COBISS®

Co-operative Online Bibliographic System & Services

VIF - Maintenance of computer systems infrastructure

Zebra GK420t User Guide

VIF-NA-BG-136, V3.0

Institute of Information Science, Maribor, Slovenia

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1 Introduction

This document presents how the GK420t printer is used in the COBISS system (connecting to power supply, changing paper, etc.).

2 Using the GK420t printer

2.1 Description of the printer

Power switch

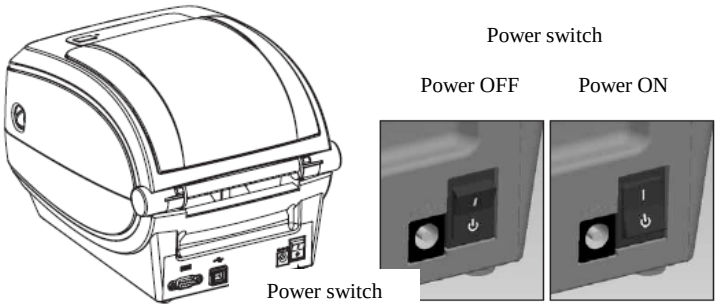

Figure 1: Back side of the printer

FEED button and status light

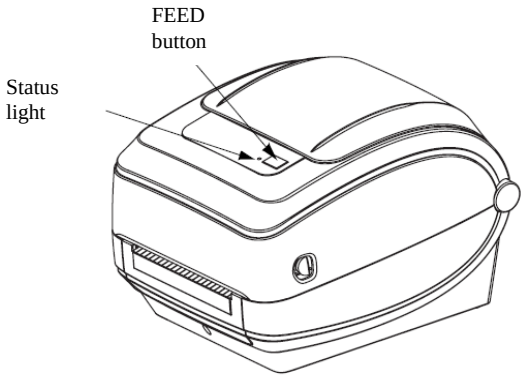

Figure 2: Front side of the printer

FEED Button – In normal operating mode, the label ribbon advances to the next label.

Status light – In normal operating mode the status light is green. If it turns red, an error has occurred: the printer either ran out of label ribbon or black ribbon cartridge or the service is needed because of a more complex error.

Opening and closing the printer

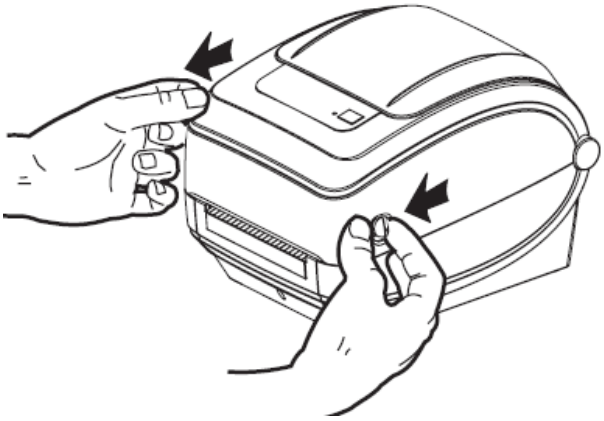

Figure 3: Opening the printer

Figure 4: Closing the printer

Printhead position

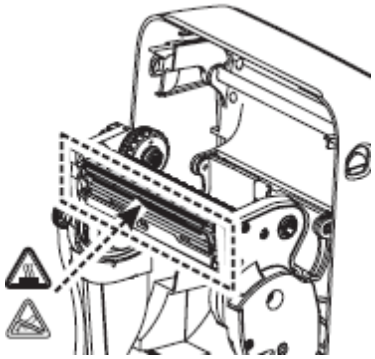

Figure 5: Printhead

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2.2 Connecting to power supply and installing printer

To connect your printer to a computer use the serial cable or the USB cable supplied with the printer.

Connecting to power supply

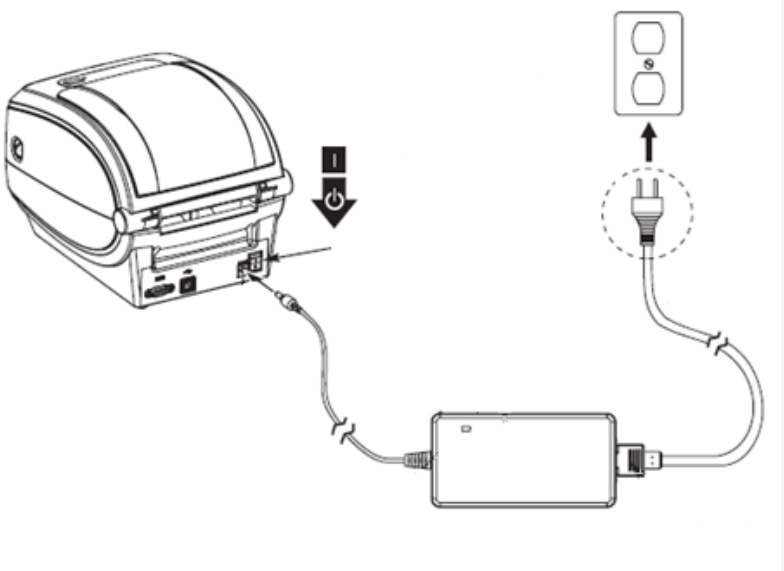

Figure 6: Connecting to power supply

USB connection

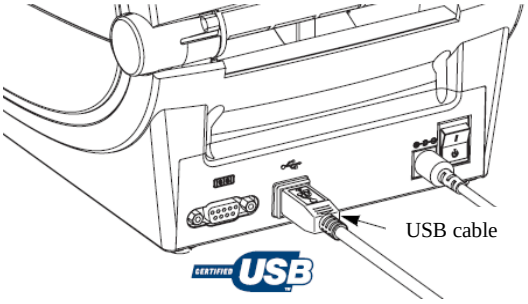

Figure 7: USB connection

Serial connection

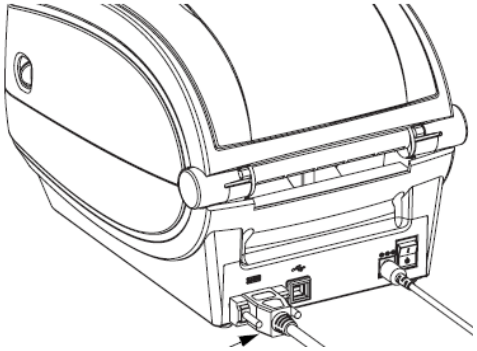

Figure 8: Serial connection

The printer comes with a serial and a USB interface. To connect the printer use the appropriate cable.

