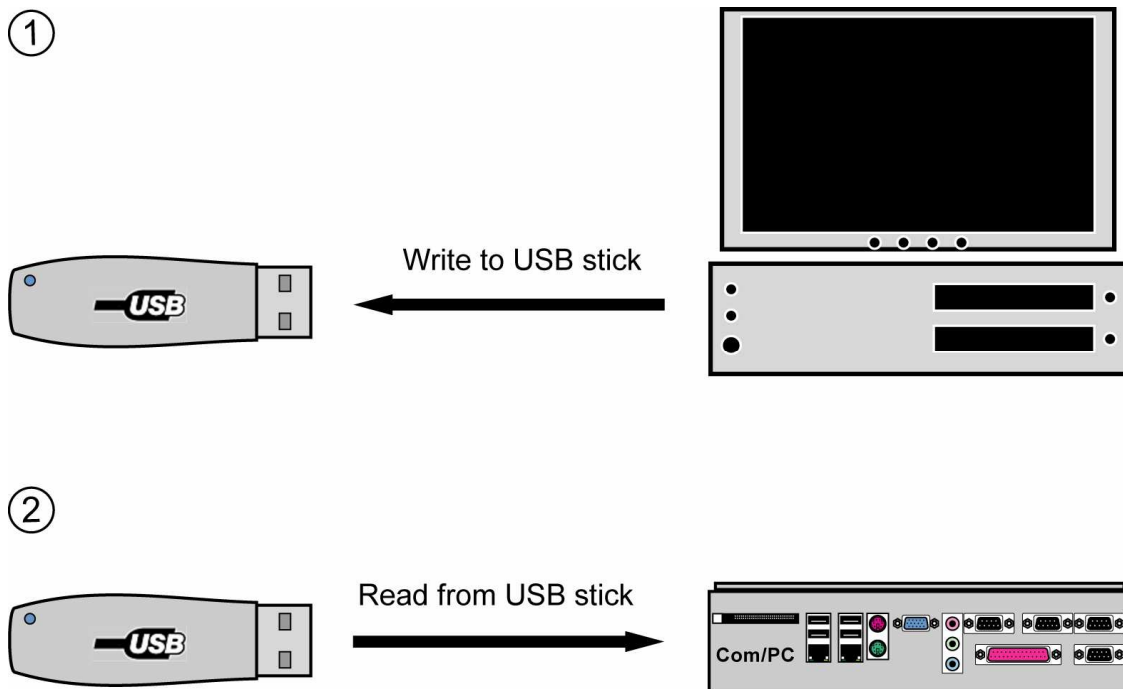


How to use the Com/PC WLAN (Wi-Fi) Interface in Access Point Mode

The Com/PC hardware contains an IEEE 802.11-based wireless interface. This WLAN (Wi-Fi) interface supports three different operating modes (**access point mode**, **client mode** and **ad-hoc mode**). The Com/PC Embedded Gateway Linux (EGL/2) operating system is also prepared for WLAN (Wi-Fi) usages.

- **1. Step:** Please download the current WLAN (Wi-Fi) driver archive for EGL/2 from the web site <http://www.ssv-comm.de> and extract the files from the archive to an USB stick.



Please note: The installation of new EGL/2 software components needs two steps. The first step writes the necessary files to an USB stick with the help of a development system. The second step installs these files on the Com/PC.

- **2. Step:** Booting your Com/PC with VGA display and keyboard attached. Please see also the document: *Com/PC1 Embedded Gateway Linux 2 (EGL/2) First Steps*. Then insert the USB stick into the Com/PC.
- **3. Step:** Login as root user (user name *root*, password *root*). Then execute the *ssvusbmount* command.

