




NETWORK ADMINISTRATOR MANUAL

Configuring an Evolis printer via Wi-Fi or Ethernet

Document History

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Table of contents

1 - Introduction	5
1.1 Introduction	5
1.2 List of icons	5
2 - General remarks.....	6
2.1 Interface characteristics	6
2.2 TCP/IP Protocol	6
2.3 Wi-Fi	6
2.4 MAC address	7
2.5 Hostname	7
2.6 IGMP	7
3 - Network configuration.....	8
3.1 Network installation wizard	8
4 - Printer configuration using escape commands.....	10
4.1 Access to the printer dialogue menu	10
4.2 List of Escape commands.....	11
4.2.1 General settings	11
4.2.2 Wi-Fi: General settings	13
4.2.3 Wi-Fi: Rwifi and Pwifi Keywords list.....	15
5 - Evolis printer configuration settings.....	17
5.1 Access to the administration web page	17
5.2 Viewing the settings.....	17
5.2.1 Network	17
5.2.2 Wireless	18
6 - Examples of printer configuration.....	19
6.1 Configuring a printer in DHCP mode, located on a sub-network.....	19
6.1.1 With the embedded web server	19
6.1.2 With escape commands	20
6.2 Configuring a printer with a static IP address, on a subnet with WINS resolution.....	21
6.2.1 With the embedded web server	21
6.2.2 With escape commands	21
6.3 Configuring a printer with a static IP address, on a subnet without WINS resolution.....	23
6.3.1 With the embedded web server	23
6.3.2 With escape commands	23
6.4 Configuring a printer in Wi-Fi mode - Ad hoc with no security	25

6.4.1	With the embedded web server	25
6.4.2	With escape commands	25
6.5	Configuring a printer in Wi-Fi mode - Access point with Wep 128 bits security and static IP address	26
6.5.1	With the embedded web server	26
6.5.2	With escape commands	26
6.6	Configuring a printer in Wi-Fi mode - Access point with WPA-AES security and IP address in DHCP mode	27
6.6.1	With the embedded web server	27
6.6.2	With escape commands	27

Table of figures

Figure 1: Network installation wizard	8
Figure 2: Welcome screen	9
Figure 3: Access to the printer dialogue menu	10
Figure 4: Printer's properties window.....	10
Figure 5: Printer's properties window.....	11
Figure 6: Web interface - Network.....	17
Figure 7: Web interface - Wireless.....	18
Figure 8: DHCP mode configuration.....	19
Figure 9: Web server (DHCP mode).....	19
Figure 10: Static IP configuration with WINS resolution.....	21
Figure 11: Web server (Static IP)	21
Figure 12: Static IP configuration without WINS resolution	23
Figure 13: Web server (Without WINS resolution).....	23
Figure 14: Web server (Wi-Fi - Ad hoc)	25
Figure 15: Web server (Wi-Fi - Access point - Wep 128).....	26
Figure 16: Web server (Wi-Fi - Access point - WPA-AES).....	27

1 - Introduction

1.1 Introduction

This manual describes how to configure a Primacy or a Zenius printer connected to Wi-Fi or to a TCP/IP network, also known as an Ethernet network.

The two printers are similar, for this reason, the network administrator manual is the same for both printers.

This information is intended for well-informed readers who are specialists in computer networking.

The examples given are based on Windows 7.

Changing the printer's basic settings, without prior knowledge of the layout of the LAN in question or without genuine technical knowledge may result in a malfunction of the printer, and may even extend to a more widespread failure of all part of the LAN.

Contact your System and Network Administrator before connecting to or changing the settings for your local area network.

1.2 List of icons



Warning Sign:
Indicates an operation which require special attention.



Note:
Indicates general remarks.



No entry sign:
Identifies steps or actions strictly prohibited.



Eye:
Inspect, Check.

2 - General remarks

All Evolis printers have the benefit of a TCP/IP network connection mechanism.

This feature is available as standard or as an option, depending on the model in the range.

By default, the printer comes configured in DHCP mode (Dynamic Host Configuration Protocol), which means that its IP address is supplied by the network. Besides, by default, Wi-Fi is disabled.

In addition to these basic settings, the network administrator has the option of configuring the printer differently in order to comply with the constraints imposed by the corporate LAN:

- Printer connected in a subnet, in DHCP.
- Printer connected within a subnet with fixed IP address, with WINS resolution.
- Printer connected within a subnet with fixed IP address, without WINS resolution.
- Printer connected in Wi-Fi.

The printer may be identified on the network according to:

- Its hostname (NETBIOS),
- Its IP address,
- Its serial number.

The user-definable settings are:

- The printer's IP address,
- Subnet mask,
- Gateway,
- WINS server,
- Wireless connection settings

The following sections describe the procedures to be followed in order to configure the printer taking the specific features of the LAN / Wi-Fi into account.

The examples and screen images are from a Microsoft Windows environment, on the basis of which your System and Network Administrator will have full scope to configure the printer in other environments such as Mac OS X or Linux.

2.1 Interface characteristics

Protocol:	10Base-T / 100Base-T
Speed:	10Mbit/sec and 100Mbit/sec, automatic detection
Connection:	Auto-MDX
Link:	Half / Full duplex
LED:	Green LED On = 10Mbit/s Off = 100Mbit/s Orange LED On = Printer connected to network Flashing = Printer connected and network traffic

2.2 TCP/IP Protocol

- IPv4 compatible
- IP address configured under DHCP (factory setting) or manually
- Raw mode printing uses the TCP/9100 port
- Name authentication is based on NBNS (NetBios Name Server)
- NBNS service via TCP for WINS resolution when the WINS server is configured.

When the IP address is static, the configuration relating to the gateway, subnet masks and WINS resolution is set manually.

When the printer is configured in DHCP mode, this data is supplied by the DHCP server.

2.3 Wi-Fi

Your printer may have an optional Wi-Fi interface. Out of factory, the wired interface is enabled and the Wi-Fi interface is disabled. See how to configure the printer on a Wi-Fi network on paragraph 5.2.2 Wireless, page 18.

2.4 MAC address

- Generated from the printer's serial number with the Evolis 00-1A-FD header (Evolis OUI - Organisationally Unique Identifier).
- For example, for the serial number P07100001234, the MAC address is 00-01-FD-00-04-D2.
- 00-04-D2 is the hexadecimal transcription of the decimal value 001234.



MAC address is visible beneath the printer

2.5 Hostname

The printer name (hostname) is automatically set as EVO_NNN_XXXXXXX, where:

- **EVO** is the root for Evolis products
- **NNN** varies with the printer model:
 - **PR1** for Primacy
 - **ZE1** for Zenius
- **XXXXXXX** is obtained from the printer's serial number, e.g. EVO_PR1_0001234 for serial number **Z710001234**

Hostnames are used by various naming systems. Evolis limits the hostname to 15 characters according to the Windows Netbios limitations: <http://support.microsoft.com/kb/909264/en-us>

2.6 IGMP

Evolis uses IGMP frame to send query to all printers connected to the network. To use the discovery services offered by the Evolis Premium Suite, it is important that the network gateways support IGMP frames. To route Multicast traffic between two LANs, the gateway requires PIM Dense or PIM Sparse mode.

Example for Windows Server 2003: <http://www.labo-microsoft.org/articles/win/rad2003/7>

The default Evolis Multicast address is 224.69.86.79.

3 - Network configuration



The installation of USB driver is not described in this manual. Once the Evolis Print Center is installed, follow the following instructions.

3.1 Network installation wizard

1. Launch the Evolis Print Center and click on **Tools**, then on **Network printer installation wizard (DHCP)** for an installation in DHCP mode or on **Advanced network printer installation wizard (static IP)** for a printer installation with static IP.

