

trentino|systems

**User Manual**

**Version 1.6**

**For**

**Generic Printer Drivers**

**Version 1.0.1.11**

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## 1. ABOUT THIS MANUAL

The purpose of this manual is to provide information related to installation / uninstallation and usage of generic printer drivers provided for associated Trentino printers. For further information on the subject, the relevant documents may be referred.

The following topics will be covered in this manual:

- Installing Generic Printer Drivers
- Uninstalling Generic Printer Drivers
- Specific Options related to Printing Preferences
- Specific Options related to Printer Properties
- Install Unsigned Drivers in Windows 8 Release Preview
- Frequently Asked Questions (FAQs)

Please note that the images provided in this manual are specifically designed as per use in Windows 7 operating system. They may slightly differ for other versions / types of operating systems. The given drivers are compatible to work on systems with Microsoft Windows 8 Release Preview, Microsoft Windows 7, Microsoft Windows Embedded 7, Microsoft Windows Server 2008, Microsoft Windows Vista or Microsoft Windows XP platforms and provide support for both 32 bit and 64 bit architectures of these operating systems except for Microsoft Windows XP in which only 32 bit architecture is supported.

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## 2. INSTALLING THE GENERIC PRINTER DRIVERS

### Important Note:

The driver signature enforcement has to be disabled in order to successfully install generic printer drivers in Windows 8 Release Preview. Section 6 of this manual may be referred for further reference in this regard.

Following steps are required to install generic printer drivers on your system:

1. Unzip 'Generic\_PrintDriver\_Ver1.0.1.11.zip' file shown in figure 1 at an appropriate place on your system.

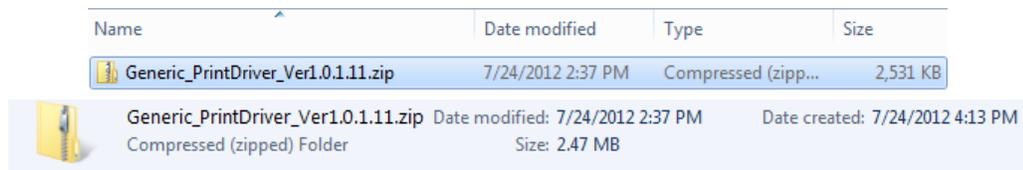


Figure 1: Driver Installation Setup Zip File

2. Start the application "TrentinoPrintInstaller.exe" as an administrator as shown in figure 2.

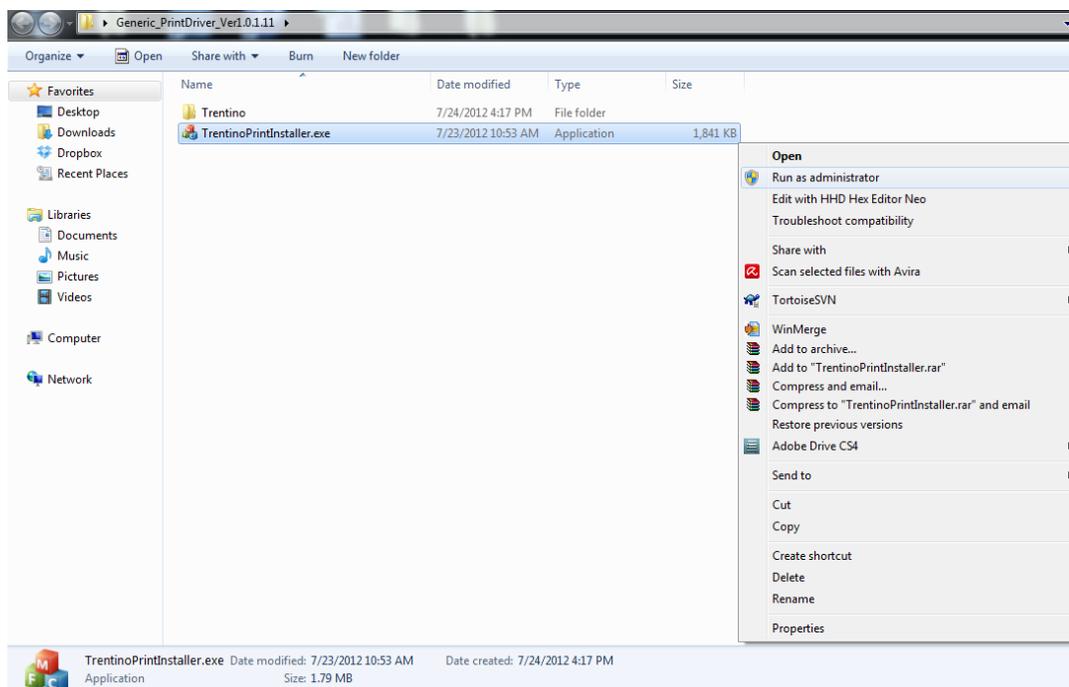


Figure 2: Application to be started as administrator for printer driver installation

3. Select an appropriate print-head size as shown in figure 3 and then click on “Install” button. Relevant hardware documentation may be consulted to know about the print-head size supported in the associated printer.

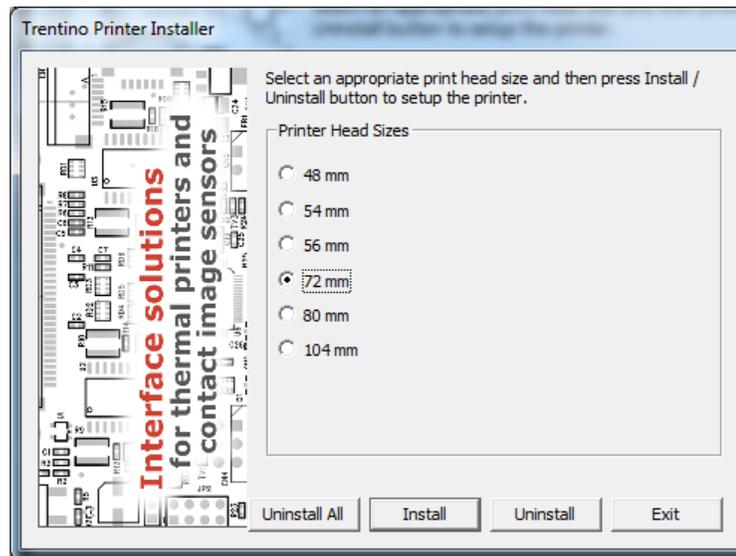


Figure 3: Printer Installation Setup Startup Screen

4. Select port from the given list as shown in figure 4 to be used for printer connection and then click “OK” button. Relevant hardware documentation may be referred to get information about the port supported by the associated printer.