During installation you can use the drivers available:

- on CD supplied with your printer,
- via http://www.zebra.com/id/zebra/na/en/index/products/printers/desktop/gk420t.4.tabs.html,
- via http://www.seagullscientific.com/downloads/drivers/archive/7.2/7.2/Zebra_7.2.exe,

To use the printer from several workstations, it is recommended to connect it only to one workstation enabling shared use of the printer to other workstations. For help, call +386 (0)2 2520 333 (Call center) or send an email to cobissservis@izum.si.

2.3 Cleaning the printhead

To clean the printhead, use the cleaning pen supplied with your printer containing the cleaning solution. Use the cleaning pen tip to remove debris and dust that has built-up on the heater element of the thermal printhead.

The cleaning pen can be used only once and make sure that you use it only for this purpose. If you use it once again, the contaminants from previous uses may damage the printhead. Instead of a cleaning pen, you can also use a soft cloth and pure alcohol.

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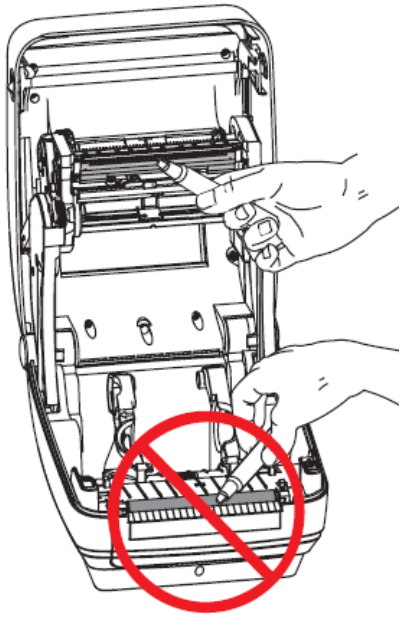

Figure 9: Cleaning the printhead

2.4 Placing the media roll and loading black ribbon cartridge

Go through the following steps of the procedure:

1. Open the printer lid. Place the media roll on the green roll holder.

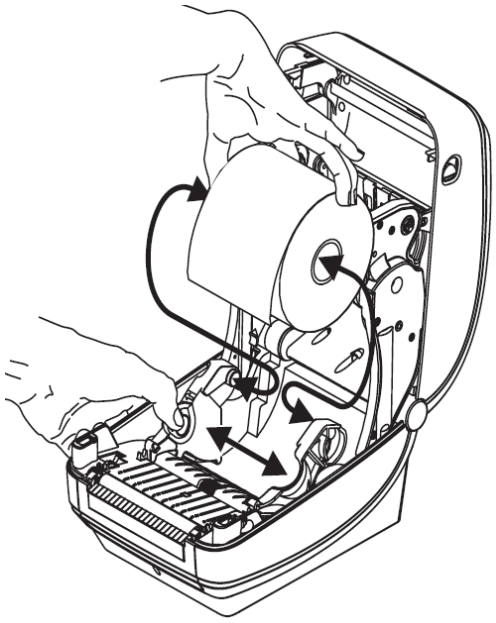

Figure 10: Opening the printer and placing the media roll

2. The media roll must go under both media guides.

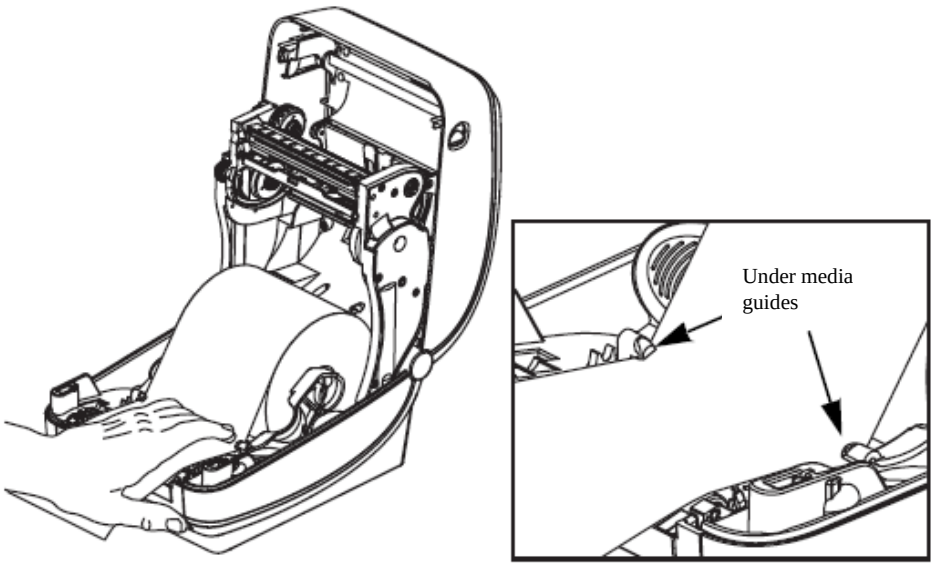

Figure 11: Pushing the media under the media guides

3. Place a new ribbon roll on the inner holder. Then, place an empty ribbon core, remained from the ribbon, on the front holder. Pay attention to lock the notches of the ribbon core properly. Attach the adhesive strip of the black ribbon cartridge to the empty ribbon core. Prior to use, pull the ribbon cartridge tight across the printhead.