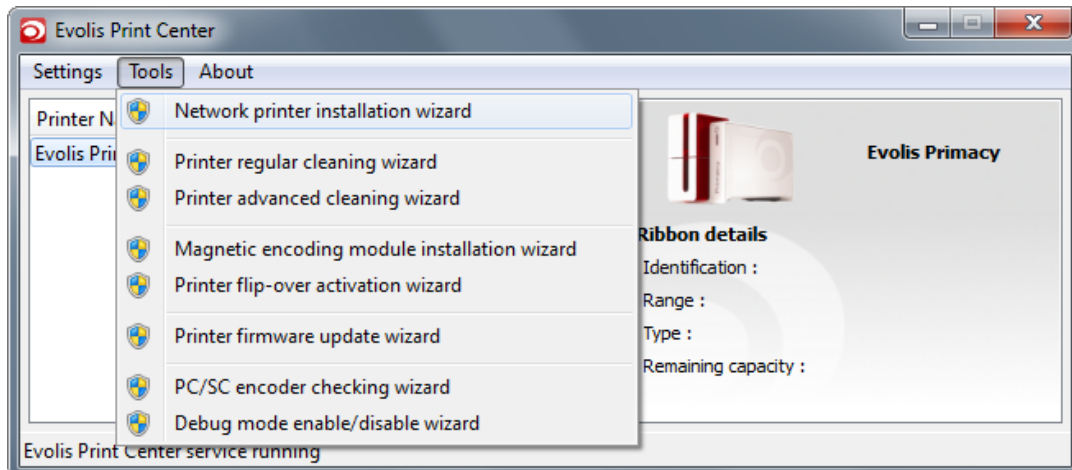


Figure 1: Network installation wizard

2. The following windows opens:

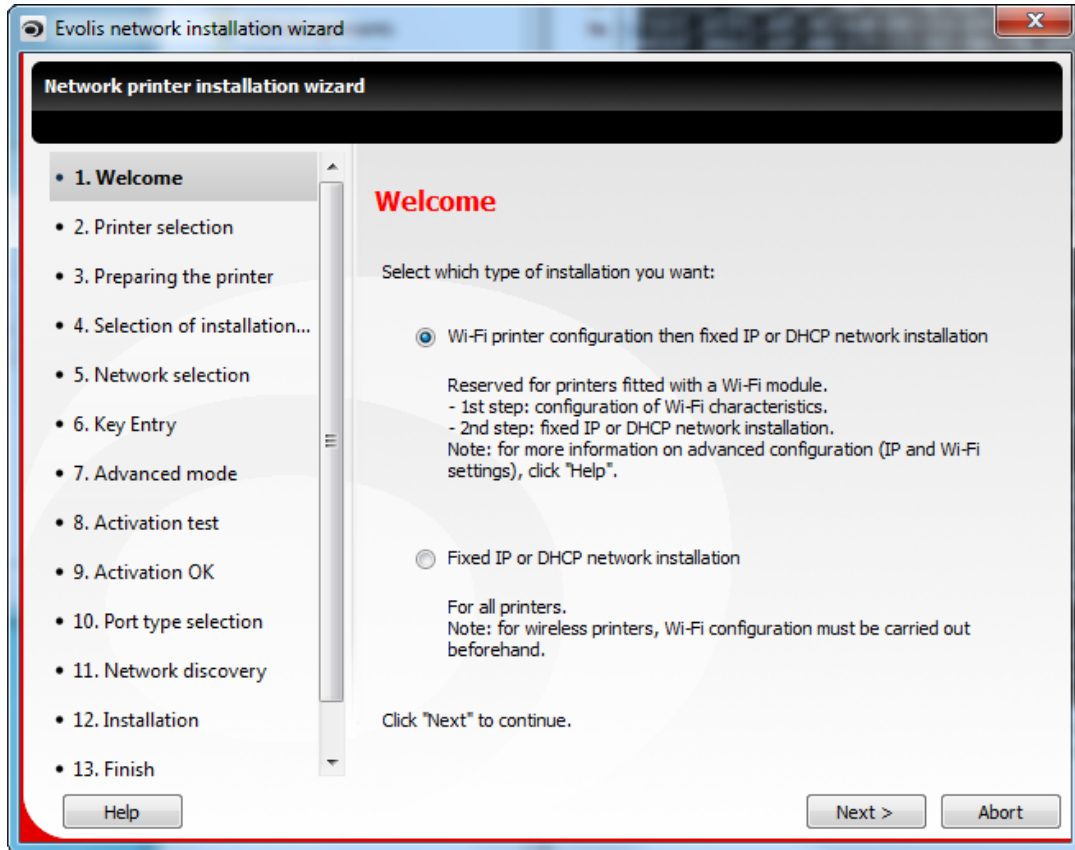


Figure 2: Welcome screen

3. Follow the instructions of the wizard in order to install your printer.

4 - Printer configuration using escape commands

Administrators can also configure printers by means of ESCape commands.

To do so, it is essential to install the printer and its USB driver beforehand, in order to have a direct connection available for dialogue.