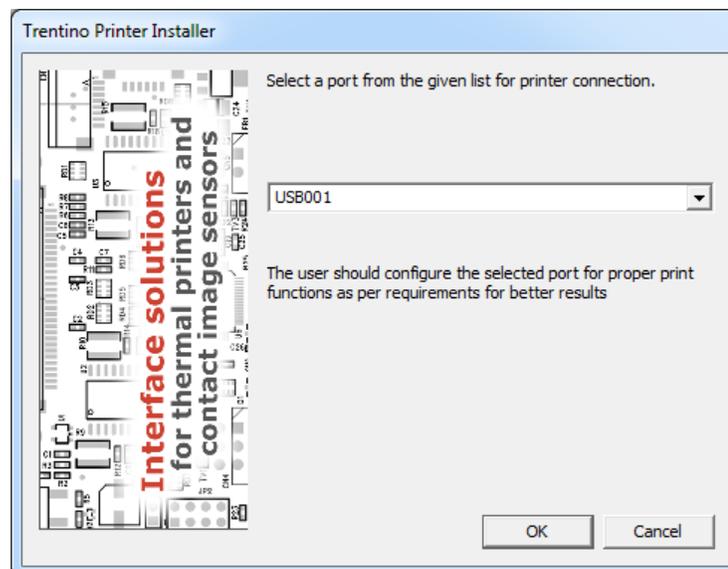


Figure 4: Port Selection Screen during Printer Driver Installation

5. Wait for driver installation while the progress bar is being updated as shown in figure 5.

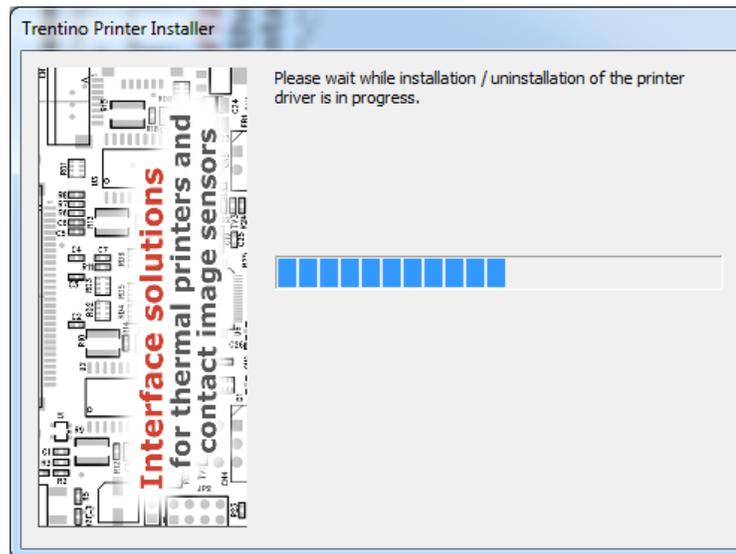


Figure 5: Printer Driver Installation Progress

6. The screen shown in figure 6 may appear on some systems during the installation process. Select "Install this driver software anyway" to proceed with the driver installation.

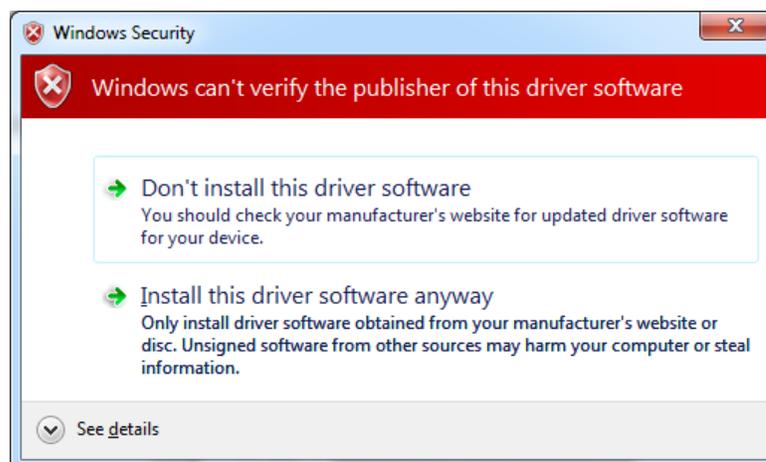


Figure 6: Driver Installation Confirmation Screen

7. When the installation of drivers will complete, a message informing completion of installation process will appear as shown in figure 7. Click "Finish" button to complete the installation process and close the installation setup.

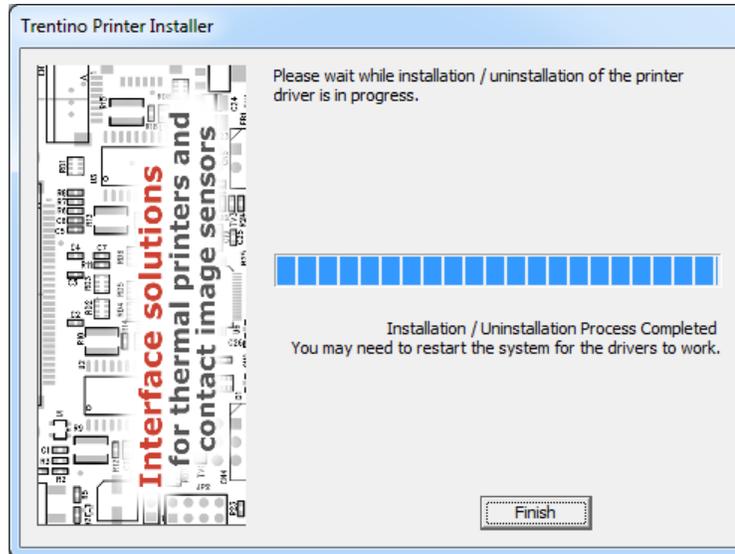


Figure 7: Installation Process Completion Screen

Important Note:

Please note that it may need to restart the computer on some systems to complete the installation process.

### 3. UNINSTALLING THE GENERIC PRINTER DRIVERS

There are two options with regards to uninstalling generic printer drivers:

1. Uninstall printer drivers for a user selected print-head size.
2. Uninstall printer drivers for all print-head sizes.

#### 3.1 Uninstall Drivers for Particular Print-Head Size

Following steps are required to uninstall generic printer drivers from your system:

1. Start installation setup as an administrator as shown in figure 2. Please refer to step 1 and 2 of section 2 of this document related to installing generic printer drivers for more details about extracting the installation setup and starting it.
2. Select the print-head size for which drivers are to be uninstalled as shown in figure 8 and then click “Uninstall” button.

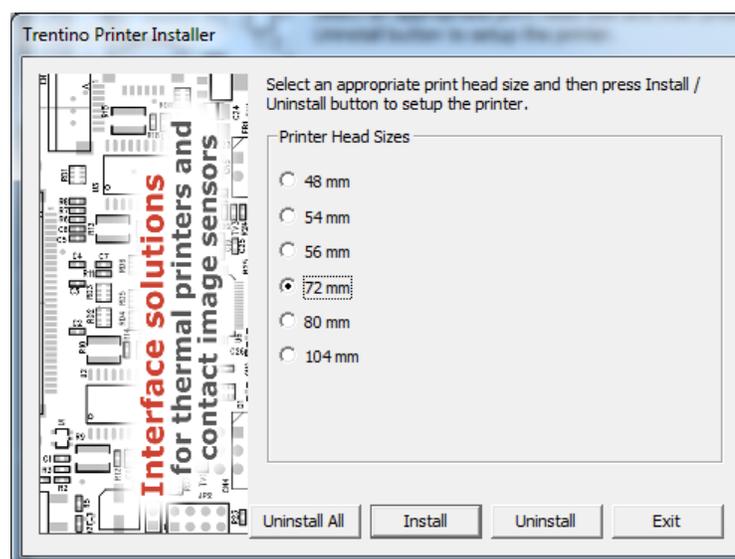


Figure 8: Printer Installation Setup Startup Screen

3. Wait for the drivers to uninstall while the progress bar is being displayed as shown in figure 9.

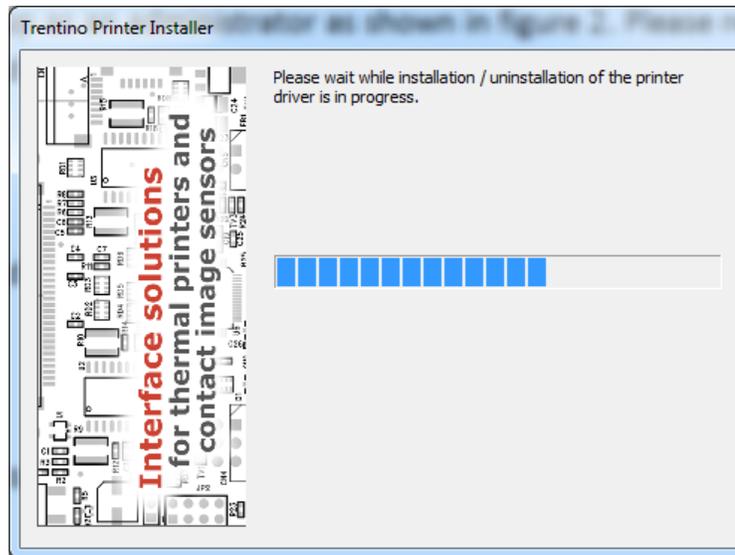


Figure 9: Progress while uninstalling printer drivers

4. When the driver uninstall process will complete, the screen similar to figure 10 will appear. Click "Finish" button to complete the uninstall process followed by closing the setup.