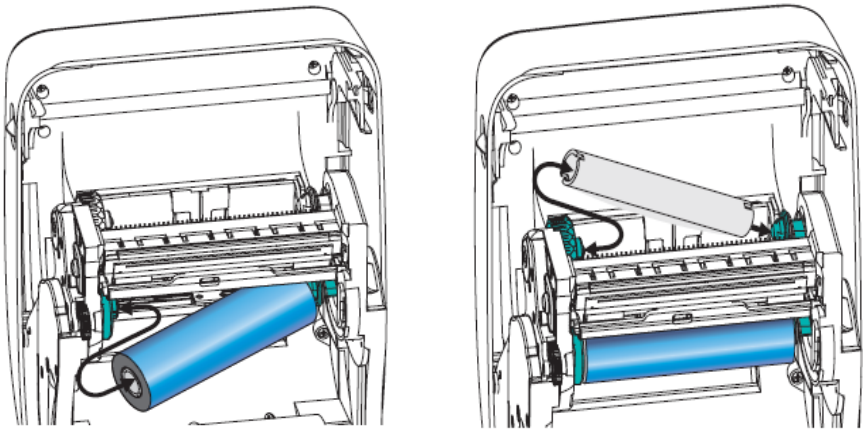

Figure 12: Loading black ribbon cartridge

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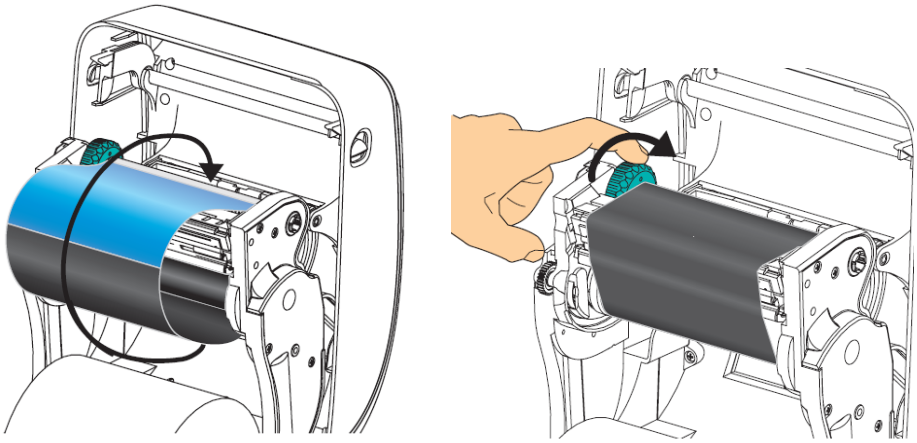

Figure 13: Final loading of the black ribbon cartridge

2.5 Resetting printer

Once the media roll is placed and the black ribbon cartridge loaded, go through the following steps (make sure that the printer's cover is closed and the status light is green):

1. Turn off the printer.
2. Press and hold the FEED button.
3. Turn on the printer.
4. The green status light flashes in sequences: once, then in the two-flash-, three-flash- and four-flash sequence.
5. Release the FEED button after the four-flash sequence.
6. The printer starts calibration process and advances the label ribbon to the next label.
7. Once the calibration process is complete, turn off and on the printer.

2.6 Status light

Colour	Status	Explanation and solution
None		Printer is turned off.
Green	Solid green	Normal functioning
Orange	Solid orange	It lights up for about ten seconds immediately after the printer is turned on. If it lasts for more than ten seconds, the printer requires service.

Colour	Status	Explanation and solution
Green	Flashing	Normal functioning
Red	Flashing	Labels or ribbon cartridge ran out.
Green	Double flashing	The printer is idle.
Orange	Double flashing	The printerhead is overheated.
Green and red	Alternately flashing	Flash memory is not programmed, the printer requires service.
Red and green	Flashing twice red and then once green	The printhead or motor has a failure, the printer requires service.

Table 1: Status light

3 Installing driver

If the original or the latest version of the driver for Zebra GK420t is not installed on your local computer, which is connected to the printer, install the driver or upgrade it. Drivers are available on Zebra's official web page

http://www.zebra.com/id/zebra/na/en/index/drivers_downloads.html or on the user's CD supplied with your printer.

When the downloading web page opens, select *GK420t Desktop Printer* from the Printer Support drop-down list (see Figure *14*).

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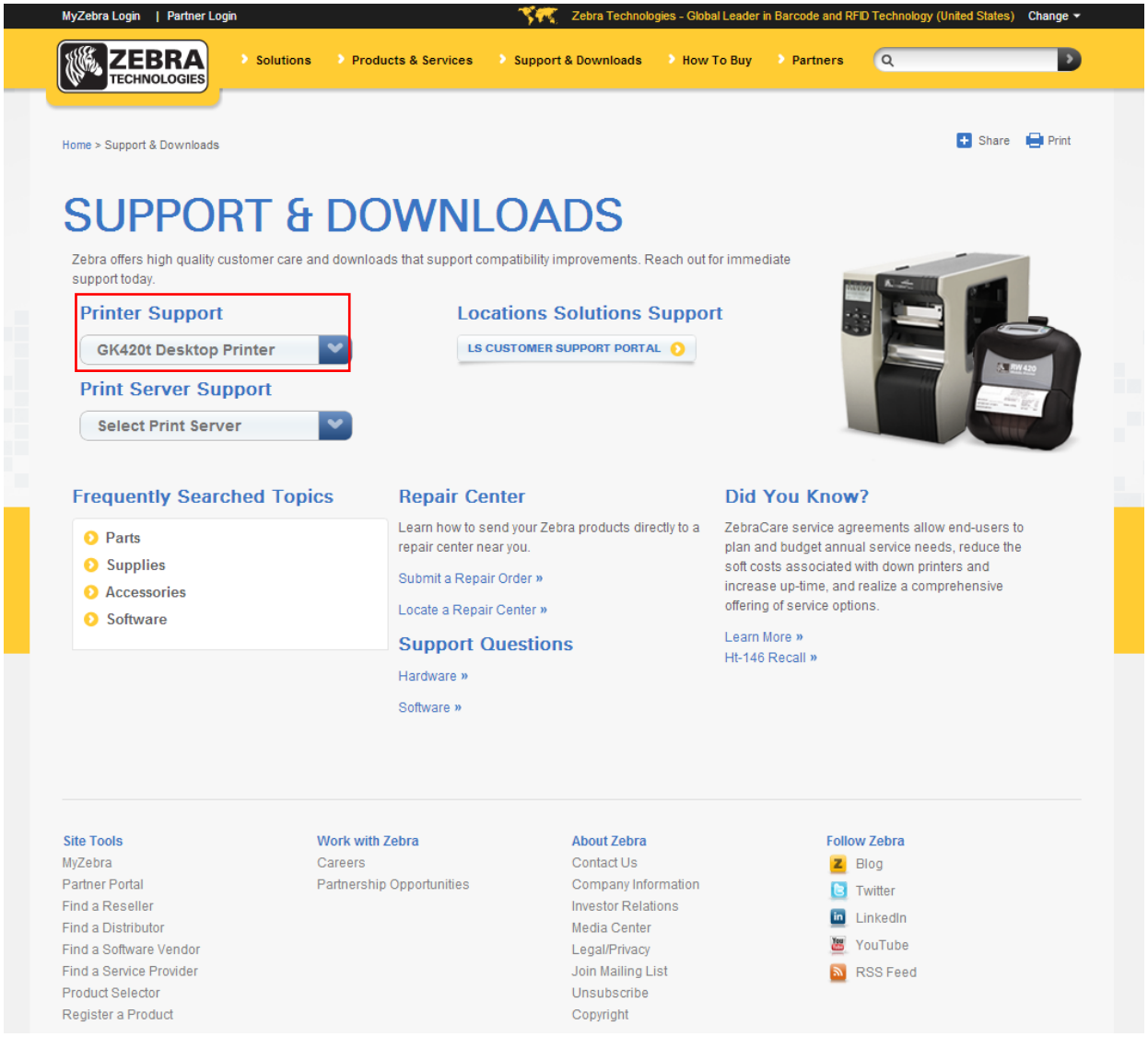

Figure 14: Selecting the right model (GK420t)

Then, select the **Drivers** tab and click **Download** under "Zebra Setup Utilities" to download the drivers to your computer (see Figure *15*).