4.1 Access to the printer dialogue menu

1. Open the **Evolis Print Center**.
2. Double click on the printer you want to dialog with.

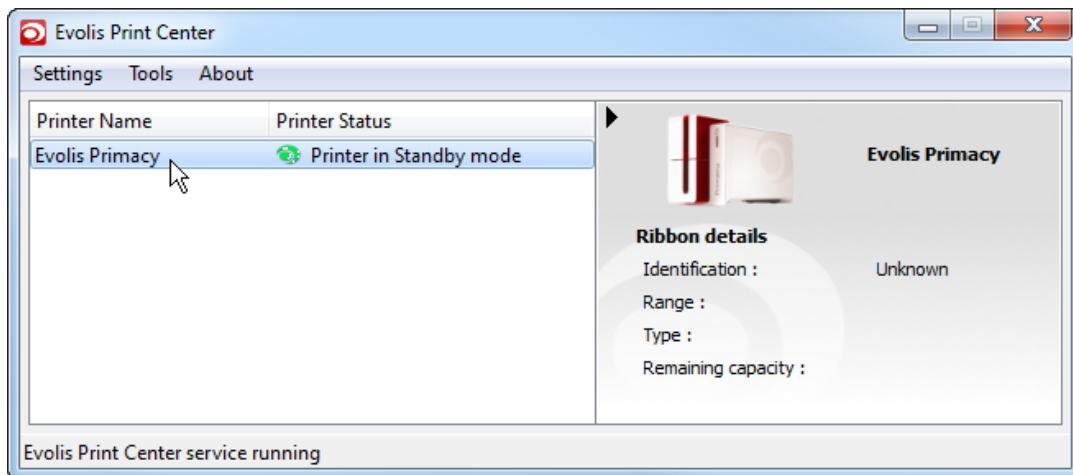


Figure 3: Access to the printer dialogue menu

3. A properties window opens. Click on **Maintenance**.

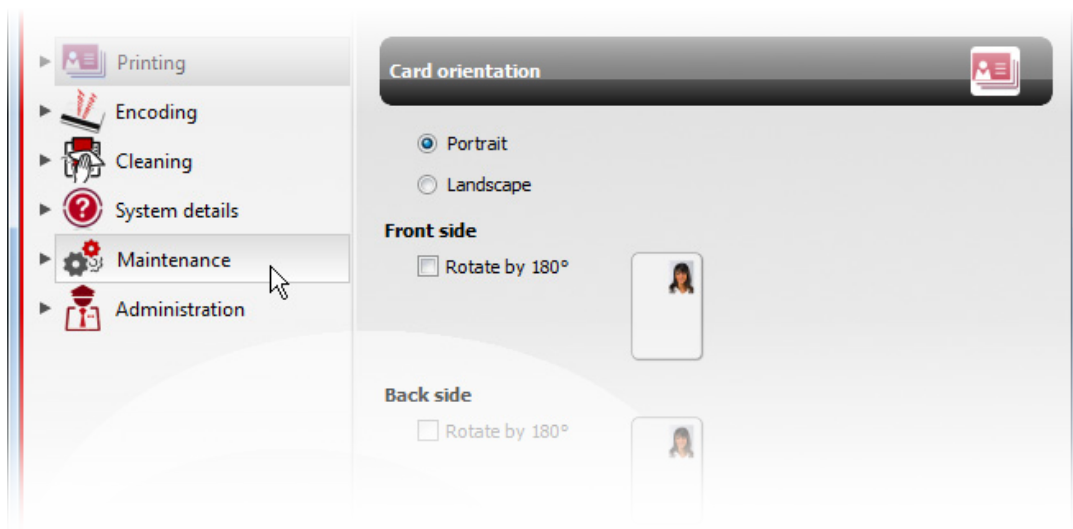


Figure 4: Printer's properties window

4. In **Printer commands prompting** sub-menu, you can enter ESC commands in **Command** field.

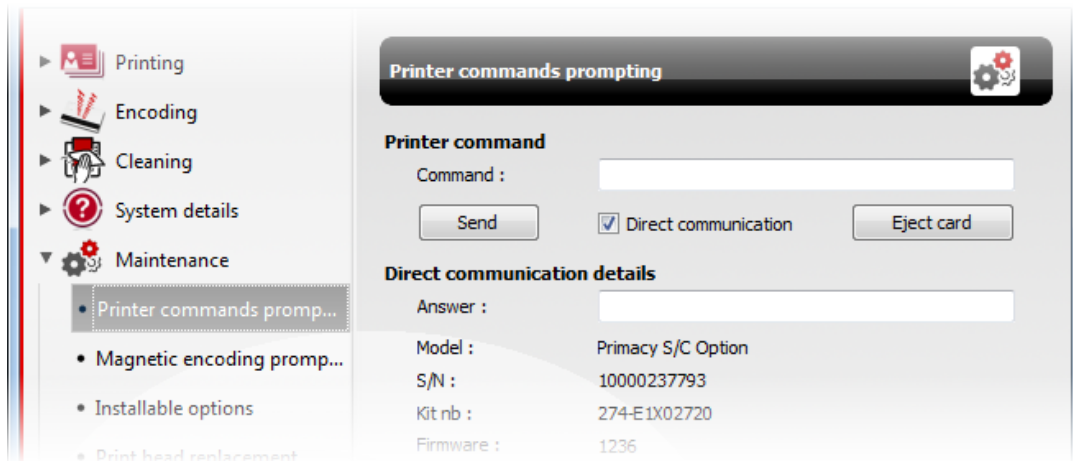


Figure 5: Printer's properties window

4.2 List of Escape commands



It is recommended to always read the contents or status of the printer before making any changes. Similarly, after any modification, check that new data is handled properly by reading it.

To enter an escape sequence, fill the **Command** field with instructions described hereafter.



It is recommended to enter Escape commands via USB connection in order to avoid losing the connection.

4.2.1 General settings

Escape sequence:	Read the printer's IP address
Command:	Rip;opt1
Parameters:	value 1 is optional, if set, it returns the dhcp status: "Manual" if the IP has been set manually or "Auto" if dhcp is activated.
Example:	Rip;1
Return:	IP address (i.e. 192.168.1.10 Auto)
Note:	-
Escape sequence:	Set the printer's IP address
Command:	Pip;par1
Parameters:	par1 is the IP address to be set, must be 4 digit separated by dot character '.' or it can be the string "dhcp" to enable DHCP service.
Example:	Pip;192.168.0.1 or Pip;dhcp
Return:	OK or ERROR CDE
Note:	When the IP address entered is set to 0.0.0.0 it disables the interface.
Escape sequence:	Read Mask address
Command:	Renm
Parameters:	-
Example:	-
Return:	Ethernet subnet mask (i.e. 255.255.255.0)
Note:	-

Escape sequence:	Read Hostname
Command:	Rehn
Parameters:	-
Example:	-
Return:	Hostname (i.e. EVO_PR180023456)
Note:	-

Escape sequence:	Set Mask Address
Command:	Penm;par1
Parameters:	par1 is ethernet subnet mask to be set, 4 numbers separated by dot character '.'
Example:	Penm;255.255.255.0
Return:	OK or ERROR PARAMETERS
Note:	When using DHCP, this subnet mask is given by DHCP server. This is useful only when IP address is set manually

Escape sequence:	Read Gateway address
Command:	Regw
Parameters:	-
Example:	-
Return:	Ethernet gateway IP address (i.e. 192.168.0.1)
Note:	-

Escape sequence:	Set Gateway address
Command:	Pegw;par1
Parameters:	par1 is Gateway IP address to be set, 4 numbers separated by dot character '.'
Example:	Pegw;192.168.0.1
Return:	OK or ERROR PARAMETERS
Note:	When using DHCP, the gateway is given by DHCP server. This is useful only when IP address is set manually.

Escape sequence:	Read Win Server address
Command:	Rews
Parameters:	-
Example:	-
Return:	WINS server IP address (i.e. 192.168.0.2)
Note:	-

Escape sequence:	Set Win Server address
Command:	Pews;par1
Parameters:	par1 is WINS server IP address to be set, 4 numbers separated by dot character '.'
Example:	Pews;192.168.0.2
Return:	OK or ERROR PARAMETERS
Note:	When using DHCP, the WINS server is given by DHCP server. This is useful only when IP address is set manually. This is used to register the printer hostname, so in case of sub-network the printer is found faster.

Escape sequence:	Read Multicast address
Command:	Rmip
Parameters:	-
Example:	-
Return:	224.69.86.79
Note:	The multicast IP address (by default: 224.69.86.79) is used to discovery Evolis printers present on the network.

Escape sequence:	Set Multicast address
Command:	Pmip;par1
Parameters:	par1 is Multicast IP address to be set, 4 numbers separated by dot character '.'.
Example:	Pmip;224.69.86.79
Return:	OK or ERROR PARAMETERS
Note:	Evolis recommends to not modify this parameter.

Escape sequence:	Restart network
Command:	Snetw
Parameters:	-
Example:	-
Return:	-
Note:	Restart network with saved configuration. This command as the same effect as clicking on button "Restart Network" on printer web page.

4.2.2 Wi-Fi: General settings

Escape sequence:	Presence of Wi-Fi module
Command:	Rtp;w
Parameters:	-
Example:	-
Return:	0 / 1
Note:	This command return 1 if the Wi-Fi module is present in your printer or 0 if it is not.

Escape sequence:	Read Wifi parameters
Command:	Rwifi;keyw
Parameters:	keyw is the parameter to be read.
Example:	-
Return:	The value of selected parameter or ERROR PARAMETERS
Note:	See paragraph 4.2.3, page 15 for a list of keywords.

Escape sequence:	Set Wifi parameters
Command:	Pwifi;keyw;value
Parameters:	keyw is the parameter to be modify. value is the new value of selected parameter.
Example:	-
Return:	OK or ERROR PARAMETERS
Note:	See paragraph 4.2.3, page 15 for a list of keywords.