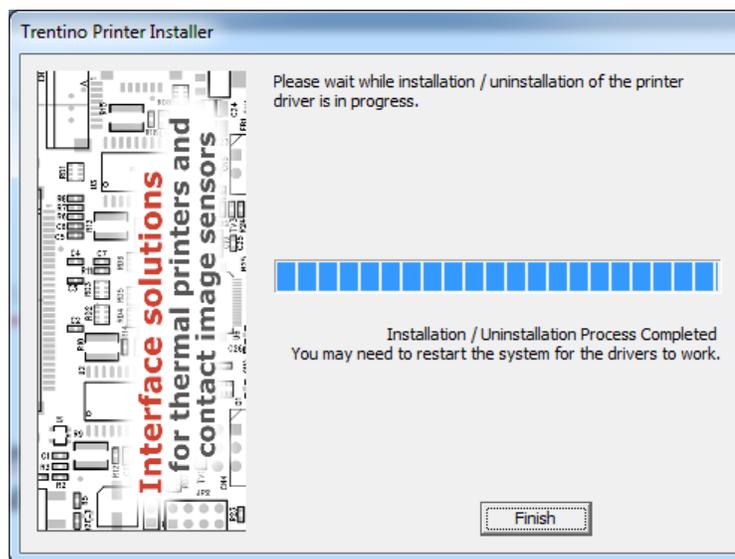


Figure 10: Uninstall Process Completion Screen

**Important Note:**

Please note that computer may need to be restarted on some systems to complete uninstall process.

### 3.2 Uninstall Drivers for All Print-Head Sizes

Following steps are required to uninstall generic printer drivers from your system:

1. Start installation setup as an administrator as shown in figure 2. Please refer to step 1 and 2 of section 2 of this document related to installing generic printer drivers for more details about extracting the installation setup and starting it.
2. Click “Uninstall All” button from the display similar to figure 11.

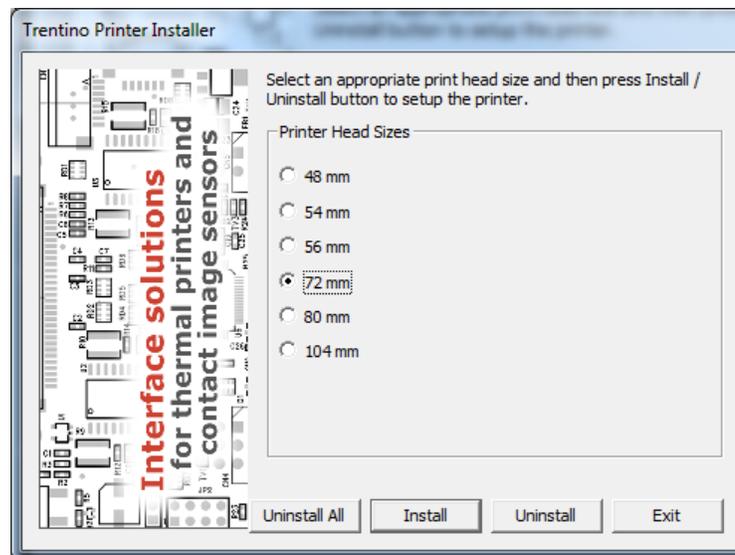


Figure 11: Printer Installation Setup Startup Screen

3. Wait for the drivers to uninstall while the progress bar is being displayed as shown in figure 12.

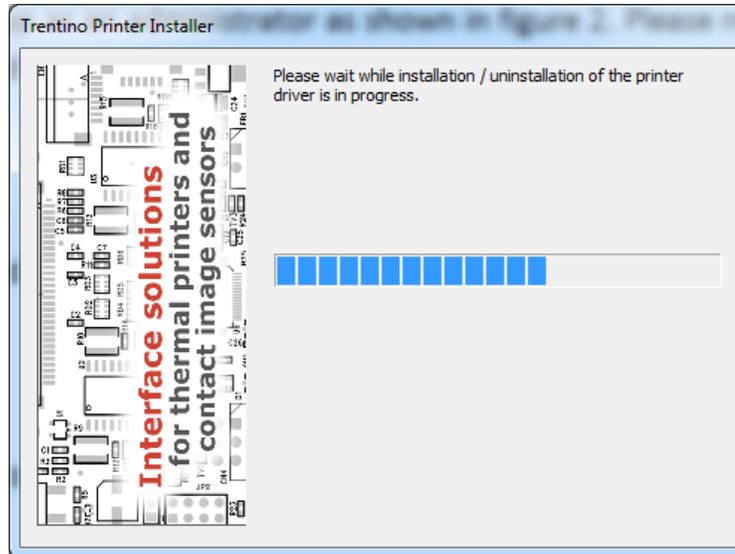


Figure 12: Progress while uninstalling printer drivers

4. When the driver uninstall process will complete, the screen similar to figure 13 will appear. Click "Finish" button to complete the uninstall process followed by closing the setup.

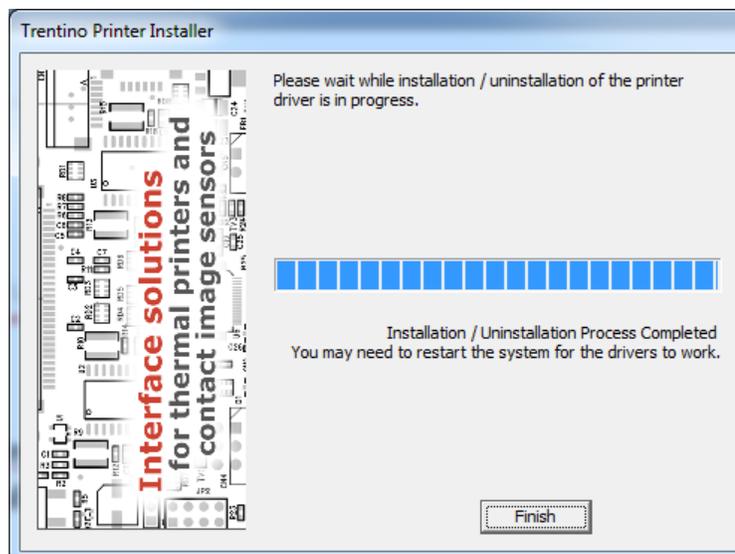


Figure 13: Uninstall Process Completion Screen

**Important Note:**

Please note that computer may need to be restarted on some systems to complete uninstall process.

## 4. OPTIONS RELATED TO PRINTING PREFERENCES IN GENERIC PRINTER DRIVERS

Following steps are required to open the preferences dialog box for generic printer drivers installed on your system:

1. Click on Start Menu followed by “Devices and Printers” option as shown in figure 14 to open the list of printers installed on the system. On some systems like Microsoft Windows XP, you’ll have the option “Printers and Faxes” instead of “Devices and Printers”.



Figure 14: Devices and Printers in Start Menu

2. Right click on the Trentino printer for which printing preferences are to be seen and then select “Printing Preferences” menu item as shown in figure 15.

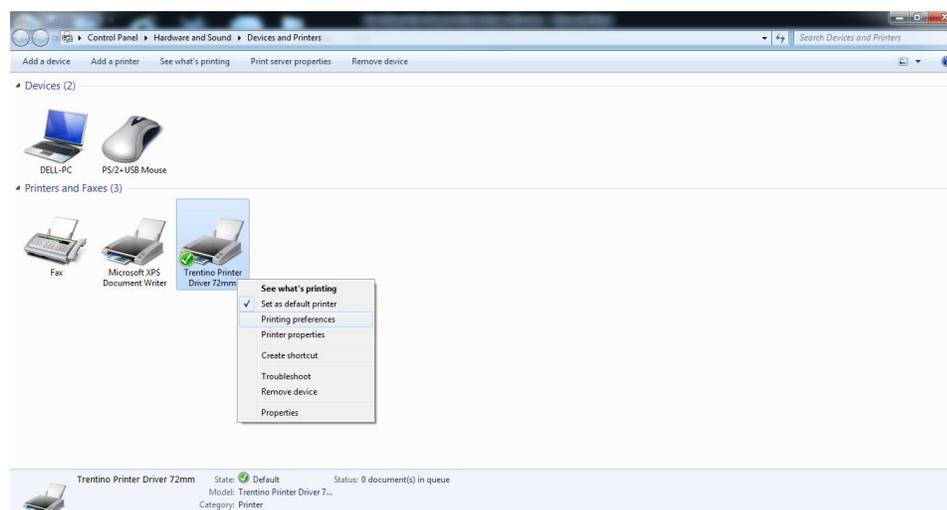


Figure 15: Printing Preferences Option in Devices and Printers

3. A dialog box similar to the one shown in figure 16 will appear. This dialog box is known as Printing Preferences and contains some additional options (discussed in following subsections) as well in addition to the standard options.

