evolis
card printers

NETWORK ADMINISTRATOR MANUAL

Configuring an Evolis printer on a TCP/IP port (Ethernet)

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Introduction

This manual describes how to configure an Evolis printer connected to a TCP/IP network, also known as an Ethernet network.
This information is intended for well-informed readers who are specialists in computer networking.
The examples given are based on Windows XP.
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 or part of the LAN.
Contact your System and Network Administrator before connecting to or changing the settings for your local area network.

Section 1 - 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.

Out of the box, the printer comes configured in DHCP mode (Dynamic Host Configuration Protocol), which means that its IP address is supplied by the network.

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

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.

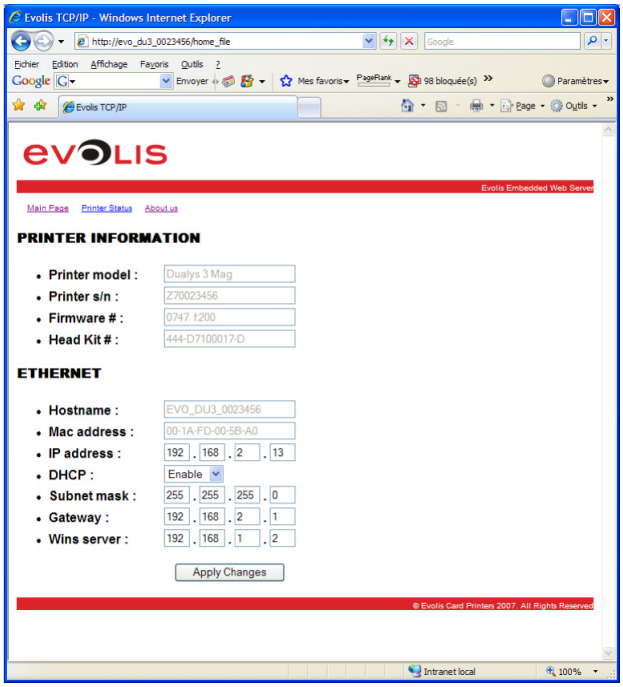
The following sections describe the procedures to be followed in order to configure the printer taking the specific features of the LAN into account.

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.

Section 2 - Evolis printer configuration settings

2-1 VIEWING THE SETTINGS

Each printer has an embedded http server which can be used to display configuration data. Some of this data can also be changed using this same interface.



2-2 ACCESS TO THE ADMINISTRATION WEB PAGE

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

- The printer's hostname must be entered in lower case
- For example, for a printer having the hostname evo_du3_0023456, enter http://evo_du3_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 sub-section of this section for further details on how the hostname is structured.

2-3 CARACTÉRISTIQUES DE L'INTERFACE

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

2-4 PROTOCOLE TCP/IP

- 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)
- 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:
    - for Securion,
    - PB4 for Pebble 4,
    - DU3 for Dualys 3,
    - TA2 for Tattoo 2,
    - TR2 for Tattoo RW
    - QU2 for Quantum 2
  - XXXXXXX is obtained from the printer's serial number, e.g. EVO_SE1_0001234 for serial number Z710001234
- NBNS (NetBios Name Server) service via TCP for WINS resolution when the WINS server is configured.

Where the IP address is fixed, 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.

2-5 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.

Section 3 - Configuring a TCP/IP port

The installation of a printer is carried out conventionally following the method described for installing the 'Evolis TCP/IP' port.

However, when the printer's IP address is allocated by the network administrator, use of the standard 'Windows' port is an excellent alternative. Under these circumstances, please refer to the 'Installation via the Standard Windows Port' sub-section.

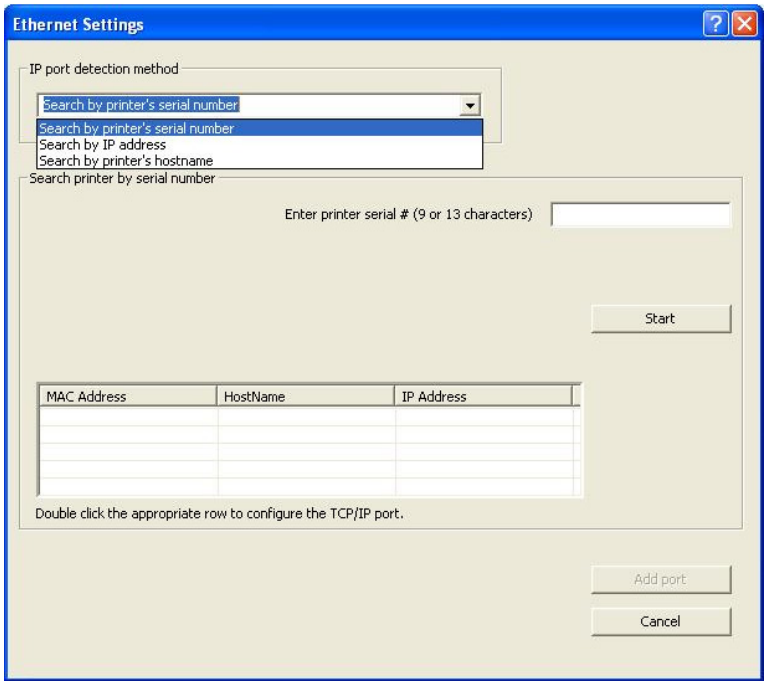
3-1 INSTALLATION VIA LE PORT EVOLIS TCP/IP