Escape sequence:	Send ATi command
Command:	Cwifi;cmd
Parameters:	cmd is the command to be send to the WiFi module.
Example:	-
Note:	see ATi_Programmers_Manual_8_40.pdf
Escape sequence:	Wi-Fi module status
Command:	Cwifi;RP2
Parameters:	-
Example:	-
Return:	LAN-to-WiFi Bridge Mode when BRM>0: "LAN/WIFI Bridge Mode,<LAN Status>,<WIFI status>" Where, <ul style="list-style-type: none"> <LAN Status> 0 – No Link 1 – Link OK <WiFi Status> 1 – Not Connected 2 – Connecting 4 – Connected
Note:	-
Escape sequence:	List of all Wi-Fi networks available
Command:	Cwifi;RP20
Parameters:	-
Example:	Jetta,AP,06:14:6C:69:4A:7C,WPA,1,25 RTL8186-default,AP,00:E0:4C:81:86:86,NONE,1,77 dlink_test,AP,00:1C:F0:9A:63:7A,NONE,1,68
Return:	List of up to 16 APs and Ad-Hoc networks available in the surrounding area. Each line contains the following comma-separated fields: <SSID>,<ADHOC AP,<BSSID>,<security type>,<channel>,<RSSI> <ul style="list-style-type: none"> • <security type>=NONE or WEP64 or WEP128 or WPA or WPA2 • <RSSI>= Value between 0-255 which represents SNR+NoiseFloor. Higher SSI values indicate weaker signal strength.
Note:	-

4.2.3 Wi-Fi: Rwifi and Pwifi Keywords list

The following keywords are to be entered in the command field instead of **keyw** and **value** parameters of Rwifi and Pwifi settings.



These keywords are case sensitive.

Escape sequence:	Read all Wifi parameters
Keyword:	all
Parameters:	keyw is the parameter to be modify. value is the new value of selected parameter.
Example:	Rwifi;all
Return:	All Wifi parameters. Example: <ul style="list-style-type: none"> • RP0;CO2128- D • RP1;ID807p03 30.6.2 • RP5;14061A98 • MACA;001AFD00146A • MDE;2 • WLCH;11 • WSIO;NETGEAR_BE • WST0;4 • WKY0; • WPP0;***** • EUSN; • EPSW;
Escape sequence:	Read all Wifi parameters
Keyword:	MDE
Value:	0: Disable 1: Connection in AdHoc mode, The printer creates a WiFi network with SSID configured in WSIO (non secured or WEP available). Then set static IP. 2: The printer connects to a WiFi network with SSID configured in WSIO.
Example:	Rwifi;MDE or Pwifi;MDE;2
Escape sequence:	Wireless LAN Communication Channel
Keyword:	WLCH
Value:	1 to 13: When the wireless interface is configured to operate in Ad-Hoc mode, this parameter must be given a value between 1 and 13 that defines the channel to be used for beacon transmission. When the wireless interface joins an already existing Ad-Hoc network, it adopts that network's channel.
Example:	Rwifi;WLCH or Pwifi;WLCH;11
Escape sequence:	Wireless LAN Service Set Identifier
Keyword:	WSIO
Value:	The destination Wireless LAN Service Set Identifier (SSID) string. SSID required for communications with a specific WLAN Access Point (AP) or Ad-Hoc. The access point must be configured with the same SSID.
Example:	Rwifi;WSIO or Pwifi;WSIO;Name_Of_SSID

Escape sequence:	Wireless LAN Security Type Array
Keyword:	WST0
Value:	The Wireless LAN security type for each individual SSID in the array. 0: No security 1: WEP 64 2: WEP 128 3: WPA-PSK with TKIP encryption 4: WPA2-PSK with TKIP or AES encryption 105: WPA-TKIP Enterprise with EAP-TLS or PEAPMSCHAPv2. RADIUS Certification Verification will be skipped 106: WPA2-AES Enterprise with EAP-TLS or PEAPMSCHAPv2. RADIUS Certification Verification will be skipped
Example:	Rwifi;WST0 or Pwifi;WST0;4
Escape sequence:	Wireless LAN WEP Key Array
Keyword:	WKY0
Value:	The Wireless LAN WEP keys in the 4-slot WEP key array. Value must be a Hexadecimal representation string, where each byte is described by 2 ASCII characters in the range [0..'9'], [A..'F'] or [a..'f']. When using 64-bit WEP (WST0=1), key may contain 10 characters (defining 5 bytes). When using 128-bit WEP (WST0=2), key may contain 26 characters (defining 13 bytes).
Example:	Rwifi;WKY0 or Pwifi;WKY0;WepKey
Escape sequence:	Wireless Personal Shared Key Pass-Phrase
Keyword:	WPP0
Value:	The wireless LAN WPA-PSK pass-phrase. For WPA2, the WSEC parameter must be set as well. If WSI0 (SSID) is not empty, WPA-PSK security is enabled for WiFi connections and pass is used in generating the WPA-PSK encryption key. The allowed value for pass is an ASCII string containing 8-63 characters.
Example:	Rwifi;WPP0 or Pwifi;WPP0;WpaPassphrase
Escape sequence:	Domain and User name for WPA/WPA2 Enterprise mode
Keyword:	EUSN
Value:	Sets the login user name to be used for WPA/WPA2 Enterprise. This parameter takes effect following either a hardware or software reset only. A change to this parameter during the wireless interface operation does not affect the current connection.
Example:	Rwifi;EUSN or Pwifi;EUSN;Login_of_user
Escape sequence:	Password for WPA/WPA2 Enterprise mode
Keyword:	EPSW
Value:	Sets the password to be used for WPA/WPA2 Enterprise. This parameter takes effect following either a hardware or software reset only. A change to this parameter during the wireless interface operation does not affect the current connection.
Example:	Rwifi;EPSW or Pwifi;EPSW;Password_of_user

5 - Evolis printer configuration settings

5.1 Access to the administration web page

Each printer has an embedded web server which can be used to display configuration data.

The administration page is reached by entering the IP address into your web browser. The address of the printer's integrated web server is determined as follows:

- The printer's hostname must be entered in lower case.
 - For example, for a printer having hostname «EVO_PR1_0023456», enter **http://evo_pr1_0023456**.
 - The IP address may be entered if you don't know the printer's hostname, enter **http://xxx.yyy.zzz.ttt** (i.e. 192.168.2.13).

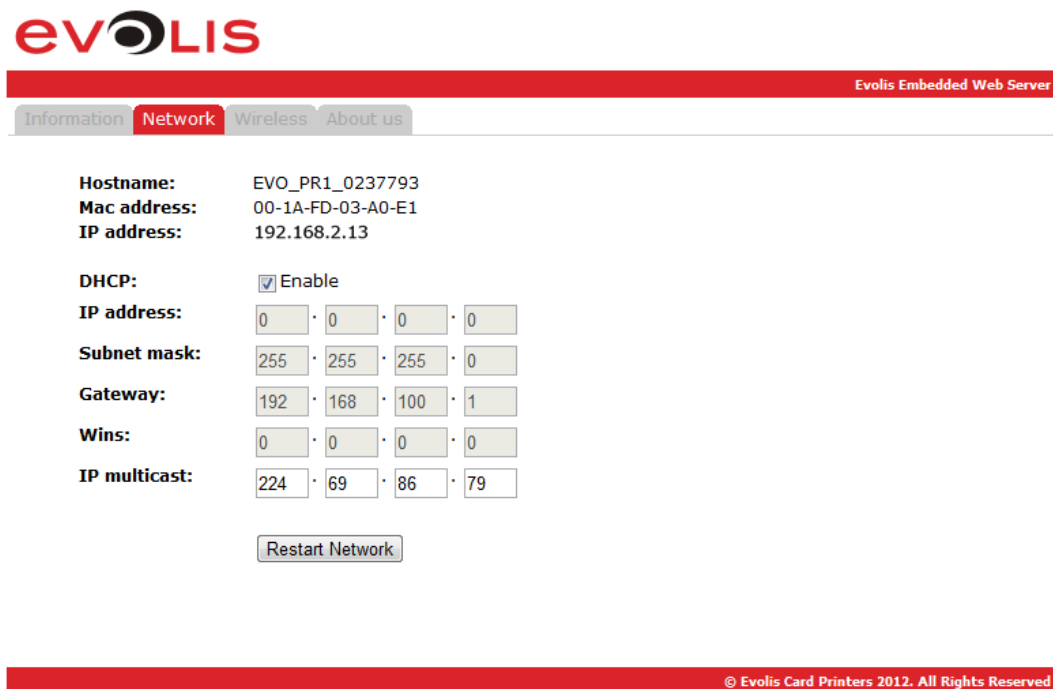
If you don't know the hostname or the IP address, please refer to the TCP/IP Protocol subsection of this section for further details on how the hostname is structured.