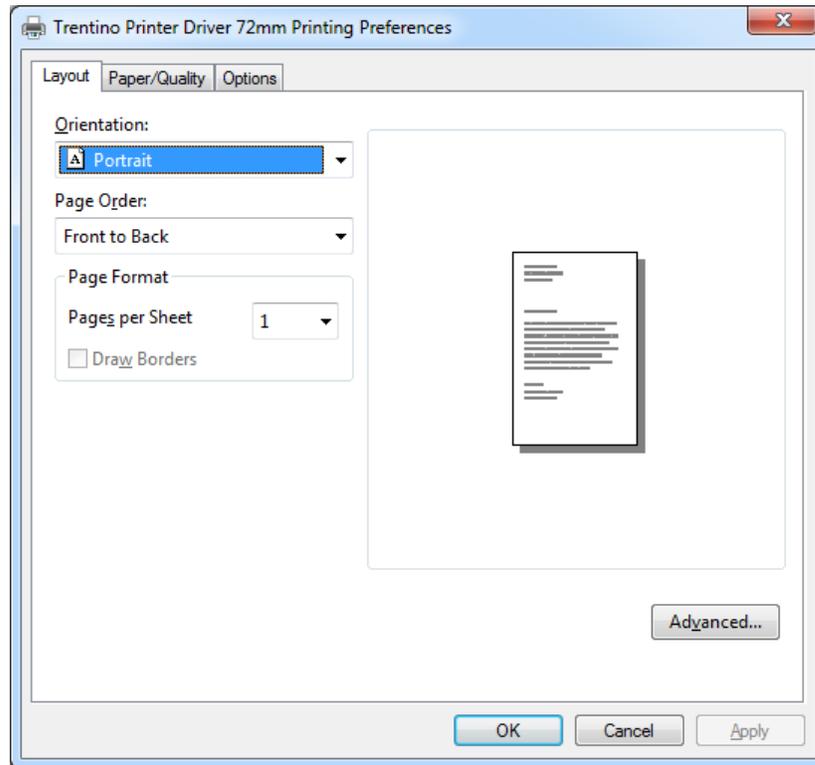


Figure 16: Printing Preferences Dialog Box

The layout tab of the printing preferences dialog box deals with the standard printer settings related to page orientation, printing order and page format while the paper / quality tab deals with the quality of the printing paper. There is an additional button on these two tabs having caption "Advanced...". This button opens up advance printer settings dialog box as shown in figure 17 and contains settings related to copy count, printer fonts and associated documents options.

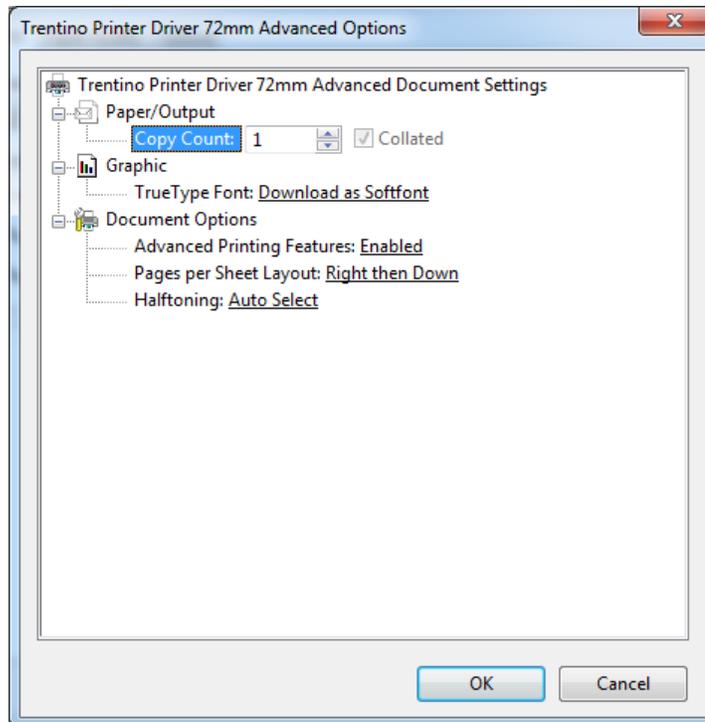


Figure 17: Advanced Printing Options in Printing Preferences

There is an additional “Options” tab in the printing preferences that contains some settings that are specific to the associated Trentino printers. Following is a brief description of these specific settings:

**Important Note:**

Customers should check if the given features are supported in specific products. Associated printer hardware documentation may be referred to know about whether these features are supported by the specific printer firmware or not.

## 4.1 Setting Peek Power

The value for peek power corresponds to the number of dots in the printer that can be activated at one time. Peek power settings for the printer may be adjusted using the “Options” tab of printing preferences dialog box. Under the head “Trentino Printer Settings” there will be an option titled “Peek Settings” as highlighted in figure 18. Adjust its value according to the requirements. The values for peek settings may be from 0 to 255. Default value is 200.

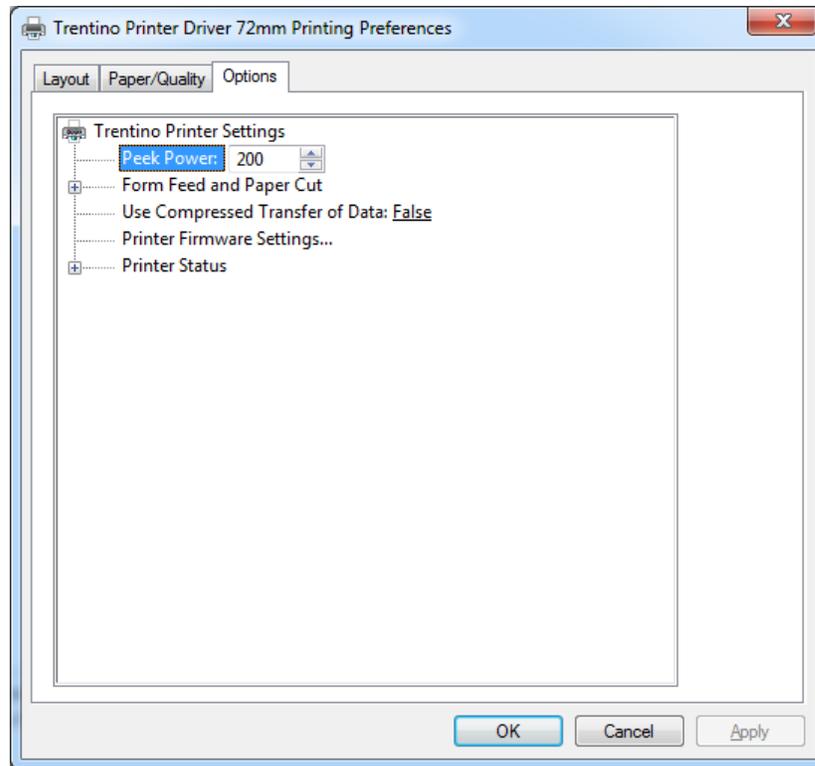


Figure 18: Peek Power Settings in Printing Preferences

## 4.2 Setting Form Feed Length

The length of the form feed after the completion of print job may be adjusted using the relevant items in the "Options" tab of the printing preferences dialog box for the subject purpose. There are two types of form feeds i.e. feed before cut and feed after cut. The subject options are available under the sub-head "Form Feed and Paper Cut" option within the "Trentino Printer Settings" heading of "Options" tab. For more details about paper cut option, please refer to section 4.3 of this document for more details. The value for form feed may be from 0mm to 255mm. The default value for both types of form feeds is 0mm i.e. no feed after print job.

