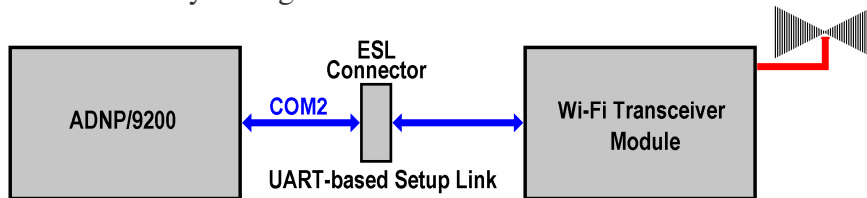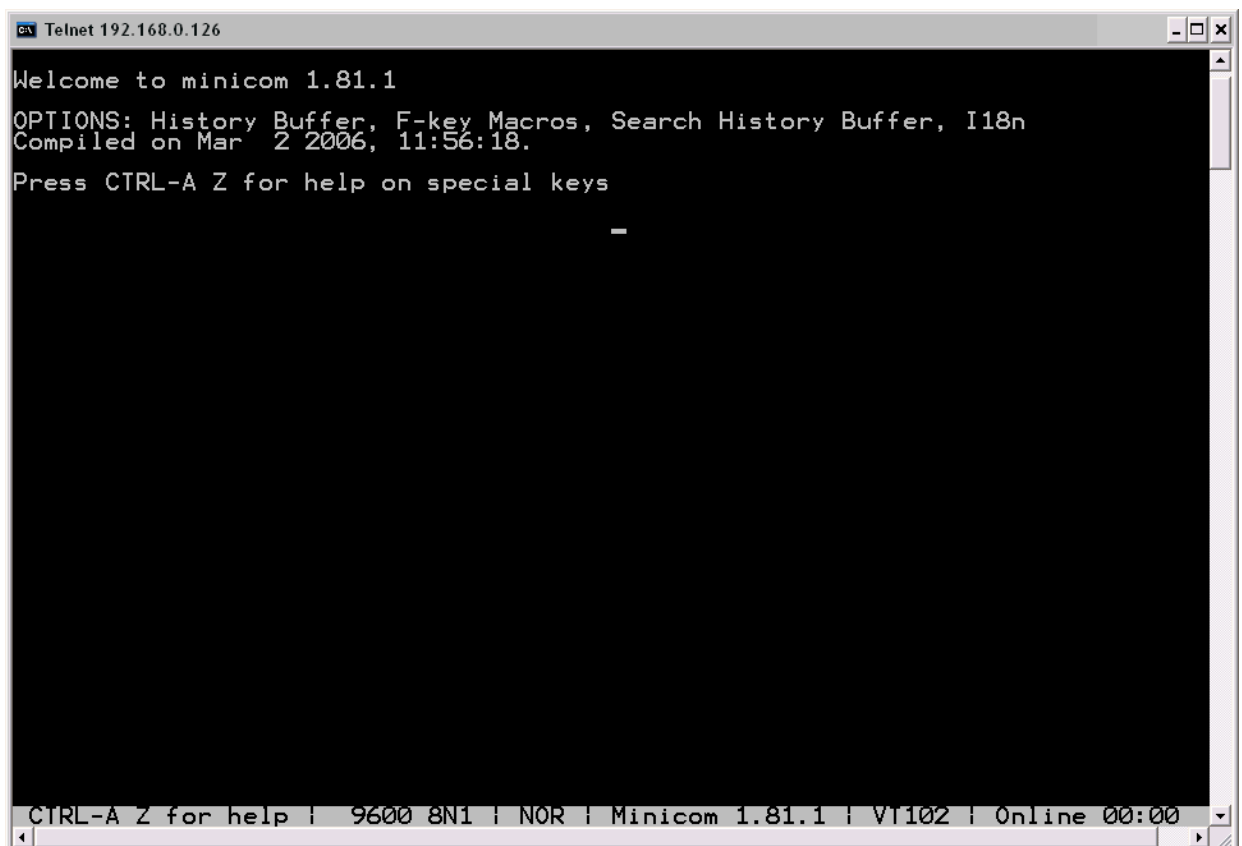## How to change the E2W/ESL1 Wi-Fi Transceiver Setup

The E2W/ESL1 Wi-Fi transceiver module contains an own setup configuration. The most important data elements of this setup configuration are the SSID name (Wi-Fi network name), network mode, and the security configuration.

The E2W/ESL1 Wi-Fi transceiver module offer a UART-based setup interface to change the Wi-Fi setup. The COM2 serial port of the DIL/NetPC ADNP/9200 is connected to this interface.