5.2 Viewing the settings

Some of this data can also be changed using this same interface.

Two web pages display all the network settings. The tab "Network" to configure the TCP/IP parameters and the tab "Wireless" to configure the Wi-Fi parameters.

5.2.1 Network



The screenshot shows the 'Network' configuration page of the Evolis Embedded Web Server. The page has a red header with the Evolis logo and the text 'Evolis Embedded Web Server'. Below the header are four tabs: 'Information', 'Network' (selected), 'Wireless', and 'About us'. The main content area displays the following configuration details:

Hostname:	EVO_PR1_0237793
Mac address:	00-1A-FD-03-A0-E1
IP address:	192.168.2.13
DHCP:	<input checked="" type="checkbox"/> Enable
IP address:	<input type="text" value="0"/> · <input type="text" value="0"/> · <input type="text" value="0"/> · <input type="text" value="0"/>
Subnet mask:	<input type="text" value="255"/> · <input type="text" value="255"/> · <input type="text" value="255"/> · <input type="text" value="0"/>
Gateway:	<input type="text" value="192"/> · <input type="text" value="168"/> · <input type="text" value="100"/> · <input type="text" value="1"/>
Wins:	<input type="text" value="0"/> · <input type="text" value="0"/> · <input type="text" value="0"/> · <input type="text" value="0"/>
IP multicast:	<input type="text" value="224"/> · <input type="text" value="69"/> · <input type="text" value="86"/> · <input type="text" value="79"/>

At the bottom of the configuration area, there is a button labeled 'Restart Network'.

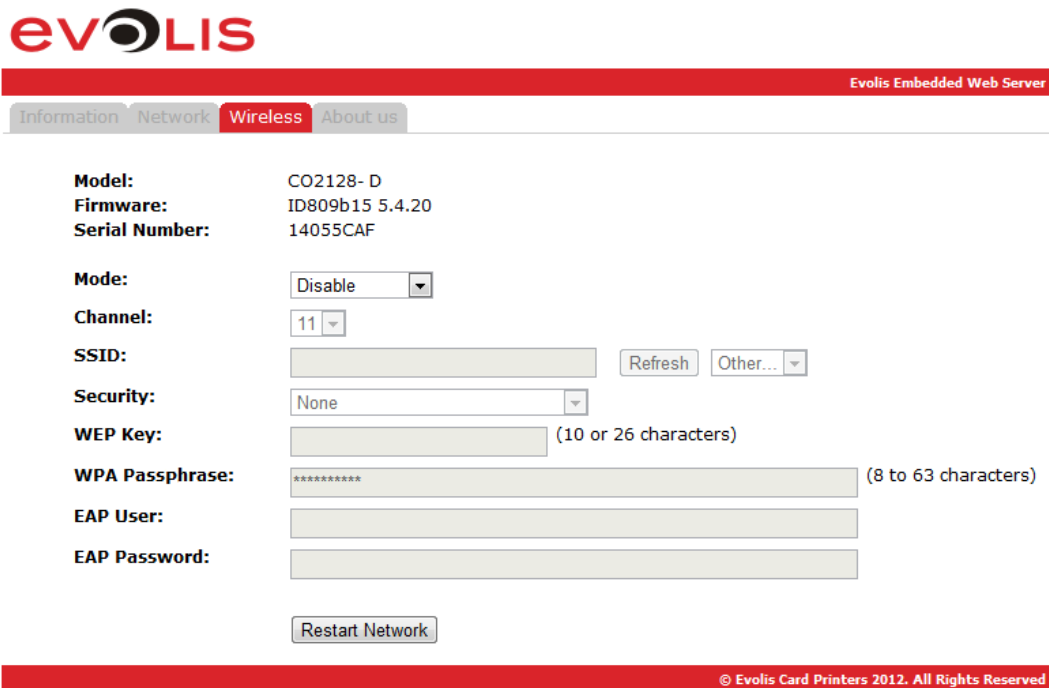
The footer of the page contains the text: © Evolis Card Printers 2012. All Rights Reserved

Figure 6: Web interface - Network

On the Network web interface, you can enable or disable the DHCP mode. When the DHCP mode is enabled, only **IP Multicast** field can be filled.

Other fields can be filled only if DHCP mode is disabled.

5.2.2 Wireless



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Evolis Embedded Web Server

Information Network **Wireless** About us

Model: CO2128- D
Firmware: ID809b15 5.4.20
Serial Number: 14055CAF

Mode: Disable ▾

Channel: 11 ▾

SSID: Refresh Other... ▾

Security: None ▾

WEP Key: (10 or 26 characters)

WPA Passphrase: (8 to 63 characters)

EAP User:

EAP Password:

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Figure 7: Web interface - Wireless

On the Wireless web interface, you can enable or disable the Wi-Fi. When the Wi-Fi is disabled, no field can be filled.

If the Wireless mode is enabled, usual wireless settings can be configured.



When setting mode other than **Disable**, the wired connection becomes disable.

6 - Examples of printer configuration

In this section, you will find six configuration examples illustrating the settings to be configured, along with the search method and selection of the printer on the network.



This list is not exhaustive, and your network administrator is free to contact your Evolis reseller for further information.

6.1 Configuring a printer in DHCP mode, located on a sub-network

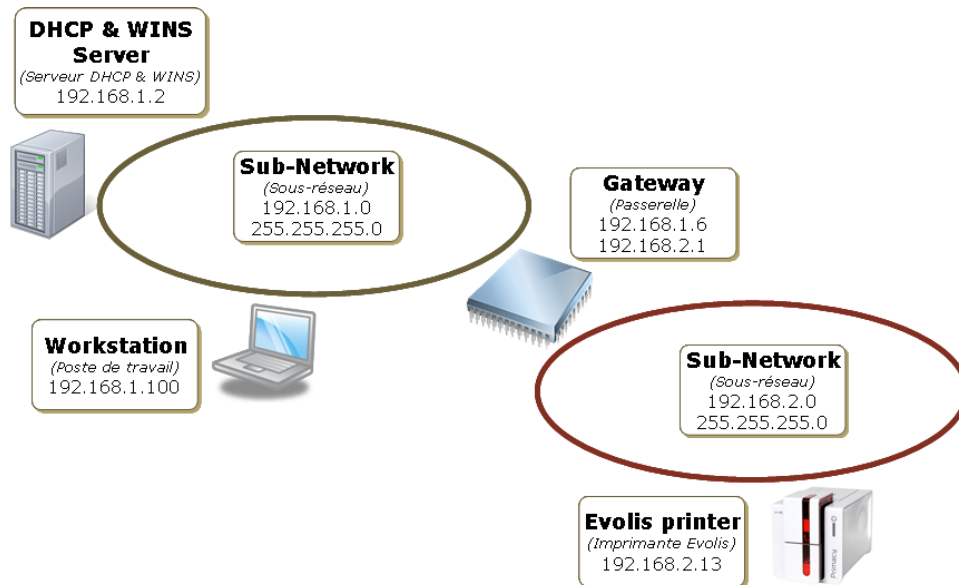


Figure 8: DHCP mode configuration

6.1.1 With the embedded web server

1. Open the web server page.
2. Click on Network tab.
3. Check the DHCP checkbox to enable the DHCP mode.
4. Click on **Restart Network** button.