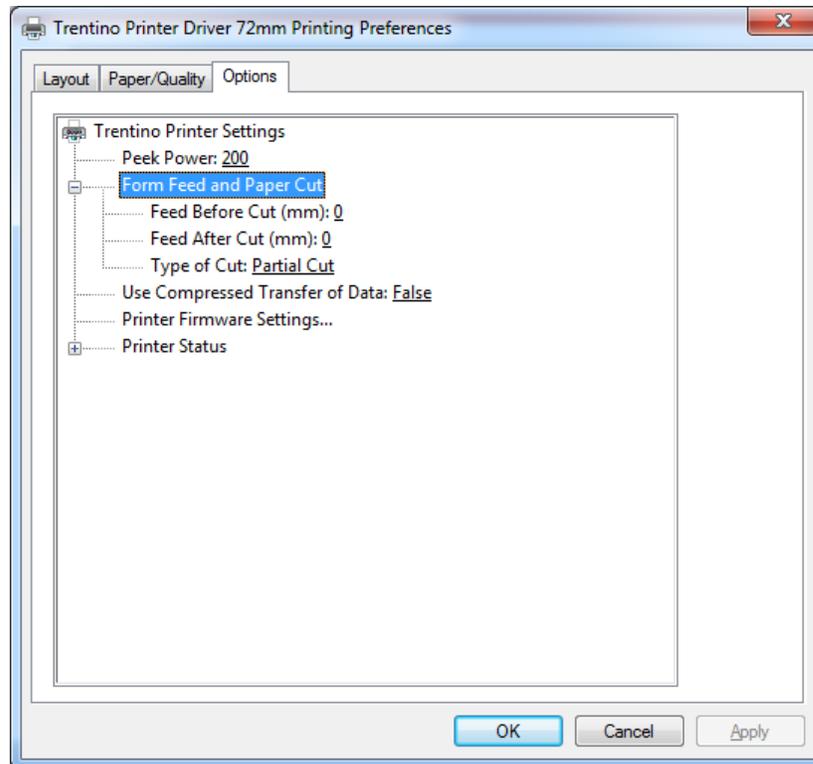


Figure 19: Form Feed and Paper Cut Options in Printing Preferences

### 4.3 Setting Type of Paper Cut

Paper may be cut after completion of print job, if it has been selected by the user. The subject option is available under the sub-head “Form Feed and Paper Cut” option within the “Trentino Printer Settings” heading in “Options” tab of printing preferences. There are two types of cuts i.e. partial cut and full cut. The paper will be cut by the cutter after feeding form to the value selected under the options of “Feed before Cut” and before executing the option “Feed after Cut”. For both types of form feeds, please refer to section 4.2 of this document for further details. Allowed values for types of paper cut are “No Cut”, “Partial Cut” and “Full Cut”. By default, its value is set to “Partial Cut”. Please note that this option will be ignored by the printer, if it is not supported by the printer firmware.

### 4.4 Use Compressed Data during Printing

To avoid bottlenecks in communication, the printer driver may send the print job using compressed data on user selection. The option highlighted in figure 20 under the “Options” tab of printing preferences dialog box deals with it. A true value will indicate the driver to use compressed data transmission while a false value will indicate to use the uncompressed original data for the print job. Default value for this option is false.

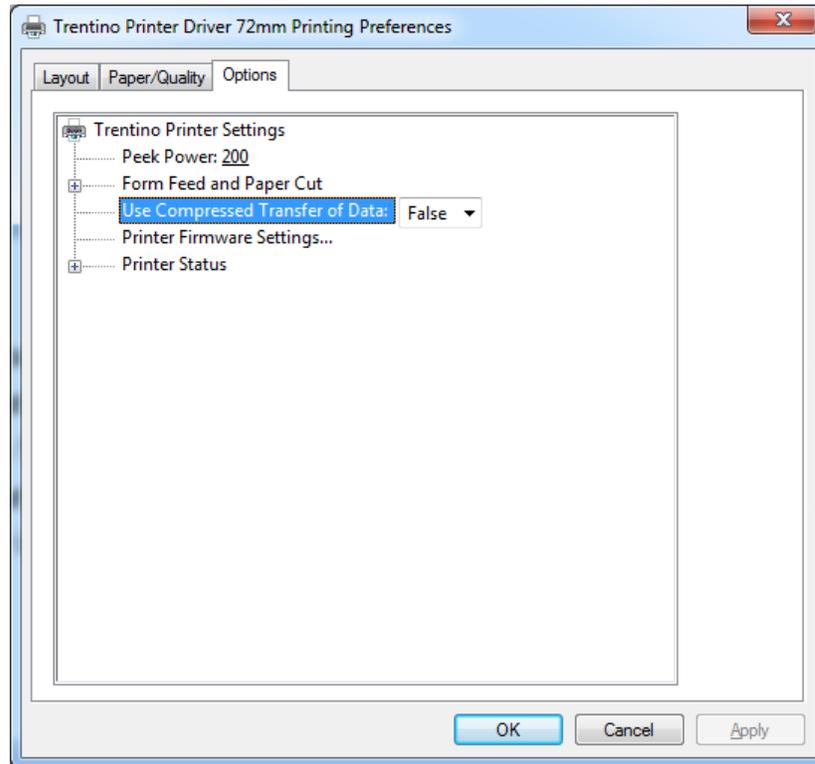


Figure 20: Compressed Data Transmission Option in Printing Preferences

## 4.5 Printer Firmware Settings

Some settings related to printer firmware may be obtained through the subject option as highlighted in figure 21 of "Options" tab in printing preferences dialog box. On clicking the "Properties" button next to item titles "Printer Firmware Settings" provided for the subject purpose, a new dialog box will appear as shown in figure 22. The available settings related to printer firmware are related to getting firmware version number and updating printer firmware.