1. To configure the printer, select the '**Properties**' function in your printer driver, then the '**Ports**' tab, and then '**Add a port**':

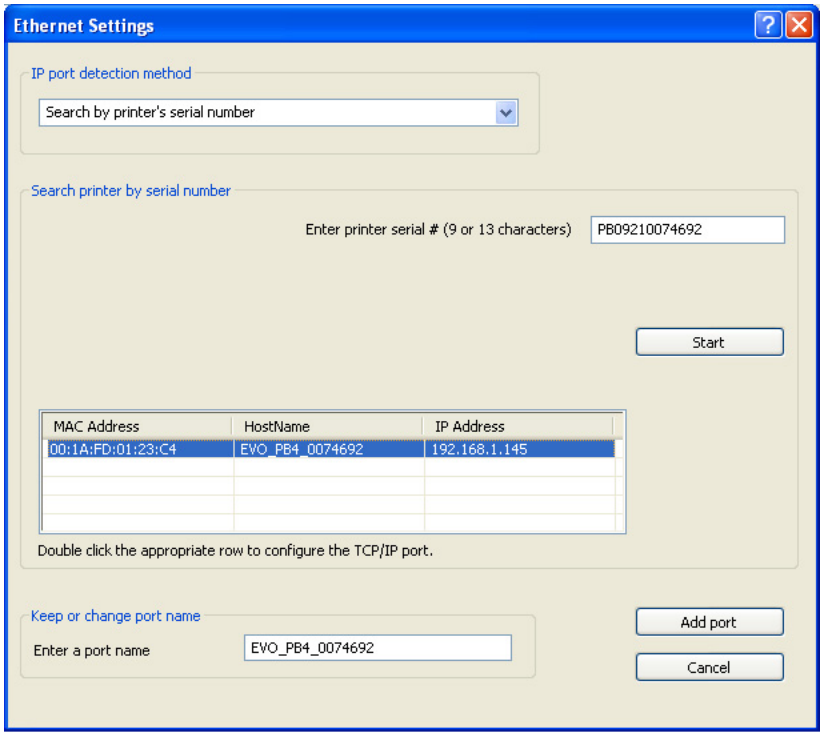
2. Select the '**Evolis TCP/IP Monitor**' row and click on '**Add a port**'...:

A configuration window appears, allowing you to:

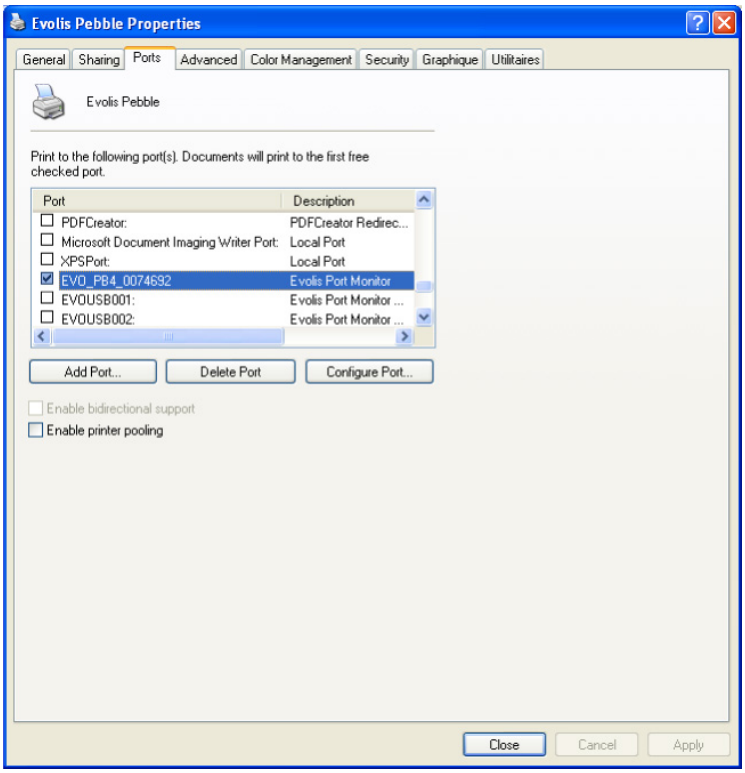
- Find the printer using its serial number (see the label stuck to the back or underneath the printer, depending on the model)
- Find the printer using its hostname
- Find the printer using its IP address



3 Enter one of the selection criteria (serial number, IP address or hostname), then run the search by clicking the '**Start**' button.



4 Select the desired printer from the list and click on '**Add port**' to complete the procedure.

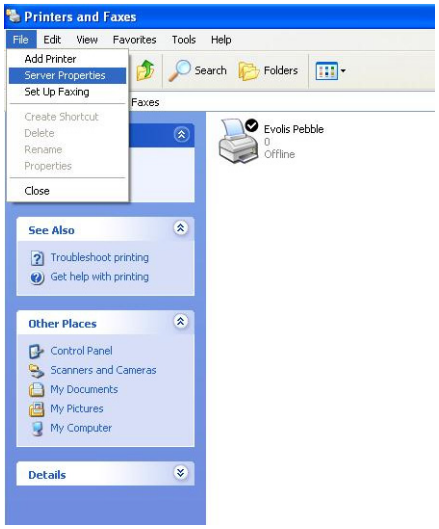


A new printer port is created with the name associated with your Evolis printer.