evolis Evolis Embedded Web Server

Information **Network** Wireless About us

Hostname: EVO_PR1_0237793
Mac address: 00-1A-FD-03-A0-E1
IP address: 192.168.2.13

DHCP: Enable
IP address: 192 · 168 · 2 · 13
Subnet mask: 255 · 255 · 255 · 0
Gateway: 192 · 168 · 1 · 6
Wins: 192 · 168 · 1 · 2
IP multicast: 224 · 69 · 86 · 79

[Restart Network](#)

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Figure 9: Web server (DHCP mode)

6.1.2 With escape commands

1. Open the Evolis Print Center and right-click on the printer you want to configure, then on properties.
2. In the printer properties window, click on **Maintenance**.
3. In Command field, type sequentially:
 - **Pip;dhcp**
 - **Snetw.**
 - Check your configuration by typing **Rip;1**. The result should be: **192.168.2.13 Auto**

6.2 Configuring a printer with a static IP address, on a subnet with WINS resolution

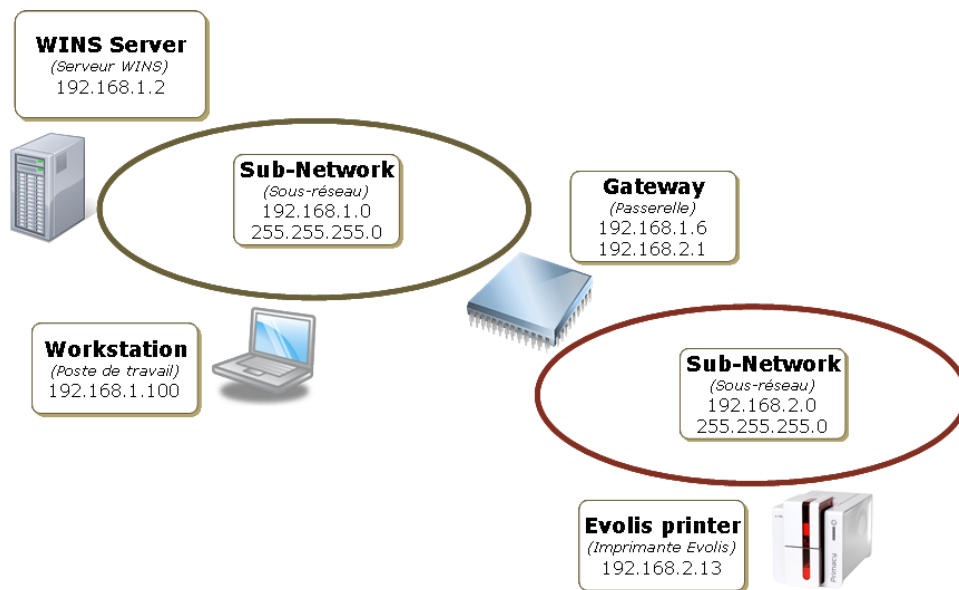
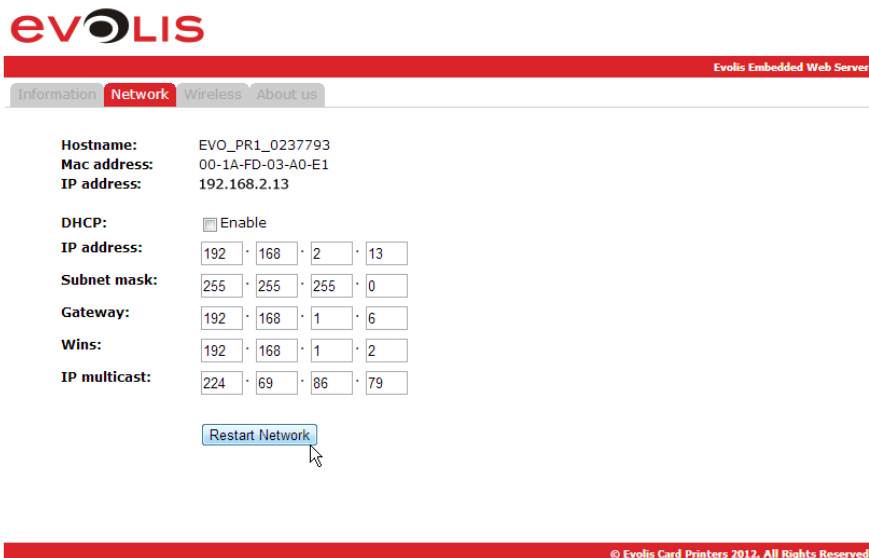


Figure 10: Static IP configuration with WINS resolution

6.2.1 With the embedded web server

1. Open the web server page.
2. Click on Network tab.
3. Uncheck the DHCP checkbox to disable the DHCP mode.
4. Complete the fields **IP address** and **WINS**, you also have to complete **Subnet mask** and **Gateway** fields.
5. Click on **Restart Network** button.



The screenshot shows the 'Network' configuration page of the Evolis Embedded Web Server. The 'Network' tab is active. The configuration details are as follows:

Hostname:	EVO_PR1_0237793
Mac address:	00-1A-FD-03-A0-E1
IP address:	192.168.2.13
DHCP:	<input type="checkbox"/> Enable
IP address:	192 · 168 · 2 · 13
Subnet mask:	255 · 255 · 255 · 0
Gateway:	192 · 168 · 1 · 6
Wins:	192 · 168 · 1 · 2
IP multicast:	224 · 69 · 86 · 79

A 'Restart Network' button is located below the configuration fields.

Figure 11: Web server (Static IP)

6.2.2 With escape commands

1. Open the Evolis Print Center and right-click on the printer you want to configure, then on properties.
2. In the printer properties window, click on **Maintenance**.
3. In Command field, type sequentially:
 - **Pip;192.168.2.13**
 - **Pews;192.168.1.2**
 - **Penm;255.255.255.0**
 - **Pegw;192.168.1.6**
 - **Snetw.**
 - Check your configuration by typing:
 - **Rip;1** The result should be: **192.168.2.13 Manual**
 - **Rews** The result should be: **192.168.1.2**
 - **Renm** The result should be: **255.255.255.0**
 - **Regw** The result should be: **192.168.1.6**