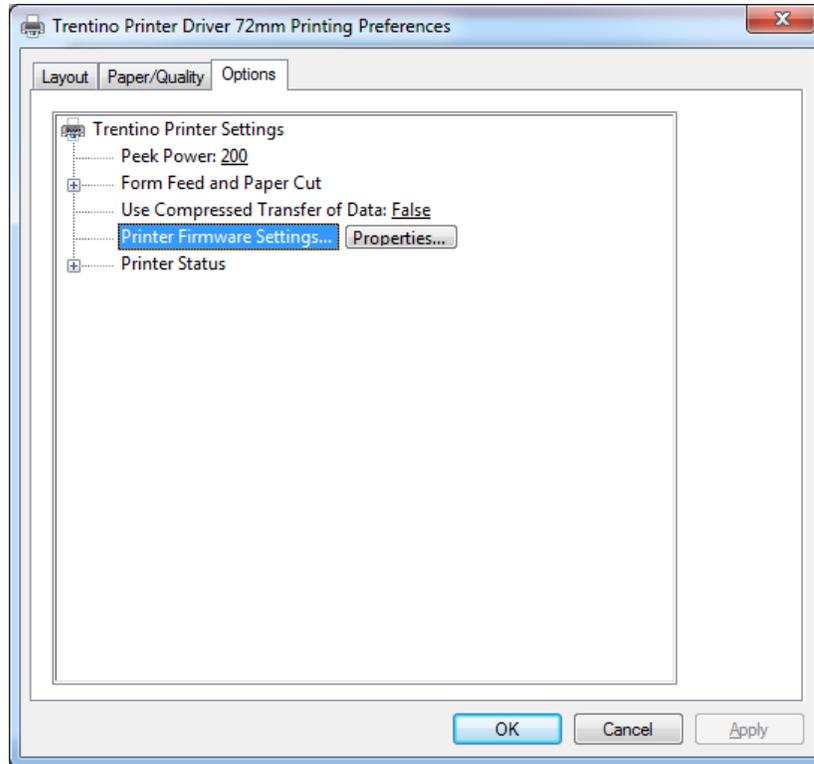


Figure 21: Printer Firmware Settings

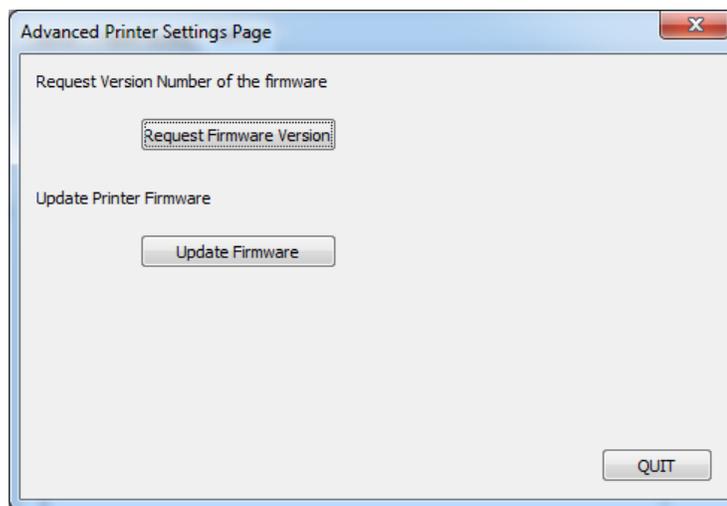


Figure 22: Printer Firmware Settings Dialog Box

### 4.5.1 Printer Firmware Version

Click “Request Firmware Version” button in the dialog box displayed in figure 22 to get the version number of the firmware from the connected printer.

The subject option will work only if bidirectional support is enabled. Section 5.4 may be referred for details regarding bidirectional support.

**Warning:**

Please note that if requesting firmware version number is not supported by the printer firmware, then the system may not respond. In such situation, it will be required to close the printing preferences dialog box through task manager, which may close all windows opened in windows explorer as well as Devices and Printers alongwith their associated opened property windows.

### 4.5.2 Printer Firmware Update

Click “Update Firmware” button to in the dialog box displayed in figure 22. Select the Hex file containing data to be uploaded to the firmware in file open dialog box that will appear. Now wait for the request to be completed. A new message box will be displayed after the completion of the request.

The subject option will work only if bidirectional support is enabled. Section 5.4 may be referred for details regarding bidirectional support.

**Warning:**

Please note that if updating firmware is not supported by the printer firmware, then the system may not respond. In such situation, it will be required to close the printing preferences dialog box through task manager, which may close all windows opened in windows explorer as well as Devices and Printers alongwith their associated opened property windows.

## 4.6 Status Display Related to Printer & Attached Sensors

The next setting highlighted in figure 23 under the “Options” tab of the printing preferences dialog box deals with different status updates related to the printer & its associated sensors. These status values are read only and will be set by the driver itself on getting status from the printer. The status messages are related to paper near end sensor, presence / absence of paper, printer head temperature, opened / closed printer head and cutter errors. A true value will indicate the presence of the indicated error while the false value informs regarding no error. The value will be updated only if the associated sensors are attached with the relevant printer and bidirectional support is enabled. Section 5.4 may be referred for details regarding bidirectional support.

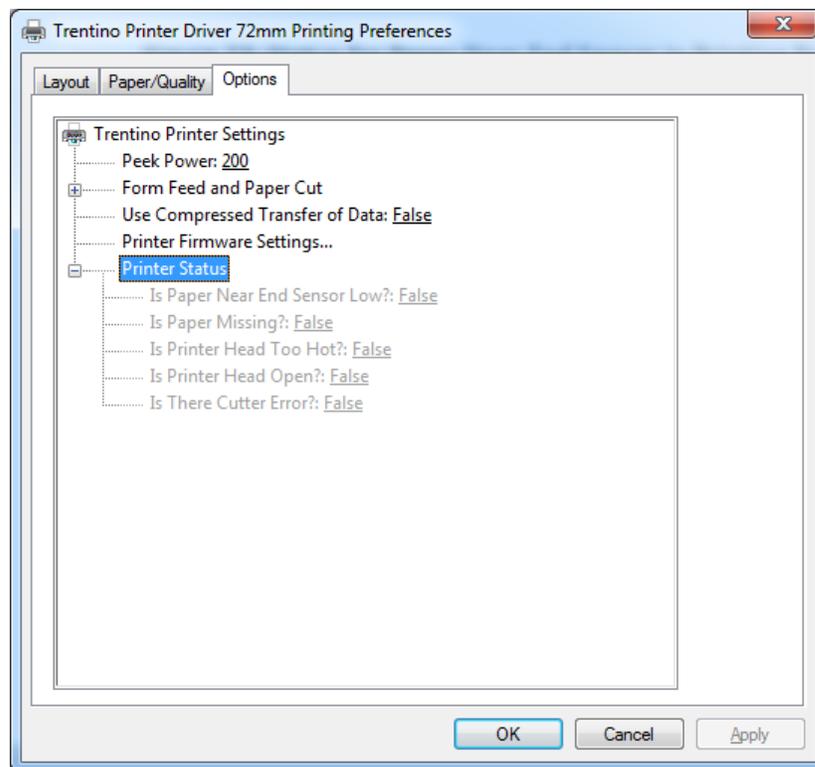


Figure 23: Status Display for Printer & Attached Sensors in Printing Preferences

## 5. OPTIONS RELATED TO PRINTER PROPERTIES IN GENERIC PRINTER DRIVERS

Following steps are required to view and change other properties of generic printer drivers on your system:

1. Click on Start Menu followed by “Devices and Printers” option as shown in figure 14 to open the list of printers installed on the system. On some systems like Microsoft Windows XP, you’ll have the option “Printers and Faxes” instead of “Devices and Printers”.
2. Right click on the Trentino printer for which printing properties are to be seen and then select “Printer Properties” menu item as shown in figure 24.

