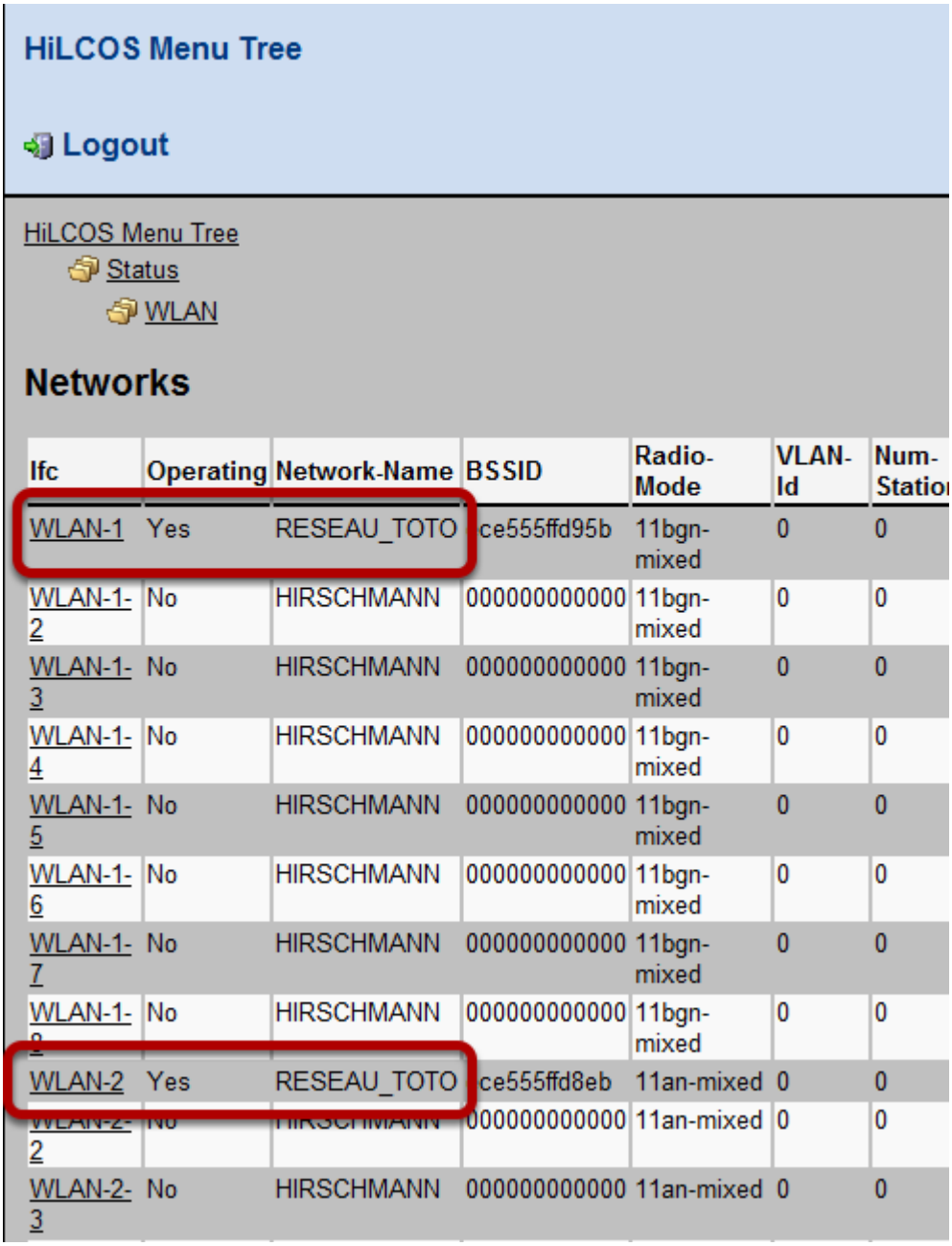


You can see under:

HiLCOS Menu Tree > Status > WLAN > Radio

The channels were the radios are operating

Check the applied config in the web interface (2)



You can see under:

HiLCOS Menu Tree > Status > WLAN > Networks

The SSID in operation