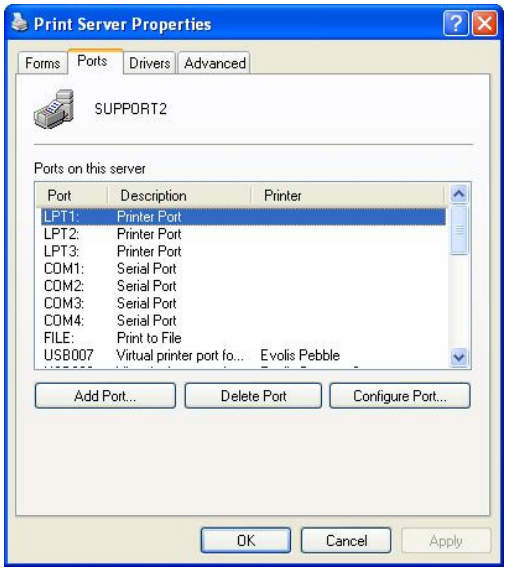
3-2 INSTALLATION VIA THE STANDARD WINDOWS PORT

This sub-section is based on the Windows XP operating system. For another operating system version, please refer to the specific documentation.

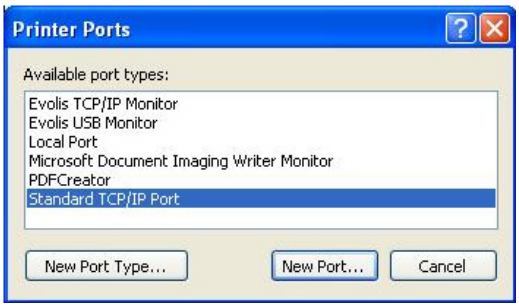
To install a new port from the '**Start**' menu, please select '**Printers and Faxes**'.