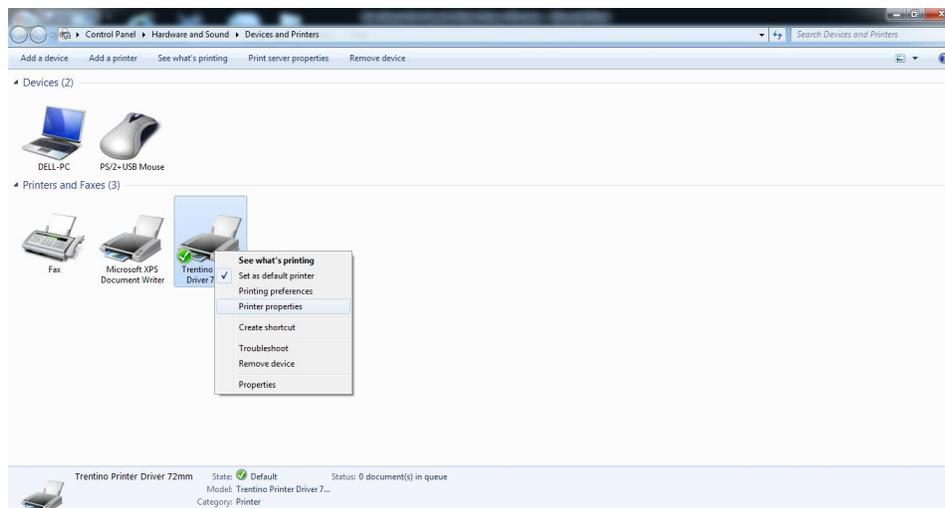


Figure 24: Printer Properties Option in Devices and Printers

3. A dialog box similar to the one shown in figure 25 will appear.

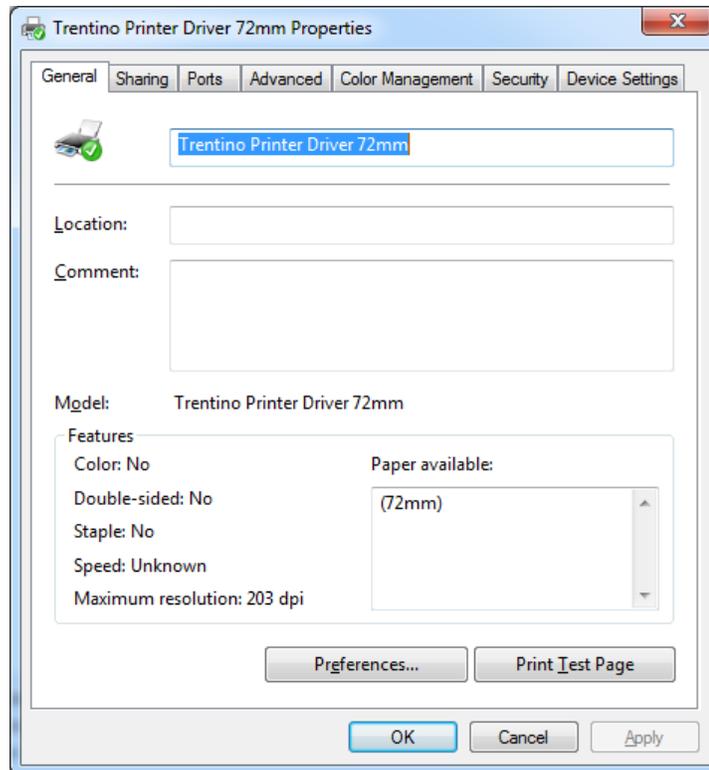


Figure 25: Printer Properties Dialog Box

## 5.1 Printing Preferences

To open the printing preferences dialog box, "Preferences..." button on the general tab of printer properties dialog box may be used. Please refer to section 4 of this document for details regarding the options / settings provided in printing preferences dialog box.

## 5.2 Getting Test Print

A user may click on "Print Test Page" button on the general tab of printer properties to send the default test print to the printer for testing the connection with the printer and its ability to print the given default document.

## 5.3 Changing Printer Port

The port selected for the printer connection may be changed through ports tab of the printer properties as shown in figure 26. To change the port, select the checkbox associated with the port to be selected from the given list of ports and then click “Apply” button to use the newly selected port by the driver for further communication with the printer.

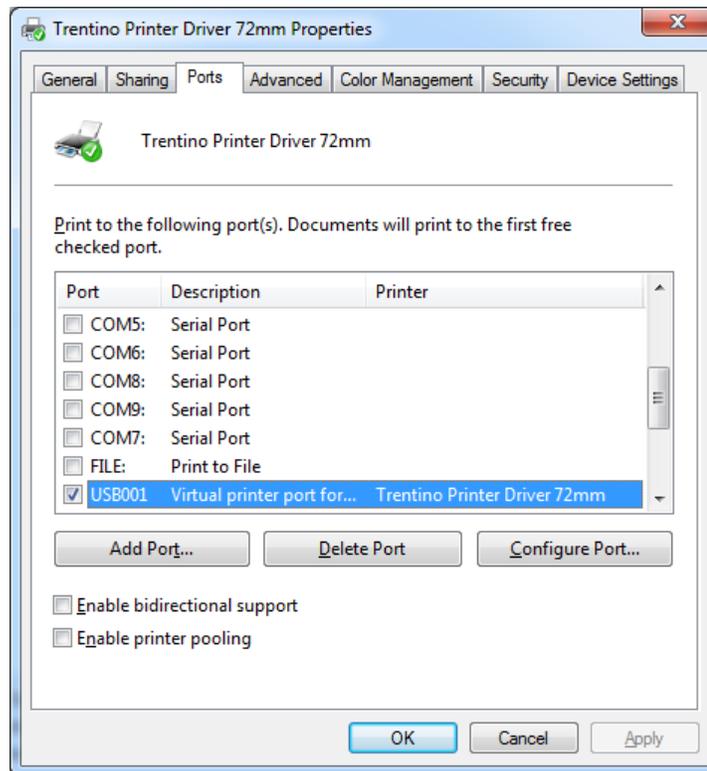


Figure 26: Ports Tab of Printer Properties

## 5.4 Bidirectional Support

A printer driver can get status updates and response for sent requests from the printer only when the bidirectional support is enabled. This support may be enabled by selecting the checkbox next to the option “Enable bidirectional support” through ports tab of the printer properties as shown in figure 27. To enable the bidirectional support, select the checkbox next to the option “Enable bidirectional support” and then click “Apply” button to start bidirectional communication with the printer. To disable the support for bidirectional communication, uncheck the same checkbox. By default bidirectional support is not enabled.

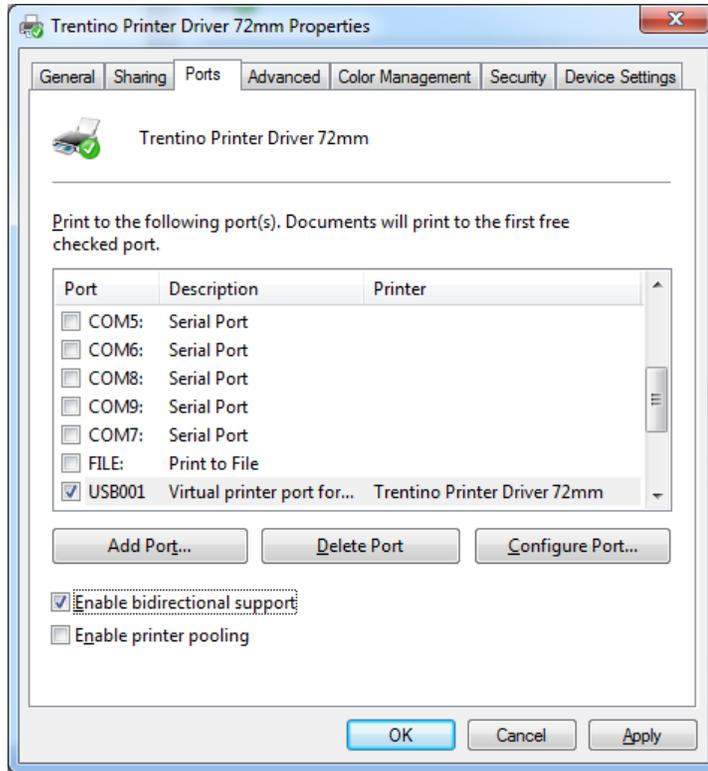


Figure 27: Bidirectional Support Option in Ports Tab of Printer Properties

## 6. INSTALL UNSIGNED DRIVERS IN WINDOWS 8 RELEASE PREVIEW

During driver installation on Windows 8 Release Preview, a user may experience that the driver installation was apparently completed successfully but the newly installed printer did not appear in the list of installed printers. This is because the printer driver installation (which apparently seemed to be completed successfully) has failed because the subject printer drivers were unsigned.

There is a slightly complicated workaround to disable driver signature enforcement in Window 8 Release Preview as explained below:

1. From the Metro Start Screen, open Settings (move your mouse to the top-right or bottom-right corner of the screen and wait for the pop-out bar to appear on the right side of the screen, click the Gear icon).



Figure 28: Metro Start Screen in Windows 8

2. Click 'Change PC Settings'.



Figure 29: Settings Panel in Windows 8

3. Select 'General' option under PC Settings on the left side. Scroll down on the right side and then click 'Restart now' under 'Advanced startup'.

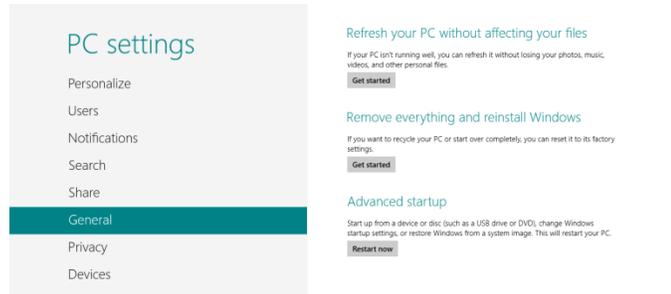


Figure 30: PC Settings in Windows 8

- 4. Click 'Troubleshoot'.