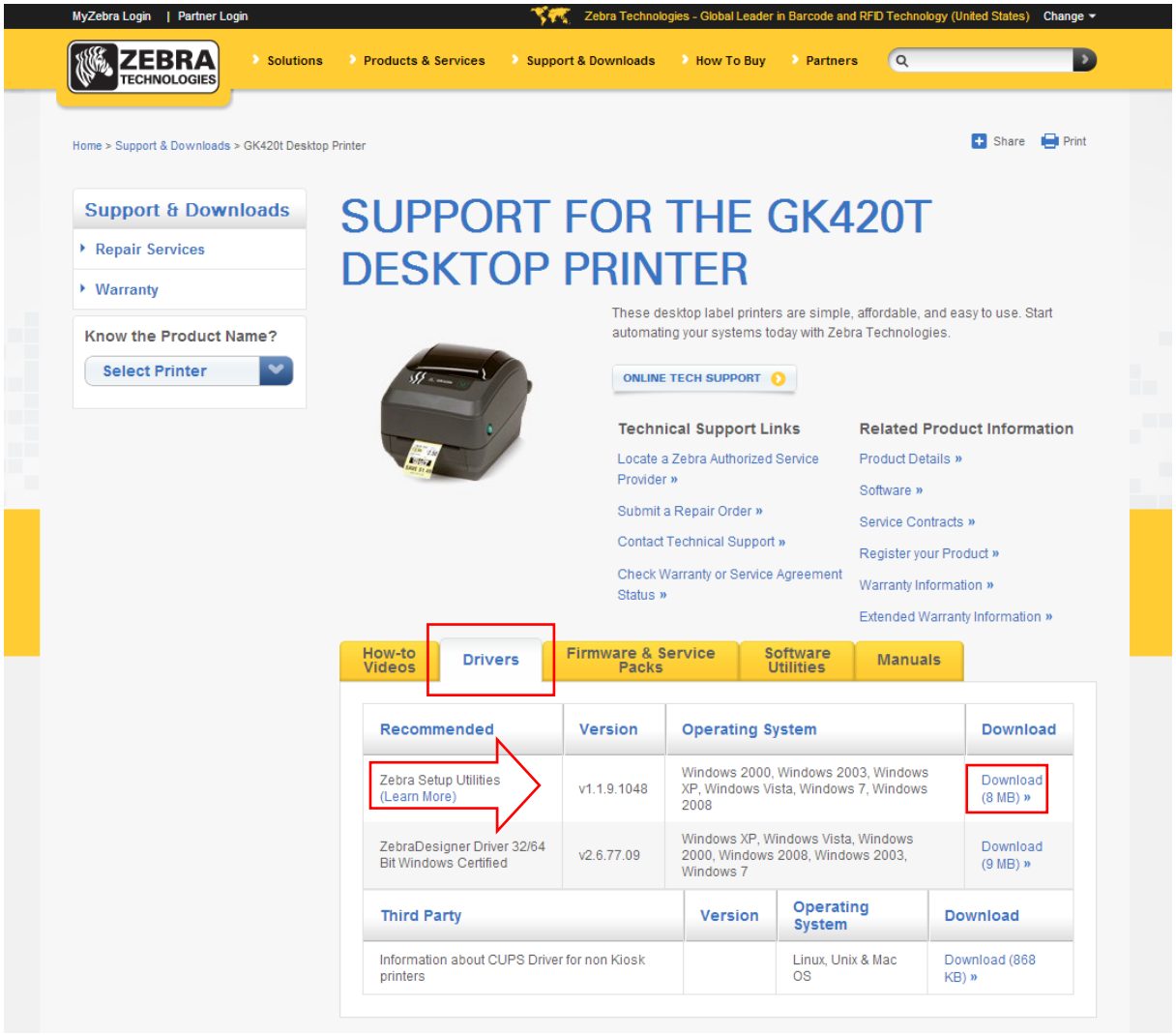

Figure 15: Selecting the right software package with drivers for GK420t

Before downloading the driver package, the confirmation window will open and ask if you agree to the specified terms. Click the field to start the download:

After the package has been downloaded, run the package (administrator privileges are required for the installation of drivers) and follow the instructions (select ZDesigner GK420t if asked for which printer model you wish to install the driver).

4 Printer settings (for COBISS3)

Once you have installed the drivers, update Zebra GK420t printer settings before you start printing labels. Go to **Control Panel** and select **Devices and Printers**. All available printers are

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displayed. Select *ZDesigner* GK420t and right-click the icon. Select **Printing Preferences** from the option list (see Figure *16*).