6.3 Configuring a printer with a static IP address, on a subnet without WINS resolution

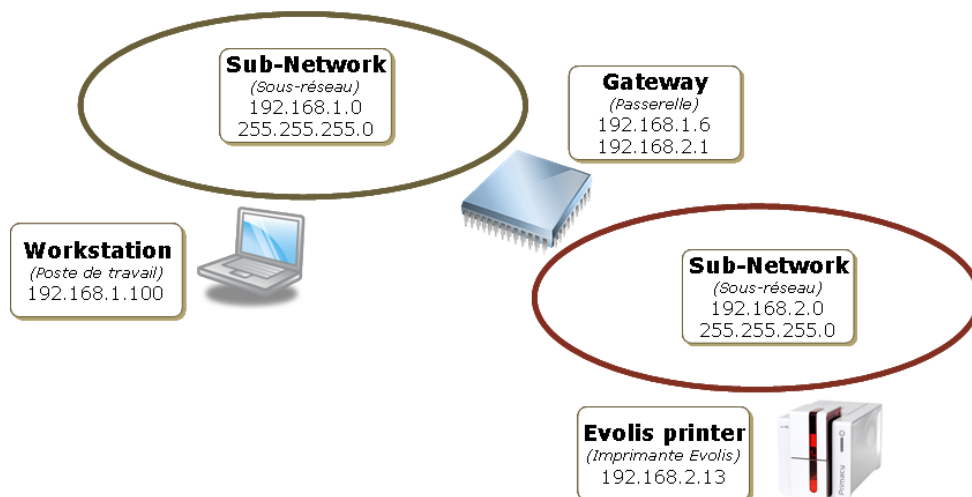


Figure 12: Static IP configuration without WINS resolution

6.3.1 With the embedded web server

1. Open the web server page.
2. Click on Network tab.
3. Uncheck the DHCP checkbox to disable the DHCP mode.
4. Complete the **IP address**, **Subnet mask** and **Gateway** fields.
5. Complete the field **WINS** with **0.0.0.0**
6. Click on **Restart Network** button.

The screenshot shows the 'Evolis Embedded Web Server' interface. The 'Network' tab is active. The configuration fields are as follows:

Hostname:	EVO_PR1_0237793
Mac address:	00-1A-FD-03-A0-E1
IP address:	192.168.2.13
DHCP:	<input type="checkbox"/> Enable
IP address:	192 · 168 · 2 · 13
Subnet mask:	255 · 255 · 255 · 0
Gateway:	192 · 168 · 1 · 6
Wins:	0 · 0 · 0 · 0
IP multicast:	224 · 69 · 86 · 79

A 'Restart Network' button is located below the fields.

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Figure 13: Web server (Without WINS resolution)

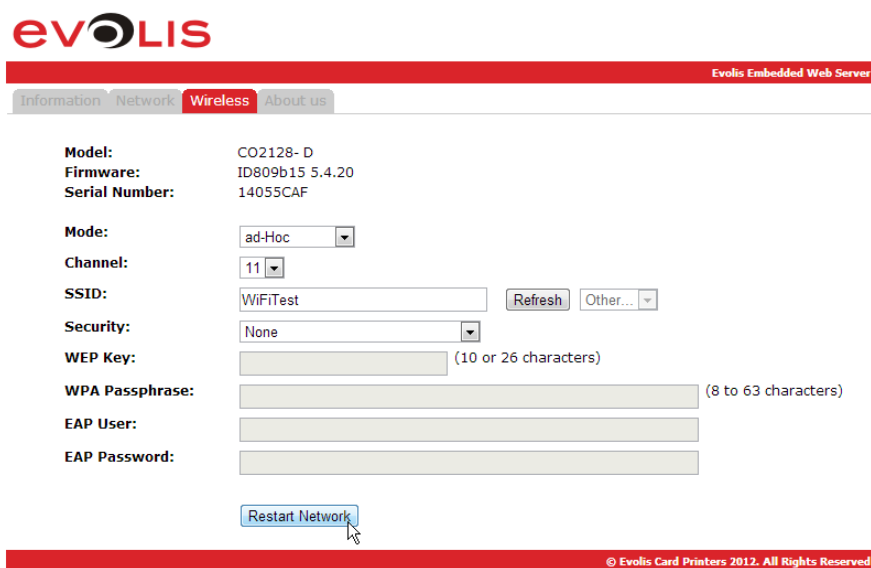
6.3.2 With escape commands

1. Open the Evolis Print Center and right-click on the printer you want to configure, then on properties.
2. In the printer properties window, click on **Maintenance**.
3. In Command field, type sequentially:
 - **Pip;192.168.2.13**
 - **Pews;0.0.0.0,**
 - **Penm;255.255.255.0**
 - **Pegw;192.168.1.6**
 - **Snetw.**
 - Check your configuration by typing:
 - **Rip;1** The result should be: **192.168.2.13 Manual**
 - **Rews** The result should be: **0.0.0.0**
 - **Renm** The result should be: **255.255.255.0**
 - **Regw** The result should be: **192.168.1.6**

6.4 Configuring a printer in Wi-Fi mode - Ad hoc with no security

6.4.1 With the embedded web server

1. Open the web server page.
2. Click on Network tab.
3. Uncheck the DHCP checkbox to disable the DHCP mode.
4. Complete the **IP address** and **Subnet mask** fields.
5. Click on Wireless tab.
6. Choose **ad-Hoc** in **Mode** field.
7. Complete the **Channel** and **SSID** fields and set the **Security** field to **None**.
8. Click on **Restart Network** button.



The screenshot shows the Evolis Embedded Web Server interface. At the top, there is a navigation menu with tabs for Information, Network, Wireless, and About us. The Wireless tab is selected. Below the navigation, there is a header with the Evolis logo and the text 'Evolis Embedded Web Server'. The main content area displays printer information: Model: CO2128-D, Firmware: ID809b15 5.4.20, and Serial Number: 14055CAF. Below this, there are configuration fields for the wireless network: Mode (set to ad-Hoc), Channel (set to 11), SSID (set to WiFiTest), Security (set to None), WEP Key (with a note '(10 or 26 characters)'), WPA Passphrase (with a note '(8 to 63 characters)'), EAP User, and EAP Password. A 'Restart Network' button is located at the bottom of the configuration section. At the very bottom of the page, there is a footer with the text '© Evolis Card Printers 2012. All Rights Reserved'.

Figure 14: Web server (Wi-Fi - Ad hoc)

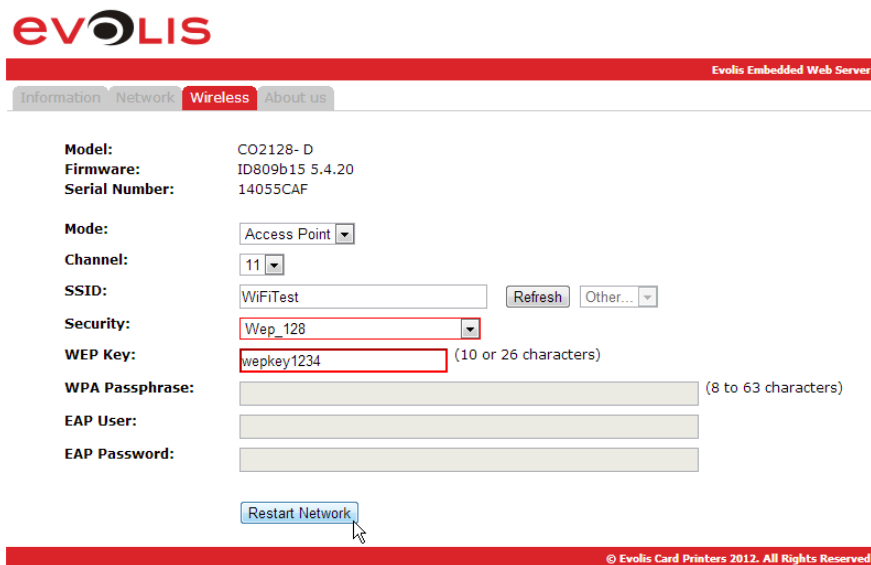
6.4.2 With escape commands

1. Open the Evolis Print Center and right-click on the printer you want to configure, then on properties.
2. In the printer properties window, click on **Maintenance**.
3. In Command field, type sequentially:
 - **Pip;192.168.2.13**
 - **Penm;255.255.255.0**
 - **Pwifi;MDE;1**
 - **Pwifi;WLCH;#Channel** (i.e. 11) where #Channel is the channel of WiFi signal (between 1 and 13).
 - **Pwifi;WSIO;Name_Of_SSID** (i.e. WiFiTest)
 - **Pwifi;WST0;0**
 - **Snetw**
 - Check your configuration by typing:
 - **Rip;1**. The result should be: **192.168.2.13 Manual**
 - **Rwifi;all** You should verify that the previous parameters are correctly set.