- **1. Step**: The directory **/flash** within the ADNP/9200 root file system contain a pre-configured *minicom* terminal emulation program. This program allows a communication over the UART-based setup link between the ADNP/9200 and the E2W/ESL1 Wi-Fi transceiver module. Please execute the following ADNP/9200 embedded Linux commands within a Telnet session:
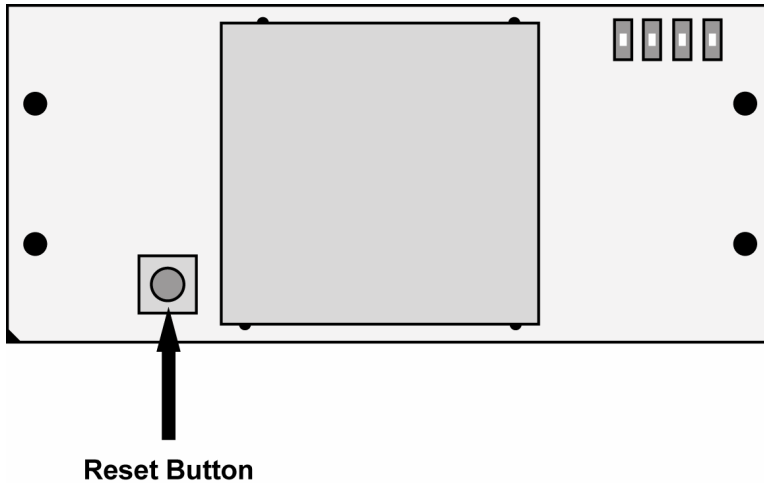
```
cd /flash
./minicom
```


The *minicom* terminal emulation program is now connected to the E2W/ESL1 Wi-Fi transceiver module UART interface.

- **2. Step**: Press with one hand the "x" key for the *minicom* terminal emulation program and hold this key down. Then press the reset button on the top of the E2W/ESL1 board and release this button after a short period of time.

Reset Button

The E2W/ESL1 Wi-Fi transceiver module firmware checks after each reset the presence of "x" characters. If some of these characters are detect within a specific period of time, the transceiver module firmware enters a setup mode.

- **3. Step**: Now press the **enter** key for the *minicom* terminal emulation program. The E2W/ESL1 Wi-Fi transceiver module firmware shows the current setup within the *minicom* window and displays a small setup menu.

- **4. Step**: Select the menu item "0 Server" and change the **Network mode** to "2=Bridging (One Host)".

- **5. Step**: Select the menu item "4 WLAN". First change the **Topology** to "0=Infrastructure". Then change the **Network name (SSID)** to "default".

```
Telnet 192.168.0.126                                                    _ □ ✕
    6 Security
    7 Defaults
    8 Exit without save
    9 Save and exit            Your choice ? 0
Network mode: 0=Wired Only, 1=Wireless Only, 2=Bridging(One Host) (1) ? 2

Change Setup:
    0 Server
    1 Channel 1
    2 Channel 2
    3 E-mail
    4 WLAN
    5 Expert
    6 Security
    7 Defaults
    8 Exit without save
    9 Save and exit            Your choice ? 4
Topology: 0=Infrastructure, 1=Ad-Hoc (1) ? 0
Network name (SSID) (LTRX_IBSS) ? default
Security suite: 0=none, 1=WEP, 2=WPA, 3=WPA2/802.11i (0) ?
TX Data rate: 0=fixed, 1=auto fallback (1) ?
TX Data rate: 0=1, 1=2, 2=5.5, 3=11, 4=18, 5=24, 6=36, 7=54 Mbps (7) ?
Enable power management (N) ?

Change Setup:
    0 Server
    1 Channel 1
    2 Channel 2
    3 E-mail
    4 WLAN
    5 Expert
    6 Security
    7 Defaults
    8 Exit without save
    9 Save and exit            Your choice ?
 CTRL-A Z for help | 9600 8N1 | NOR | Minicom 1.81.1 | VT102 | Online 00:01
```

- **6. Step**: Select the menu item "9 Save and exit". This selection stores the new Wi-Fi transceiver module setup configuration. Then check the Wi-Fi connection between the PC and the ADNP/9200 with a *ping:*

```
ping 192.168.1.126
```

For more information please see the document *mHTA9200-09.pdf: How to use the E2W/ESL1 Wi-Fi Adapter*.

```
Eingabeaufforderung                                                     _ □ ✕
C:\>ping 192.168.1.126

Ping wird ausgeführt für 192.168.1.126 mit 32 Bytes Daten:

Zeitüberschreitung der Anforderung.
Antwort von 192.168.1.126: Bytes=32 Zeit=7ms TTL=64
Antwort von 192.168.1.126: Bytes=32 Zeit=5ms TTL=64
Antwort von 192.168.1.126: Bytes=32 Zeit=4ms TTL=64

Ping-Statistik für 192.168.1.126:
    Pakete: Gesendet = 4, Empfangen = 3, Verloren = 1 (25% Verlust),
Ca. Zeitangaben in Millisek.:
    Minimum = 4ms, Maximum = 7ms, Mittelwert = 5ms

C:\>_
```

Please note: Sometime the first *ping* goes wrong. This is normal. The E2W/ESL1 Wi-Fi transceiver module needs some time to find and connect to an access point.

That is all.