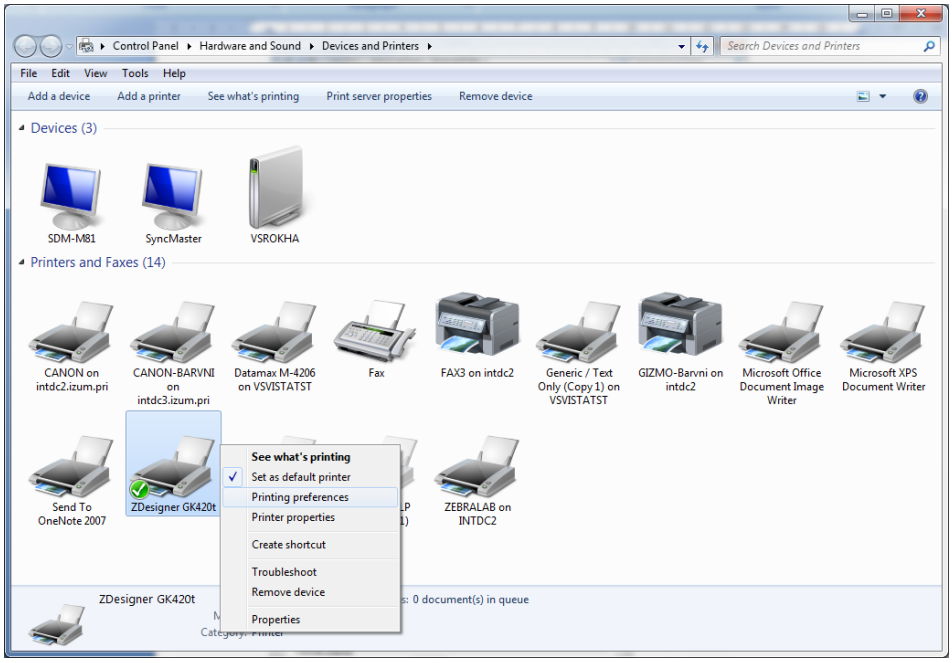

Figure 16: Control Panel with Devices and Printers

When you click **Printing Preferences**, a new window will appear in which you can set up parameters as illustrated in Figure *17*. In the **Options** tab, pay particular attention to fields in the red boxes.

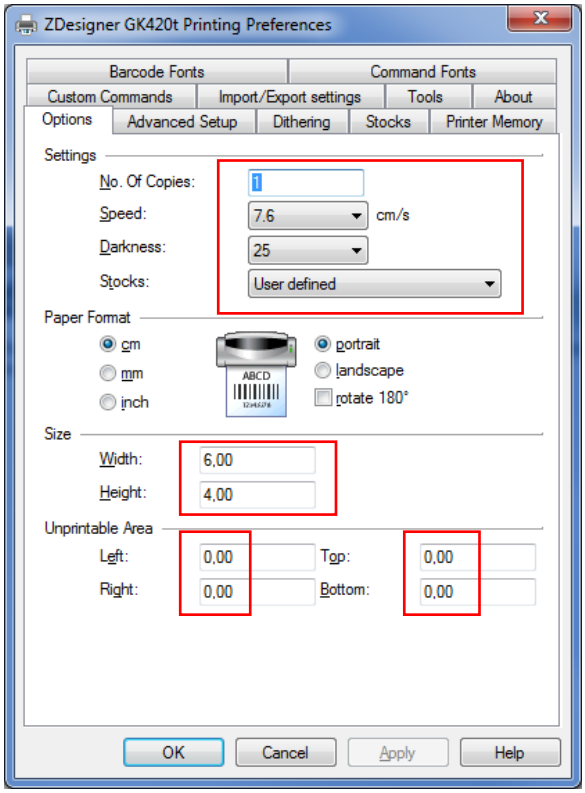

Figure 17: Printing settings

Once you set up parameters under the **Options** tab, click the **Advanced Settings** tab and make sure that *Thermal Transfer* is selected under "Media Type" (see Figure *18*).

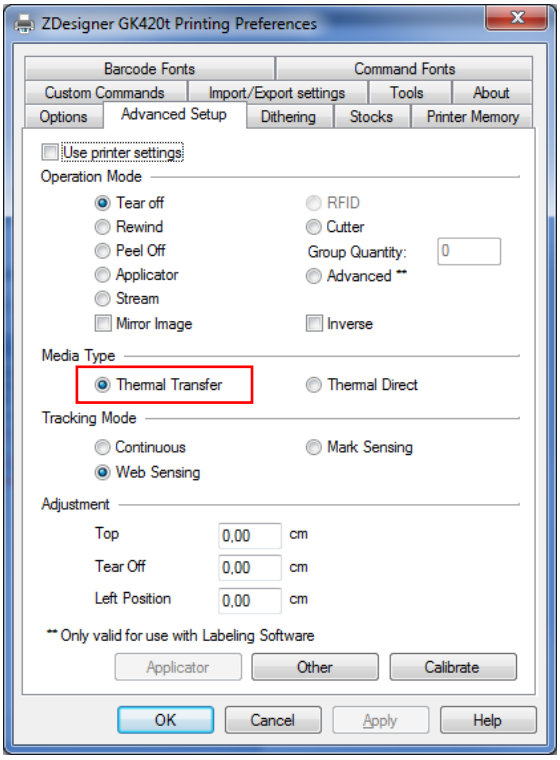

Figure 18: Advance printing settings

At the end, check if **Smooth** is selected under the **Dithering** tab (see Figure *19*).

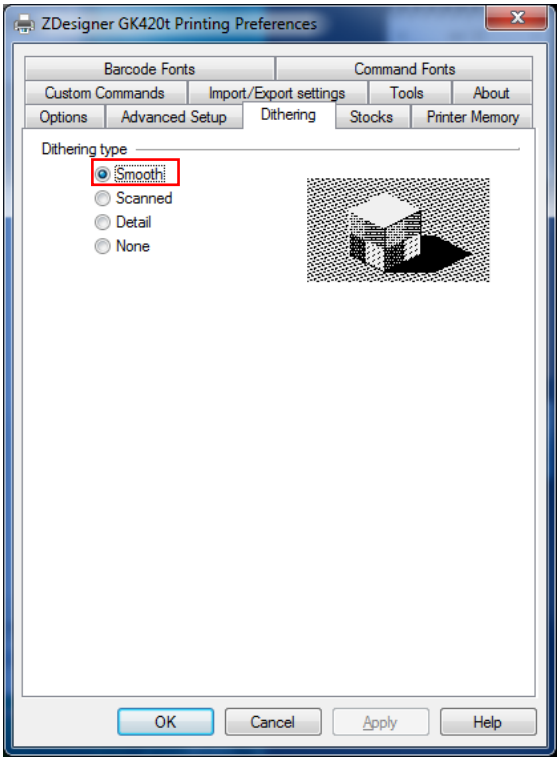

Figure 19: Dithering

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5 Setting logical destinations in COBISS3

In COBISS3, select a printer for printing labels for the material in logical destinations. Select **System/Settings/Logical destinations** (see Figure *20*).