6.5 Configuring a printer in Wi-Fi mode - Access point with Wep 128 bits security and static IP address

6.5.1 With the embedded web server

1. Open the web server page.
2. Click on Network tab.
3. Uncheck the DHCP checkbox to disable the DHCP mode.
4. Complete the **IP address** and **Subnet mask** fields.
5. Click on Wireless tab.
6. Choose **Access point** in **Mode** field.
7. Complete the **Channel** and **SSID** fields.
8. Set the **Security** field to **Wep_128** and complete the **WEP Key** field (it may contain 10 or 26 hexadecimal characters)
9. Click on **Restart Network** button.



The screenshot shows the 'Wireless' configuration page of the Evolis Embedded Web Server. The page has a red header with the Evolis logo and 'Evolis Embedded Web Server'. Below the header are tabs for 'Information', 'Network', 'Wireless', and 'About us'. The 'Wireless' tab is active. The configuration fields are as follows:

- Model:** CO2128-D
- Firmware:** ID809b15 5.4.20
- Serial Number:** 14055CAF
- Mode:** Access Point (dropdown menu)
- Channel:** 11 (dropdown menu)
- SSID:** WiFiTest (text input field) with 'Refresh' and 'Other...' buttons.
- Security:** Wep_128 (dropdown menu)
- WEP Key:** wepkey1234 (text input field) with '(10 or 26 characters)' label.
- WPA Passphrase:** (text input field) with '(8 to 63 characters)' label.
- EAP User:** (text input field)
- EAP Password:** (text input field)

At the bottom of the configuration area is a 'Restart Network' button. The footer of the page reads '© Evolis Card Printers 2012. All Rights Reserved'.

Figure 15: Web server (Wi-Fi - Access point - Wep 128)

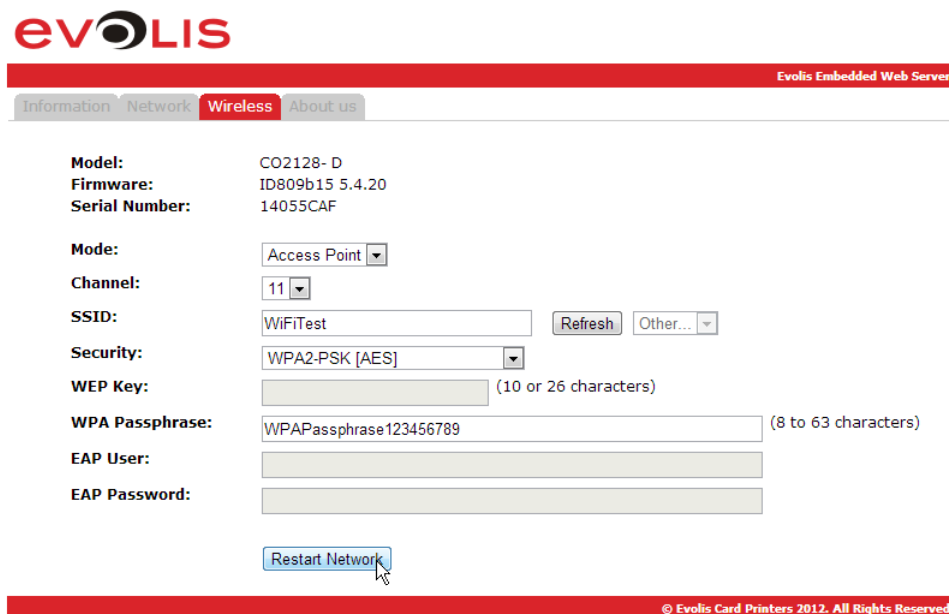
6.5.2 With escape commands

1. Open the Evolis Print Center and right-click on the printer you want to configure, then on properties.
2. In the printer properties window, click on **Maintenance**.
3. In Command field, type sequentially:
 - **Pip;192.168.2.13**
 - **Penm;255.255.255.0**
 - **Pwifi;MDE;2**
 - **Pwifi;WLCH;#Channel** (i.e. 11) where #Channel is the channel of WiFi signal (between 1 and 13).
 - **Pwifi;WSIO;Name_Of_SSID** (i.e. WiFiTest)
 - **Pwifi;WST0;0** to Disable security before send a new setting
 - **Pwifi;WKY0;WEP_Key** (i.e. wepkey1234) where WEP_Key may contain 10 or 26 hexadecimal characters
 - **Pwifi;WST0;2**
 - **Snetw**
 - Check your configuration by typing:
 - **Rip;1**. The result should be: **192.168.2.13 Manual**
 - **Rwifi;all** You should verify that the previous parameters are correctly set.

6.6 Configuring a printer in Wi-Fi mode - Access point with WPA-AES security and IP adress in DHCP mode

6.6.1 With the embedded web server

1. Open the web server page.
2. Click on Network tab.
3. Check the DHCP checkbox to enable the DHCP mode.
4. Click on Wireless tab.
5. Choose **Access point** in **Mode** field.
6. Complete the **Channel** and **SSID** fields.
7. Set the **Security** field to **WPA2-PSK [AES]** and complete the **WPA Pass-Phrase** field (8 to 63 characters).
8. Click on **Restart Network** button.



The screenshot shows the Evolis Embedded Web Server interface. At the top, there is a navigation bar with tabs for Information, Network, Wireless (selected), and About us. Below the navigation bar, the printer's details are listed: Model: CO2128- D, Firmware: ID809b15 5.4.20, and Serial Number: 14055CAF. The configuration section includes: Mode: Access Point (dropdown), Channel: 11 (dropdown), SSID: WiFiTest (text input), Security: WPA2-PSK [AES] (dropdown), WEP Key: (text input), WPA Passphrase: WPAPassphrase123456789 (text input), EAP User: (text input), and EAP Password: (text input). A Restart Network button is located at the bottom of the configuration section. The footer of the page reads: © Evolis Card Printers 2012. All Rights Reserved.

Figure 16: Web server (Wi-Fi - Access point - WPA-AES)

6.6.2 With escape commands

1. Open the Evolis Print Center and right-click on the printer you want to configure, then on properties.
2. In the printer properties window, click on **Maintenance**.
3. In Command field, type sequentially:
 - **Pip;dhcp**
 - **Pwifi;MDE;2**
 - **Pwifi;WLCH;#Channel** (i.e. 11) where #Channel is the channel of WiFi signal (between 1 and 13).
 - **Pwifi;WSI0;Name_Of_SSID** (i.e. WiFiTest)
 - **Pwifi;WST0;0** to Disable security before send a new setting
 - **Pwifi;WPP0;Keyphrase** (i.e. WPAPassphrase123456789) where Keyphrase contains 8 to 63 characters
 - **Pwifi;WST0;4**
 - **Snetw**
 - Check your configuration by typing:
 - **Rip;1**. The result should be: **192.168.2.13 Auto**
 - **Rwifi;all** You should verify that the previous parameters are correctly set.