1. From the tool bar in this window, select '**Files**' and then '**Server Properties**'.

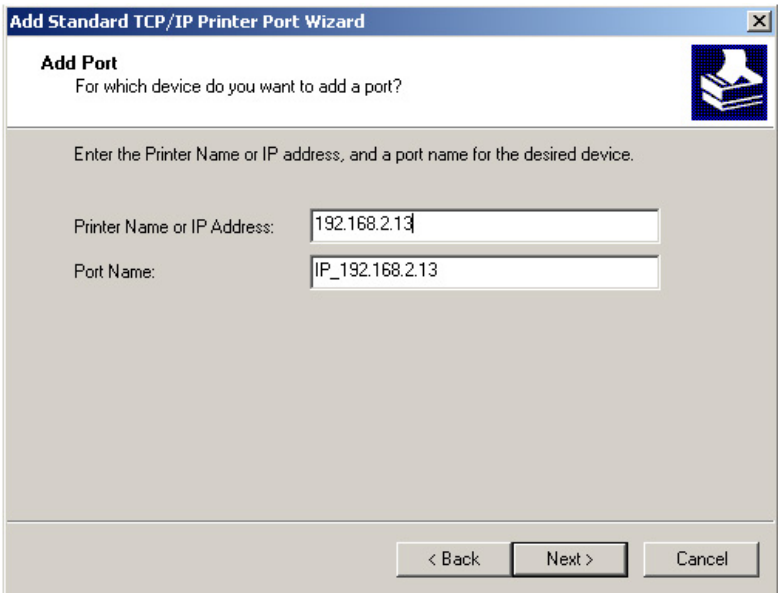


2. Select the '**Ports**' tab and click the '**Add Port...**' button.

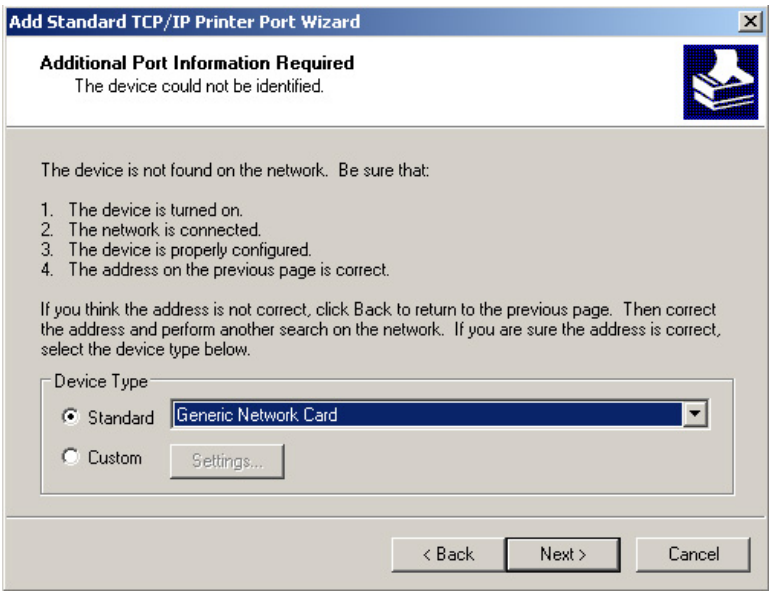


3. A window displays all available ports, select '**Standard TCP/IP Port**' then click on '**Add Port**'.

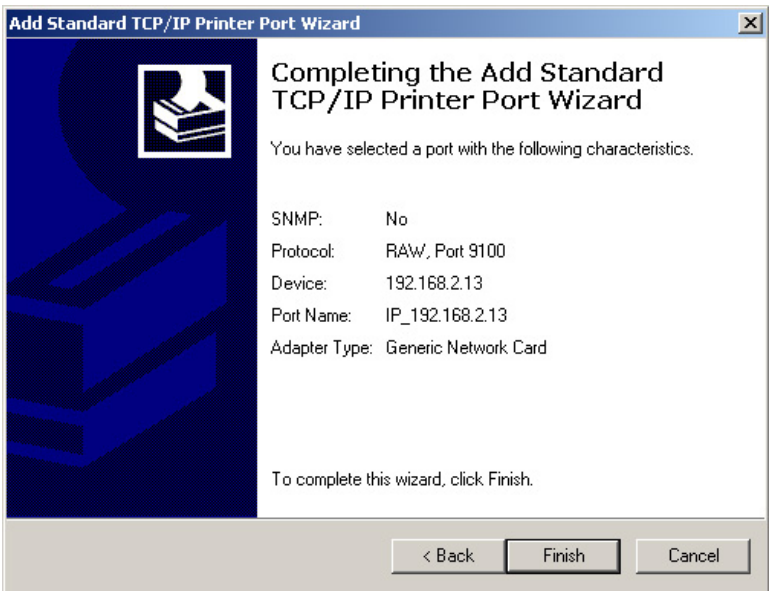
4 The Windows installation wizard starts up, click on '**Next**' to continue.



5 Enter the printer's IP address in the first field, then click on '**Next**'.



6 Select the network card then click on '**Next**'.



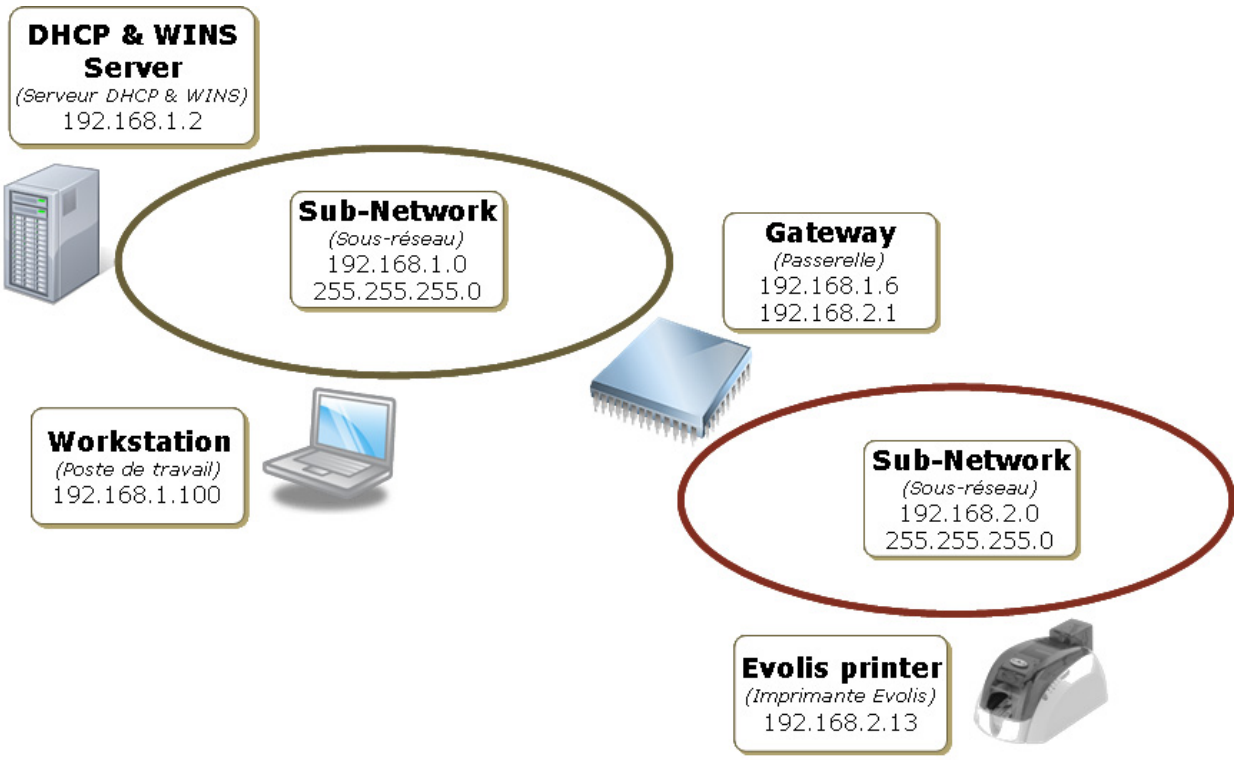
7 The installation confirmation window is displayed, stating your printer's properties. Click on '**Finish**' to complete the installation.