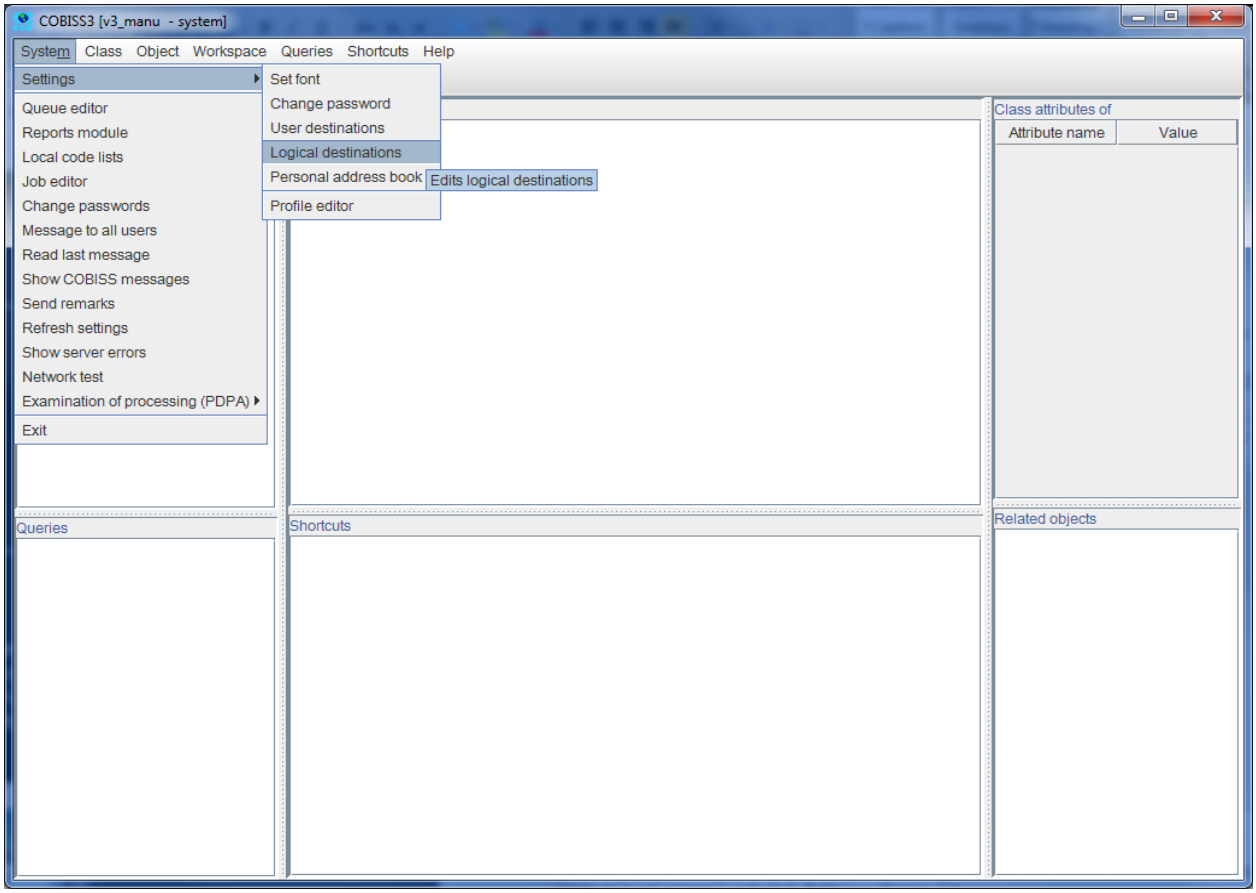

Figure 20: COBISS3 user interface

A new **Local destinations editor** window will open in which you will select *Label – material: [default local printer]* and click **Edit** (see Figure *21*).

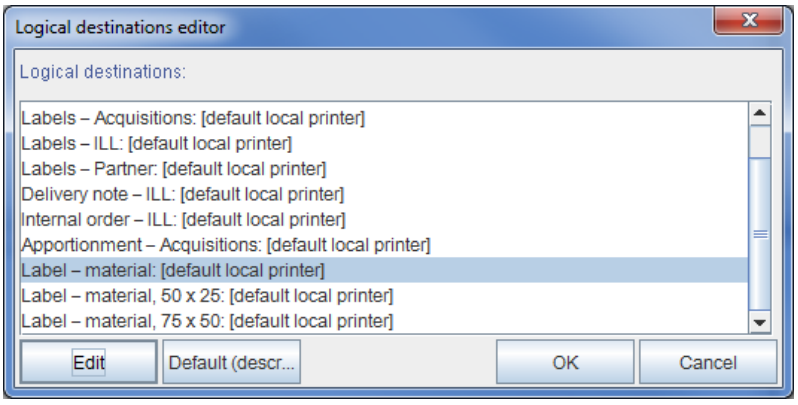

Figure 21: Local destinations editor

The **User destinations** window will open in which you will click **Add printer**. In the new window select ZDesigner GK420t from the drop down list which you intend to use to print labels for the material (see Figure *22*).

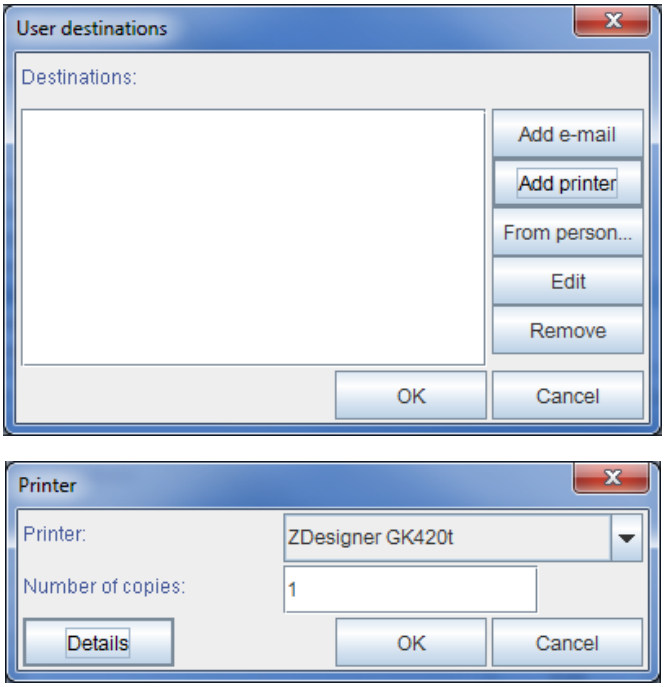

Figure 22: Setting local destinations

Once you select the printer, click the **Details** button to check if these detailed settings are correct for this type of printer (as shown in Figure *23*):

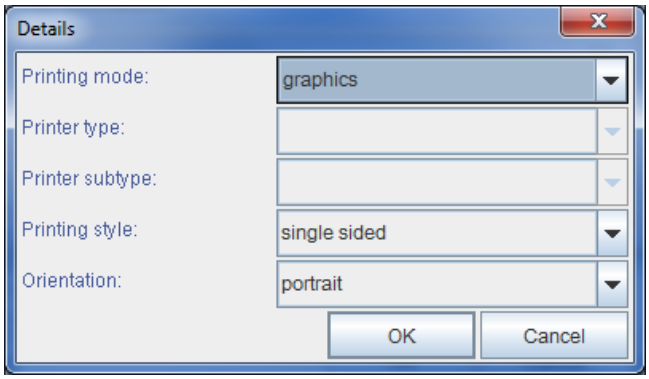

Figure 23: Detailed settings

When all settings are set, click the **OK** button to confirm each choice. At the end, in the **System** menu, select **Refresh settings** (see Figure *24*). If this option is not available, refresh the newly configured settings by first logging out and then logging in to the COBISS3 software.