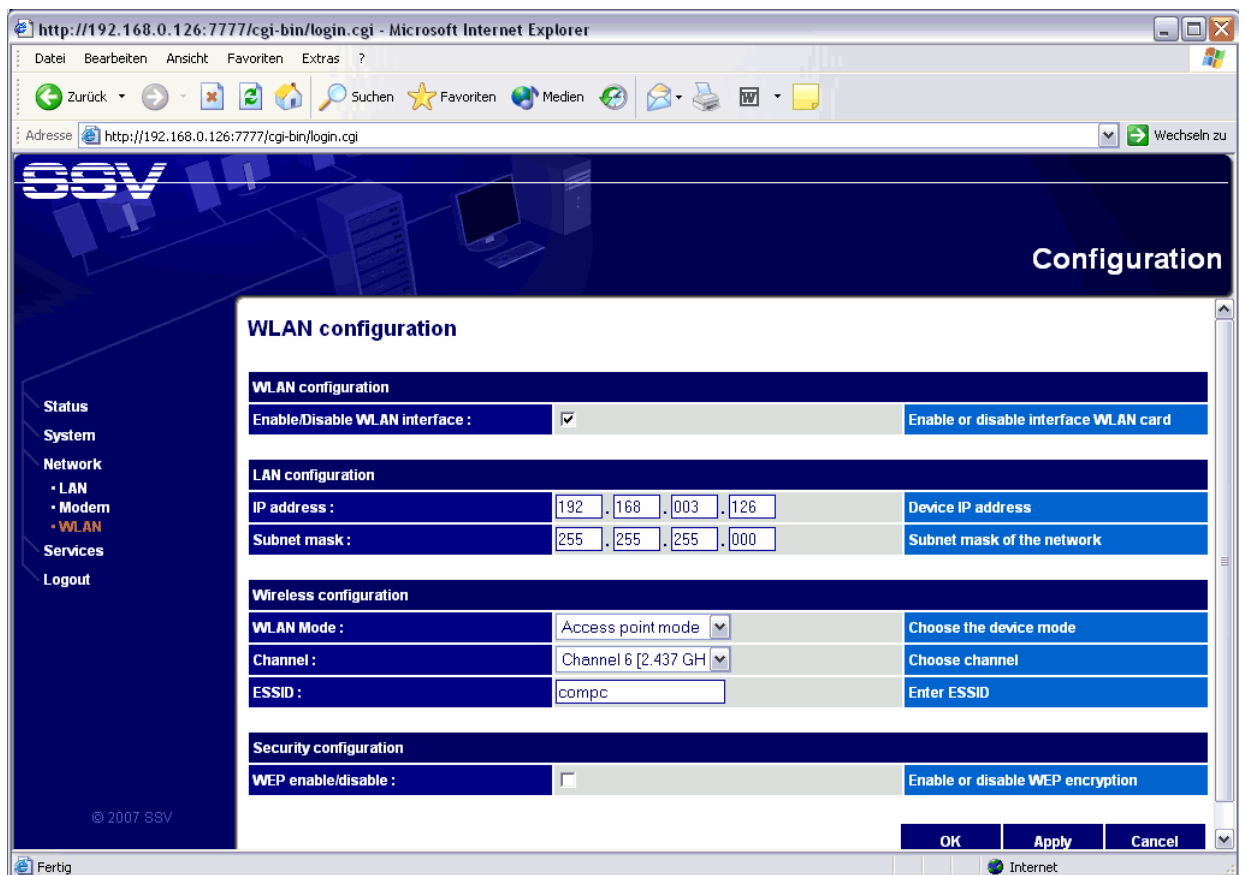
```
login as: root
Using keyboard-interactive authentication.
Password:
Last login: Wed Jan 31 12:00:01 2007 from 192.168.0.222
EGL2PRO:~# ssvusbmount
usb storage mounted at "/rw/usb".
Starting...
```

```
Update EGL/2 WLAN driver (Build 2830)...done.
Rebooting...
```

Please note: The EGL/2 command *ssvusbmount* mounts a USB stick to the Com/PC file system. This command is implemented over a shell script. *Ssvusbmount* checks the USB device – direct after mounting – for a file with the name *usbautostart.sh*. If this file is present as shell script, then EGL/2 runs the script.

- **4. Step:** The *ssvusbmount* command installs the WLAN (Wi-Fi) driver and reboots the Com/PC. Please wait until the reboot has finished.
- **5. Step:** Use the Web-based configuration interface (see menu item *Network* → *WLAN*) to enable the WLAN (Wi-Fi) interface.
- **6. Step:** Select the WLAN *Access point mode* and supply the Com/PC WLAN (Wi-Fi) interface with a valid IP address and network mask. Then press the *Apply* button. The following table shows a useable EGL/2 default setup for the WLAN (Wi-Fi) interface.