Section 4 - Examples of printer configuration

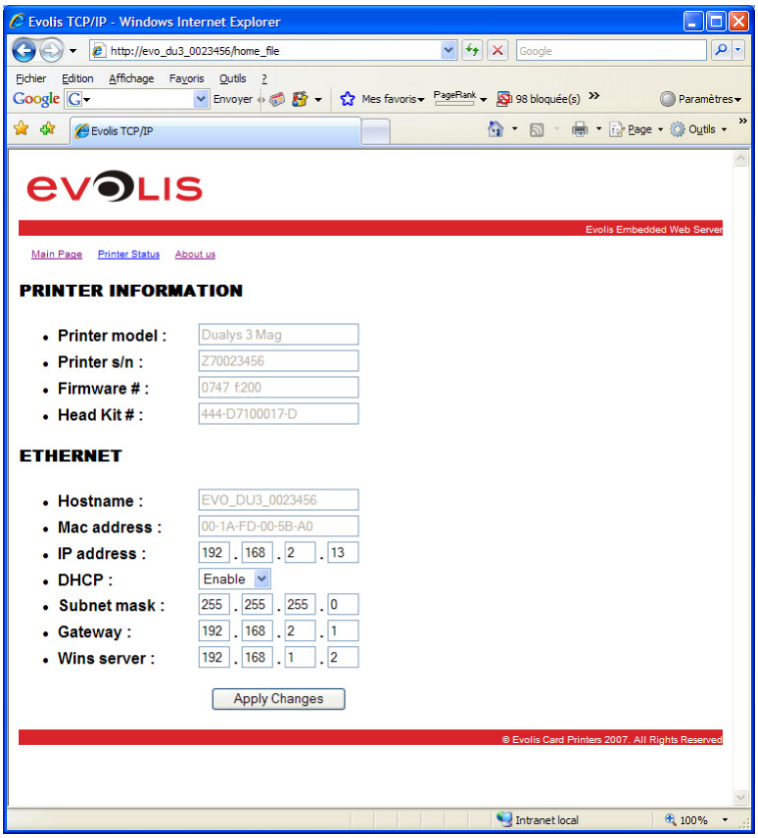
In this section, you will find three configuration examples illustrating the settings to be configured, along with the search method and selection of the printer on the network.

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

4-1 CONFIGURING A PRINTER IN DHCP MODE, LOCATED ON A SUB-NETWORK

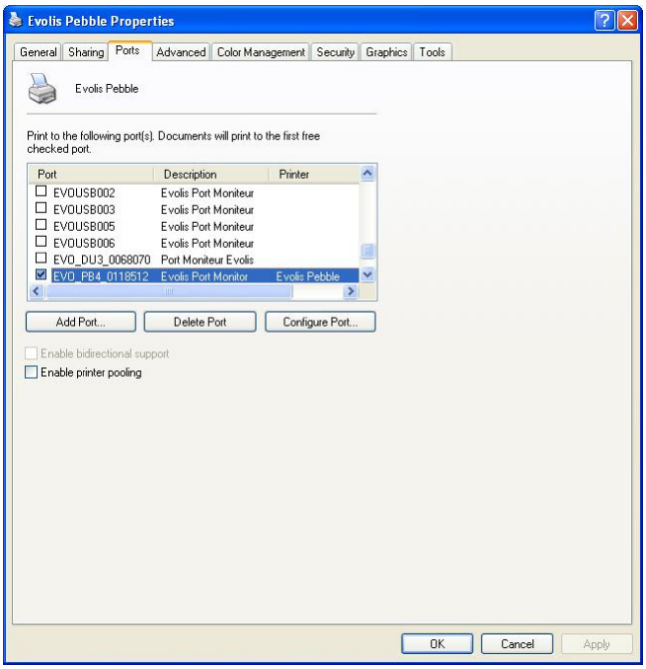


Under these circumstances, the DHCP server supplies the printer's IP address, along with the subnet mask, gateway and WINS server parameters.



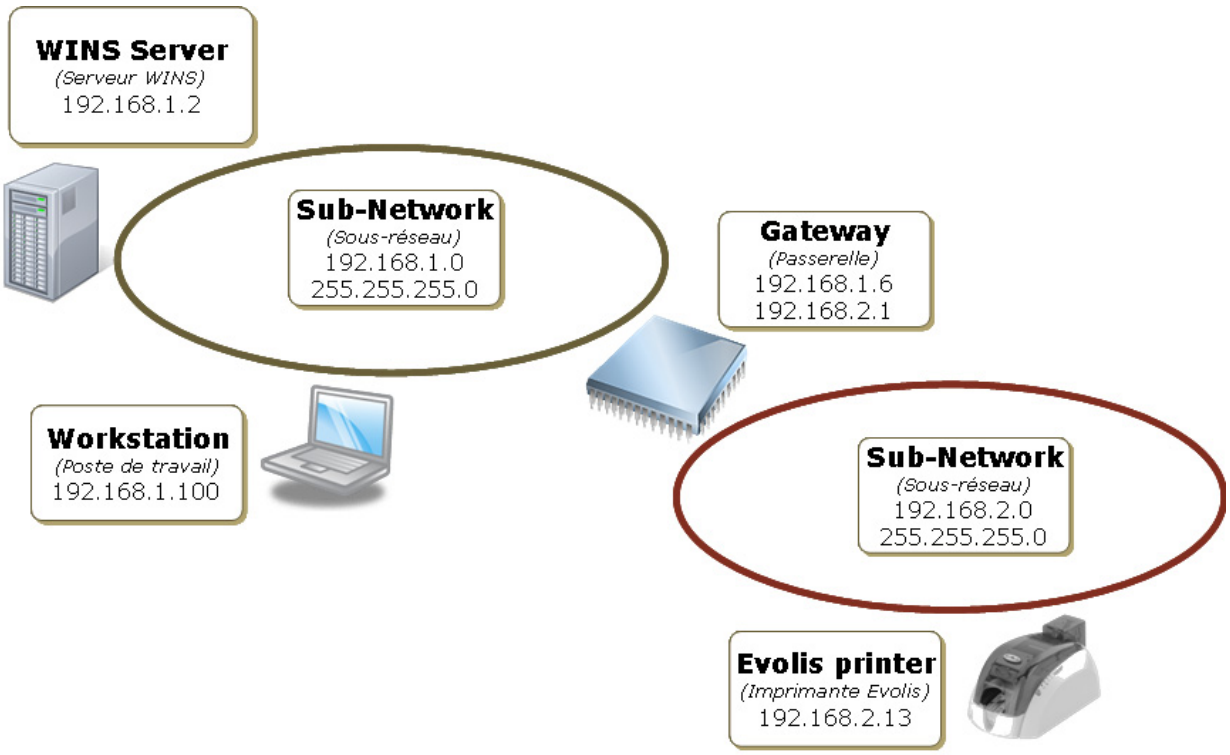
Under these circumstances, the printer search when adding the Evolis TCP/IP port is run as follows (see Section 3):