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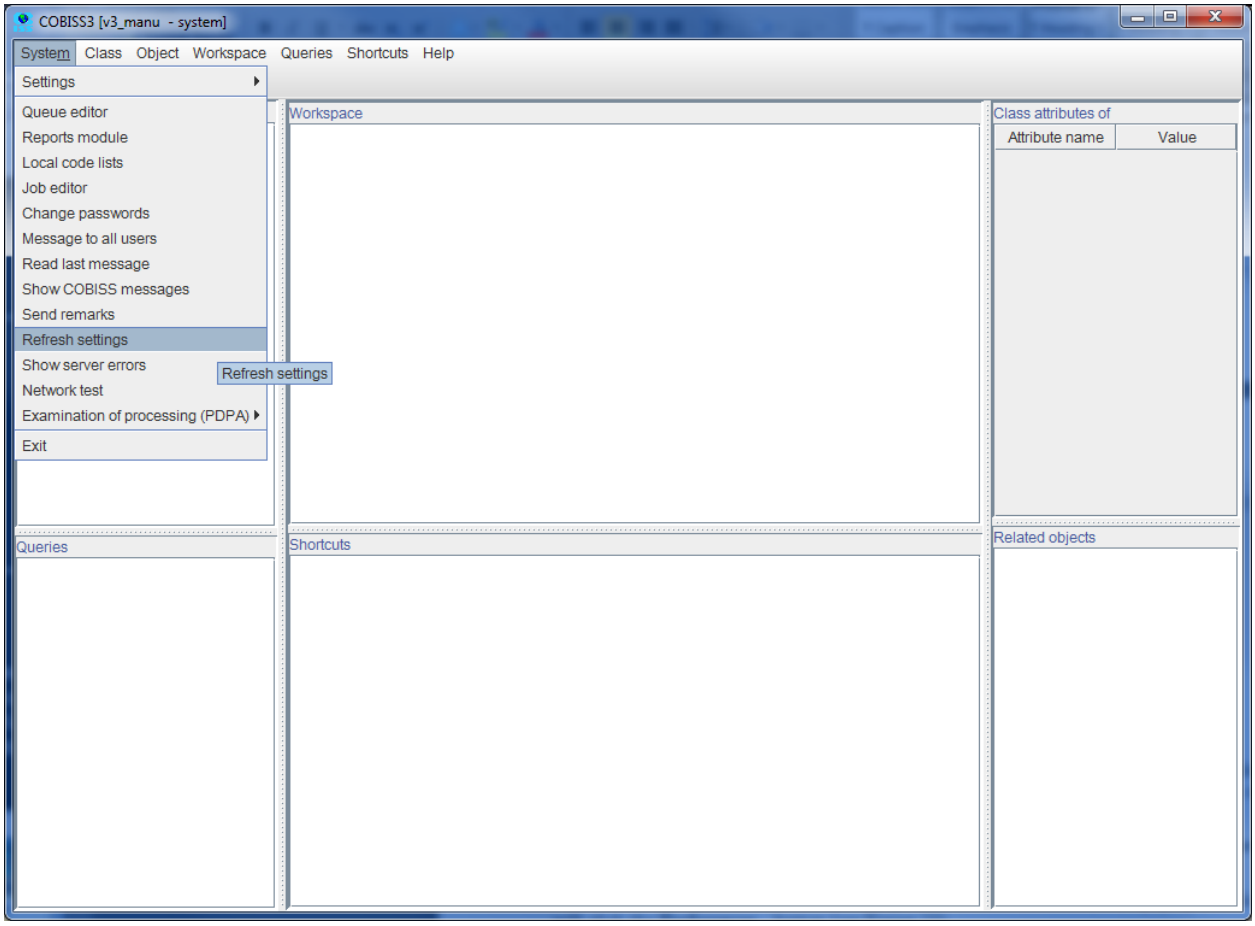

Figure 24: Refreshing settings in the COBISS3 user interface

Now, you can start printing labels for the material.

6 Potential printing problems

6.1 Printing an extra blank label

If labels cannot be printed properly after installing the drivers and setting the logical destinations (e.g. printing an extra blank label), the factory settings should be sent to the printer via original drivers.

The procedure is as follows: Go to **Control Panel** and click the **Devices and Printers** icon. Find the printer, that is the Designer GK420t icon and right-click on it.

Select *Printer properties* from the list of options. A new window should pop up in which you will click the **Preferences...** button (see Figure *25*).

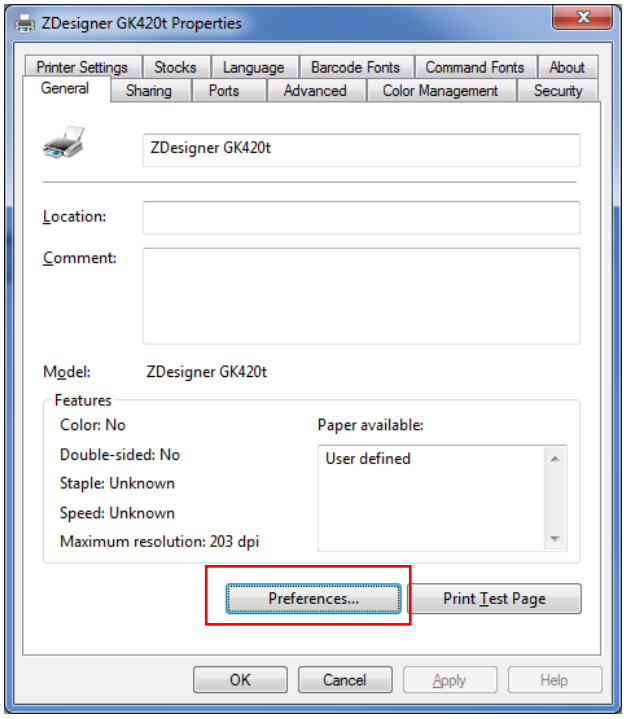

Figure 25: Setting the printer

By clicking the **Preferences…** button a new window with additional settings should pop up again, then select the **Tools** tab (see Figure *26*).