Parameter	Default Setup
WLAN Mode	Access Point
WLAN Channel	6 (2.437 GHz)
ESSID	compc
IP Address (Network Mask)	192.168.3.126 (255.255.255.0)

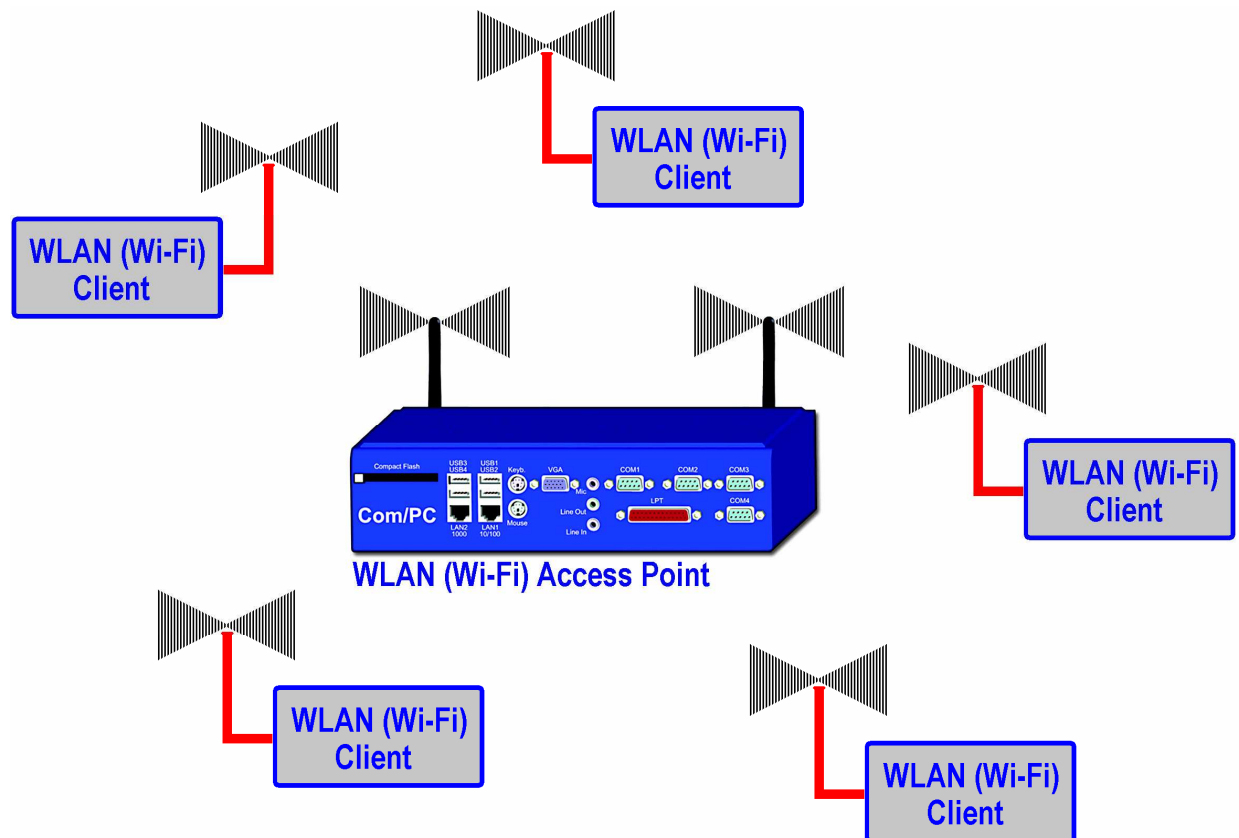


The screenshot shows a web browser window displaying the SSV Configuration interface. The address bar shows `http://192.168.0.126:7777/cgi-bin/login.cgi`. The page title is "Configuration". The main content area is titled "WLAN configuration" and contains several sections:

- WLAN configuration:** A checkbox for "Enable/Disable WLAN interface" is checked. A button labeled "Enable or disable interface WLAN card" is visible.
- LAN configuration:** Fields for "IP address" (192.168.003.126) and "Subnet mask" (255.255.255.000) are shown. Buttons for "Device IP address" and "Subnet mask of the network" are present.
- Wireless configuration:** Fields for "WLAN Mode" (Access point mode), "Channel" (Channel 6 [2.437 GH]), and "ESSID" (compc) are shown. Buttons for "Choose the device mode", "Choose channel", and "Enter ESSID" are present.
- Security configuration:** A checkbox for "WEP enable/disable" is unchecked. A button labeled "Enable or disable WEP encryption" is visible.

At the bottom right, there are buttons for "OK", "Apply", and "Cancel". The footer of the page shows "© 2007 SSV".

Please note: The access point mode allows you to build a WLAN (Wi-Fi) network with the Com/PC in the centre. The following picture shows the architecture.



The client systems within this wireless network know the Com/PC ESSID over an individual setup procedure. All traffic goes over the Com/PC as access point.

All systems inside a wireless network of these kind needs an IP address within the same range (e.g. 192.168.3.1 to 192.168.3.254 with network mask 255.255.255.0).

That is all.