- Find the printer using its serial number or hostname
- Enter the search criterion then click on Start
- Once the printer has been found, double click to select it from the list

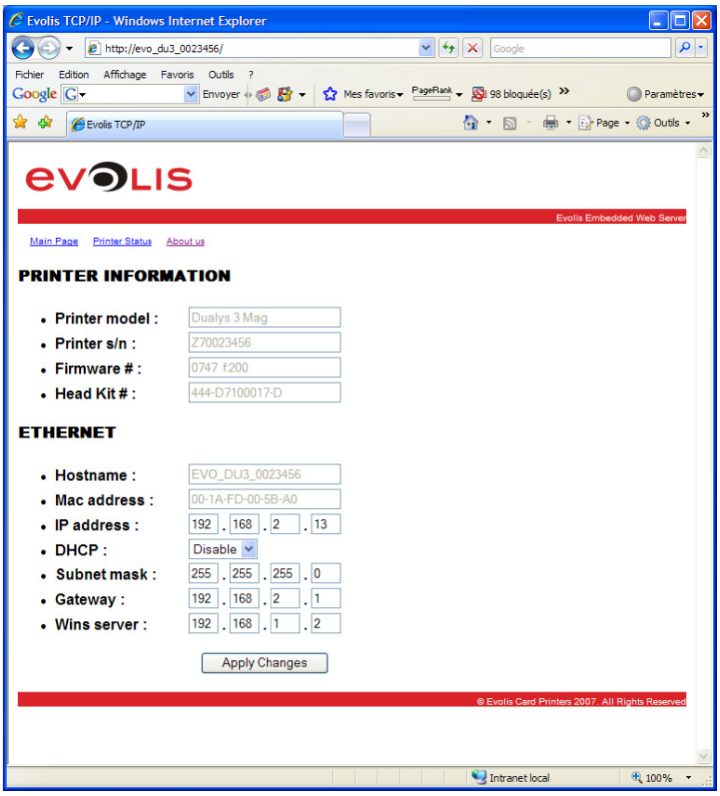


- Click on '**Add Port...**' to complete this procedure.

4-2 CONFIGURING A PRINTER WITH A FIXED IP ADDRESS, ON A SUBNET WITH WINS RESOLUTION

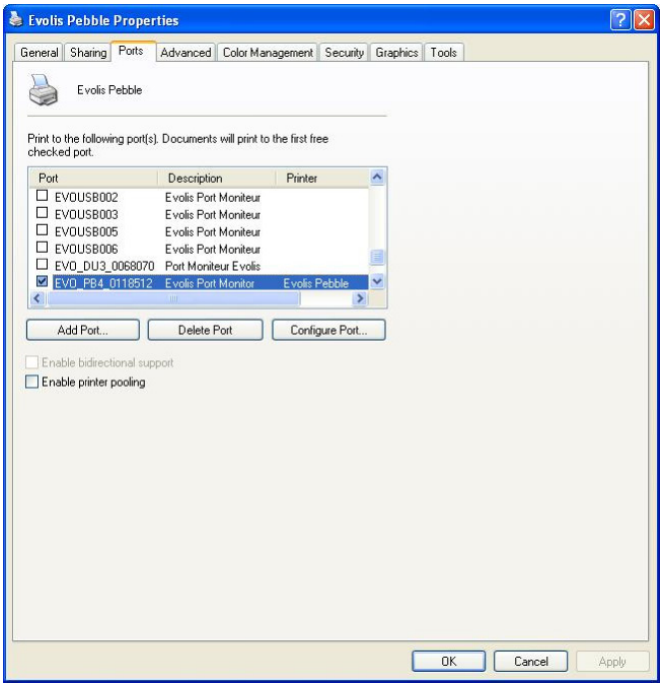


The printer's IP address is set manually by the network administrator. The administrator also configures the subnet, gateway and WINS server settings.