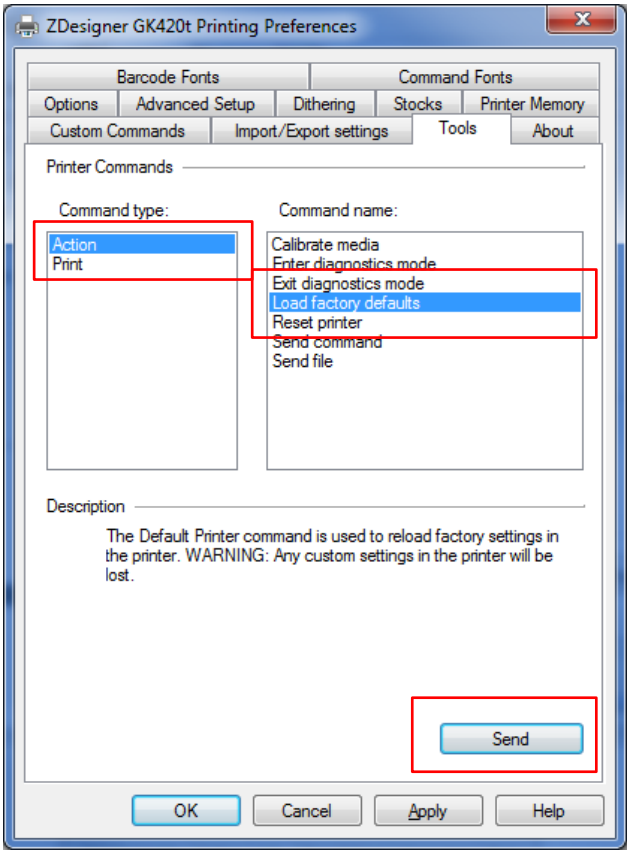

Figure 26: Sending factory settings

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Select *Action* under **Command type** and *Load factory defaults* under **Command Name**, then click the **Send** button. This command sends the default factory settings to the printer. After that retry printing a label.

6.2 Printing an extra blank label

If the settings do not resolve problems with an extra blank label, you can try with label calibration. You can use this method even if the printer prints one extra blank label besides the label for the material.

The procedure is as follows: go to the **Control panel** and click the **Devices and Printers** icon. Find the printer, that is the Designer GK420t icon and right-click on it. Select *Printer properties* from the drop-down menu.

When a new window pops up, click the **Preferences...** button (see Figure *27*).

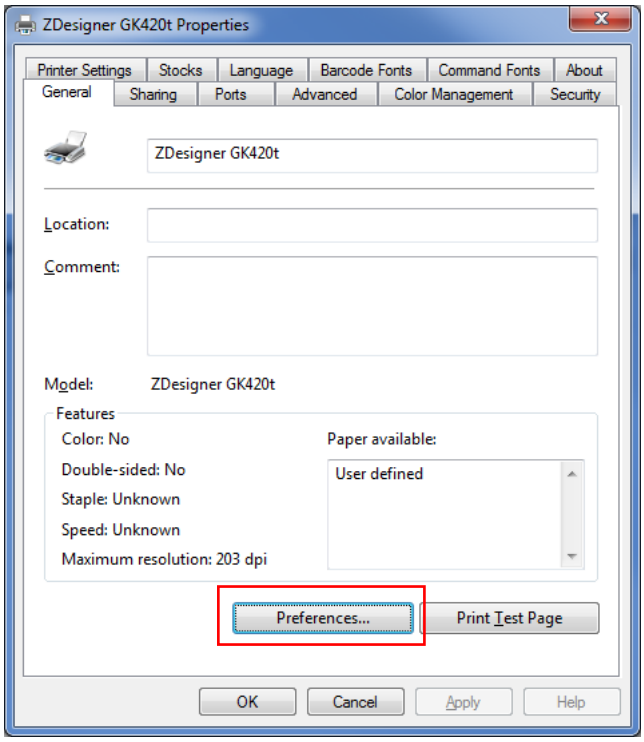

Figure 27: Printer settings

By clicking the **Preferences…** button a new window with additional settings should pop up again, then select the **Tools** tab (see Figure *28*).

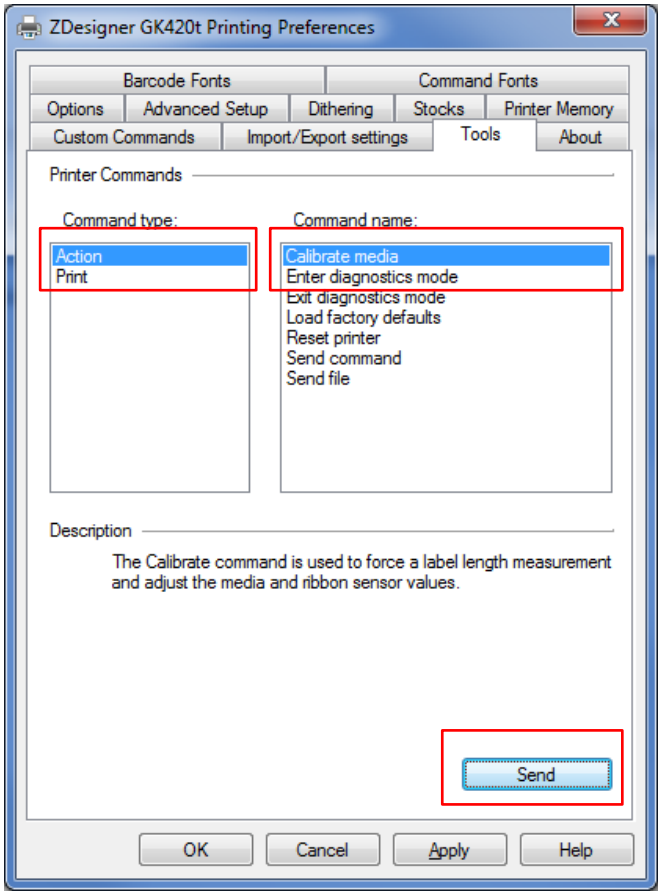

Figure 28: Media calibration

Select *Action* under **Command type** and *Calibrate media* under **Command name** as shown in Figure *28*. By clicking the **Send** button new re-calibration parameters are sent to the printer.

After that retry printing a label.

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