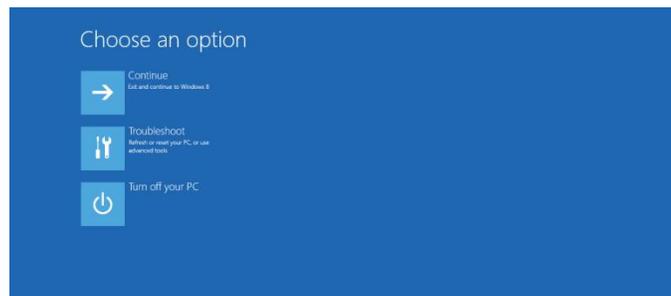


Figure 31: Advance Startup Options in Windows 8

- 5. Click 'Advanced options'

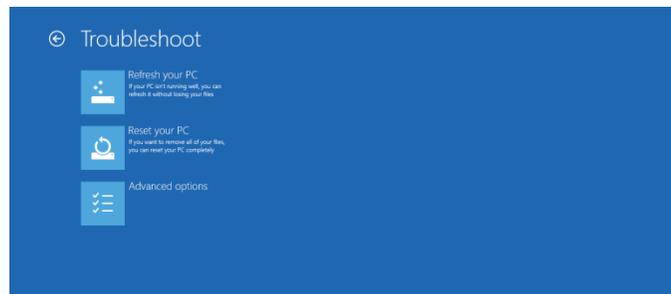


Figure 32: Troubleshoot Options in Windows 8

- 6. Click 'Startup Settings'

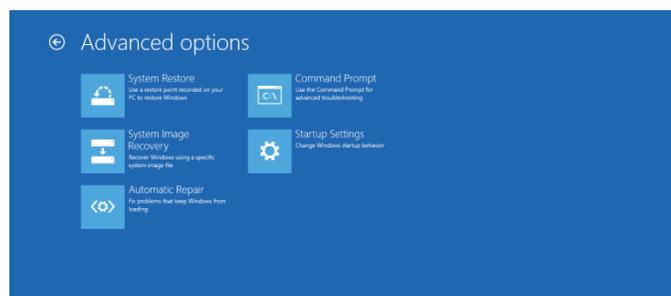


Figure 33: Advanced Options while Starting Windows 8

7. Click Restart.

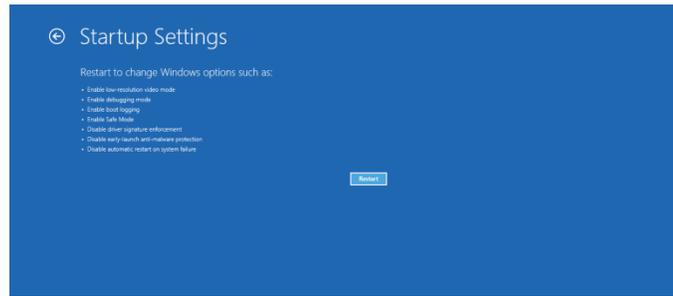


Figure 34: Startup Settings Screen in Windows 8

8. When your computer restarts, select '7) Disable driver-signature enforcement' from the list by either pressing number key 7 or function key F7.

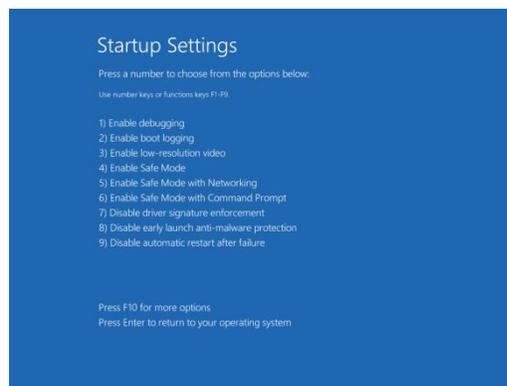


Figure 35: Startup Settings Screen 2 in Windows 8

Now the unsigned or modified drivers may be installed. Reboot again once the driver is installed and hopefully all will be well. Section 2 of this manual may be referred for further details regarding the steps required to install generic printer drivers on Windows based systems.

## 7. FREQUENTLY ASKED QUESTIONS (FAQs) RELATED TO THE GENERIC PRINTER DRIVERS

Following are some important FAQs related to the generic printer drivers:

1. What to do if the driver installation / uninstallation process completes successfully but is not updated on the system?

Ans: On some operating systems, it may be required to restart the system to complete the driver installation / uninstallation process.

2. Does deleting the printer from printers list in “Devices and Printers” / “Printers and Faxes” uninstall the associated printer drivers?

Ans: No, by only deleting the printer from the list of visible printers, one may not be able to see the printer in the list but its driver package will remain installed on the system. It is recommended to always uninstall the driver through uninstall procedure of the accompanied driver installation setup.

3. How to remove all installed Trentino printers and their driver packages from the system?

Ans: Use “Uninstall All” option on the accompanied installation setup to remove all Trentino printers and their driver packages installed on the system. Please refer to section 3.2 of this document for more details.

4. What to do if an error is generated while uninstalling printer drivers stating that printer driver is in use?

Ans: Please check, if there are some documents in the printer queue, cancel all those print jobs to empty the printer queue and then retry to uninstall the printer drivers.

5. How to remove installed drivers for a Trentino printer that is not listed in the “Devices and Printers” / “Printers and Faxes” and is not being recognized by the generic printer driver installation setup?

Ans: To open print server properties by either of the following ways as supported:

- For those systems that support “Devices and Printers”, select a printer and then click on “Print Server Properties” option.

- For those systems that support “Printers and Faxes”, by either selecting server properties from the file menu or right clicking in an empty area of the window for Printers and Faxes & selecting “Server Properties” from the menu that appears.

Go to the drivers tab as shown in figure 36 and select the Trentino printer driver followed by clicking “Remove” button available below the list of installed drivers.

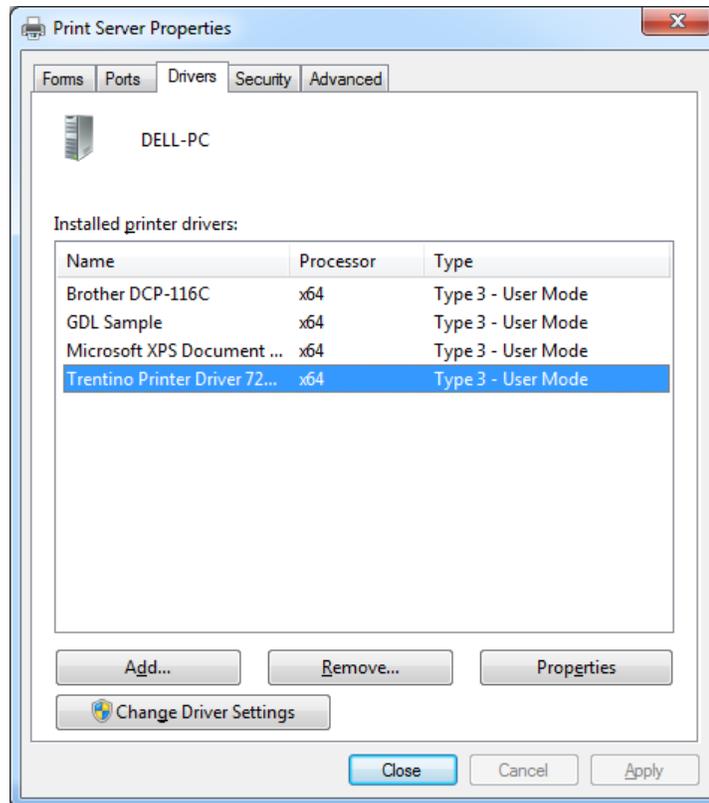


Figure 36: Drivers Tab in Print Server Properties

6. What to do if the driver gets stuck at last two block of progress bar while installing the generic printer driver?

Ans: One of main reasons for getting stuck during the driver installation process may be that some of the running system services are dependent on print spooler service which does not allow restarting the print spooler during installation process which is a necessary step to install new printer drivers.

7. Is bidirectional communication supported in generic printer drivers?

Ans: Yes, the bidirectional communication is supported by generic printer drivers. Section 5.4 may be referred for details regarding bidirectional support.

8. How to save the print job to a file instead of sending it to the printer?

Ans: There are two ways to save the print job to a file instead of sending it to the printer:

- Change the port of the printer to “File:” and then send the print job. Please see section 5.3 of this document for further details regarding changing printer port.
- Select “Print to file” option in the print dialog box before sending the print.

If any of the above two options is used for printing, then the system will require to provide the name of the file alongwith its complete path where the print job is to be saved.