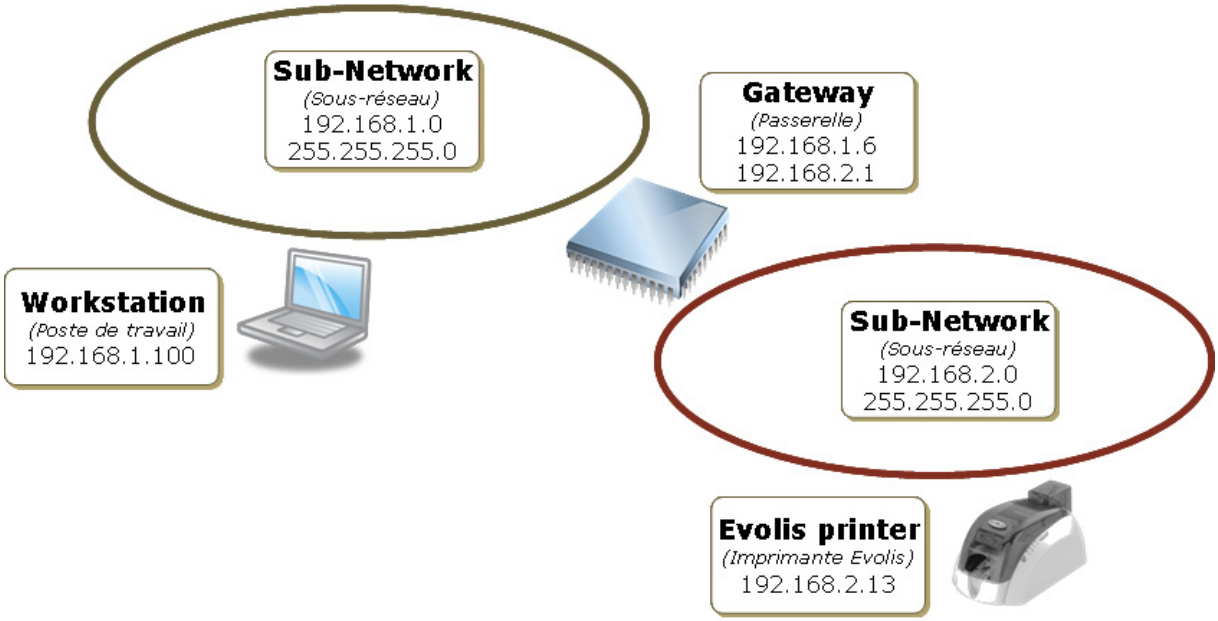
Under these circumstances, the printer search when adding the Evolis TCP/IP port is run as follows (see Section 3):

- Find the printer using its serial number, hostname or IP address
- Enter the search criterion then click on '**Start**'
- Once the printer has been found, double click to select it from the list

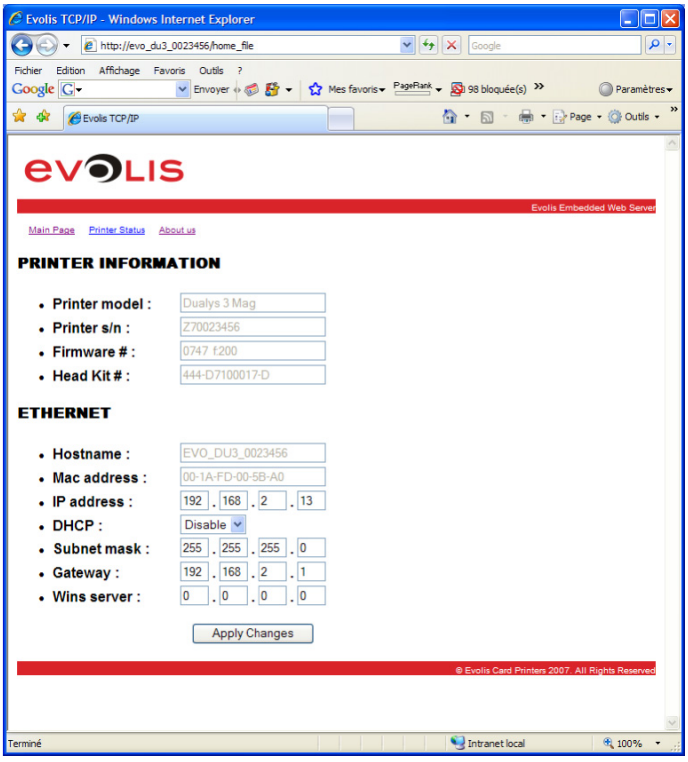


- Click on '**Add Port...**' to complete this procedure.

4-3 CONFIGURING A PRINTER WITH A FIXED IP ADDRESS, ON A SUBNET WITHOUT WINS RESOLUTION

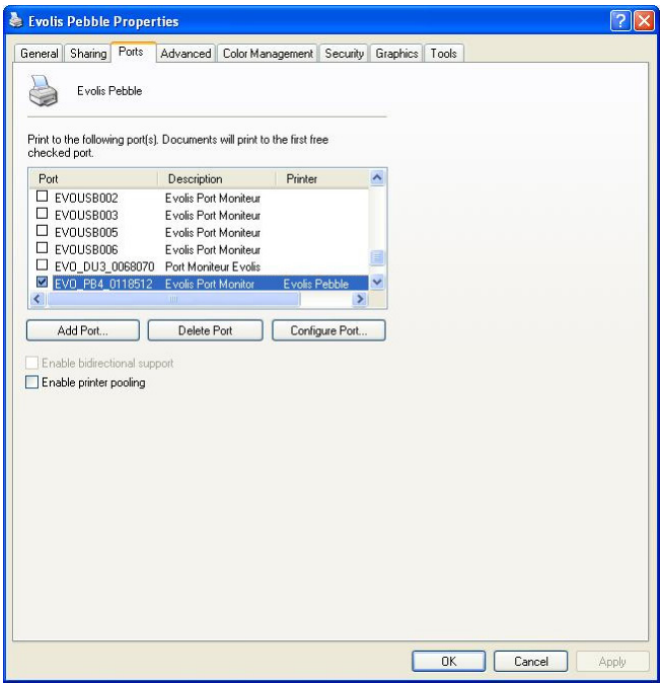


The printer's IP address is set manually by the network administrator. The administrator also configures the subnet and gateway settings.
The WINS resolution parameters are set to zero.



Under these circumstances, the printer search when adding the Evolis TCP/IP port is run as follows (see Section 3):

- Find the printer using its IP address.
- Choose between IP definition or hostname, then click on '**Start**'
- Once the printer has been found, double click to select it from the list



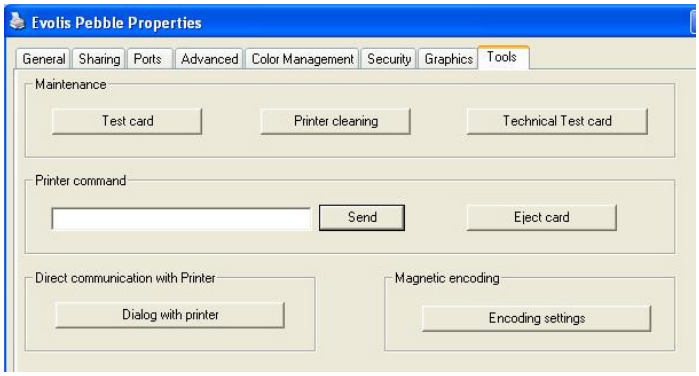
- Click on '**Add Port...**' to complete this procedure.

Under these circumstances, print jobs are sent directly to the IP address of the printer port.

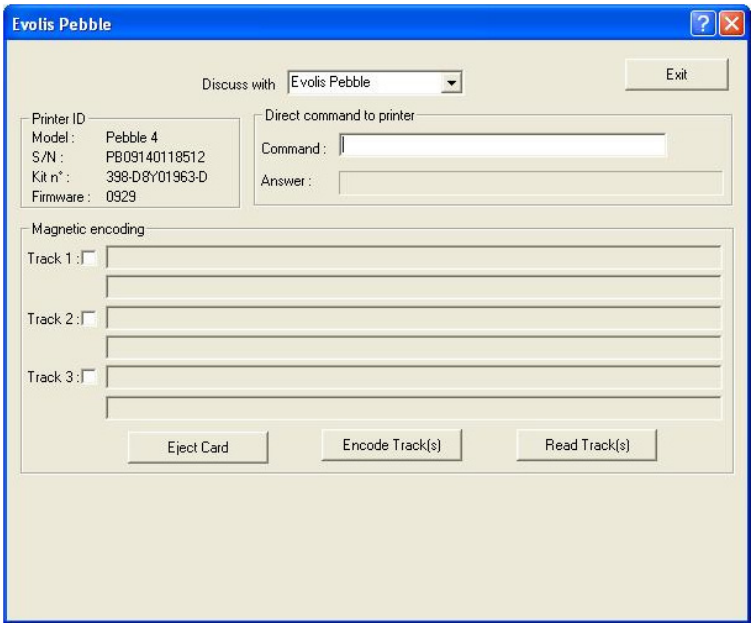
Section 5 - Printer configuration using escape sequences

Administrators can also configure printers by means of ESCape sequences.
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.
To enter the printer dialogue menu, you should proceed as follows:

- **Start** menu
- Select **Printers and Faxes**
- Select the printer in question (such as Evolis Pebble)
- Right-click, then select **Properties, Tools** tab



Click on the **Dialog with printer** button



List of Escape sequences

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

Escape sequence	Syntax	Arguments
Read the printer's IP address	**Rip**	
Set the IP address or DHCP mode	**Pip;***value*	*value:* *IP address in* **xxx.yyy.ttt.uuu format** *or* *enter* **dhcp** *for the Host to supply the address*
Read Hostname	**Rehn**	
Set Hostname	**Pehn;***value*	*value:* *Hostname (16 characters max.)*
Read Subnet mask	**Renm**	
Set Subnet mask	**Penm;***value*	*value:* *Subnet mask in* **xxx.yyy.ttt.uuu format**
Read the gateway address	**Regw**	
Set the gateway address	**Pegw;***value*	*value:* *Gateway address in* **xxx.yyy.ttt.uuu format**
Read the WINS server address	**Rews**	
Read the WINS server address	**Pews;***value*	*value:* *WINS server address in* **xxx.yyy.ttt.uuu format**