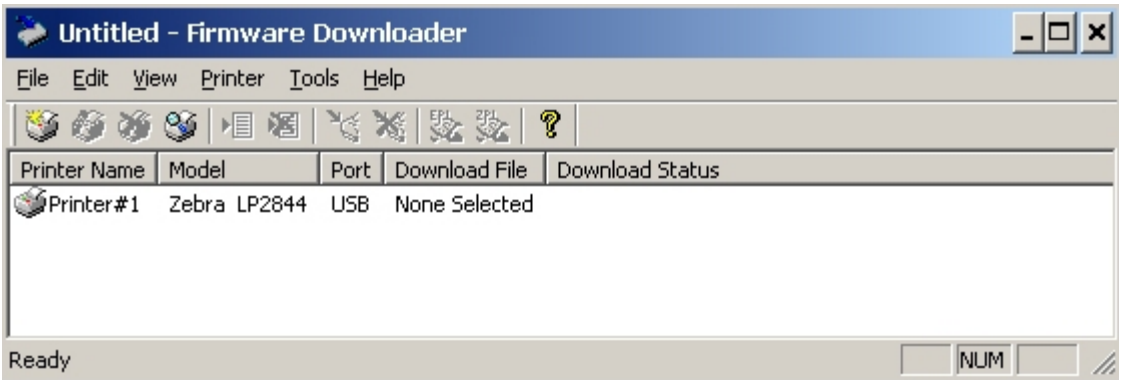
DOWNLOADING FIRMWARE USING THE Z-DOWNLOADER UTILITY

Firmware Downloader Application

This application can update firmware in Zebra printers connected by Serial, Parallel, USB and IP Ethernet network.



Firmware Downloader screen with one printer added.

Add Printers to the List

There are two ways to add printers to the list: Auto-Detect and Manual.

If your printer is connecting via an USB or an IP Ethernet interface, use Auto-Detect to add the printer(s).

If your printer is connecting via the serial or parallel interfaces, or is not detected by using the Auto-Detect method, use the Manual add method.

Auto-detect Printers

To Auto-Detect printers connected via the USB or IP Ethernet interfaces, press the “Auto-Detect” Toolbar button and choose the menu option “Printer→Auto-Detect” or right click on the list and select “Auto-Detect Printers”. Once you start an Auto-Detect, the dialog box shown in Figure 1 will appear.

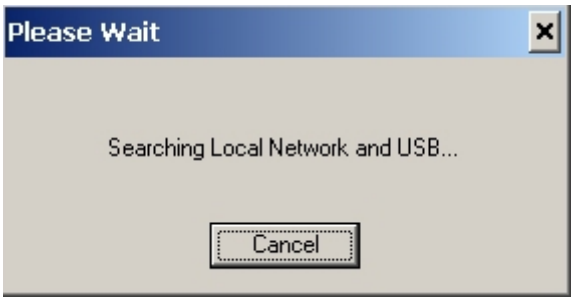


Figure 1 - Auto-Detect Dialog Box

You can cancel Auto-Detection at any time by pressing the Cancel button.

Once the Auto-Detection is complete, the printers detected will be added to the printer list.

NOTE: Ethernet connected printers are detected by the application broadcasting a UDP packet out onto the network. UDP port number 4201 is used for the discovery process. Some networks filter out UDP packets. This means that it may not be possible to detect all printers on your network. See your network administrator for more information. If you are not able to Auto-Detect your network printers, follow the manual add instructions in the next section.

Manual Add Printers

To manually add a printer to the list press the "Add Printer" toolbar button , choose the menu options "Printer→Add…" or right click on the list and select "Add Printer…". When you add a printer the dialog shown in Figure 2 appears.

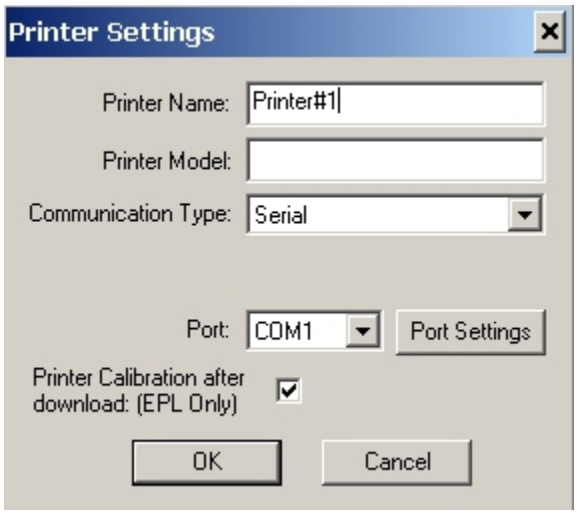


Figure 2 - Configuring a Serial Printer

Enter the Printer Name, Model, Communication Type, etc for the printer you wish to add.

Adding a Serial Printer

The available Serial ports will be shown in the Port combo box. Select the serial port to which the printer is connected. The computer's serial port settings must match the printer's serial port settings. The printer's serial port settings can be viewed by performing an AutoSense on the printer (see the user's manual for details) and reading the Dump Mode status labels serial configuration data (example: 9600,N,8,1 which matches the Port Setting displayed below). Configure the port settings by pressing the Port Settings button. The dialog shown in Figure 3 will appear.

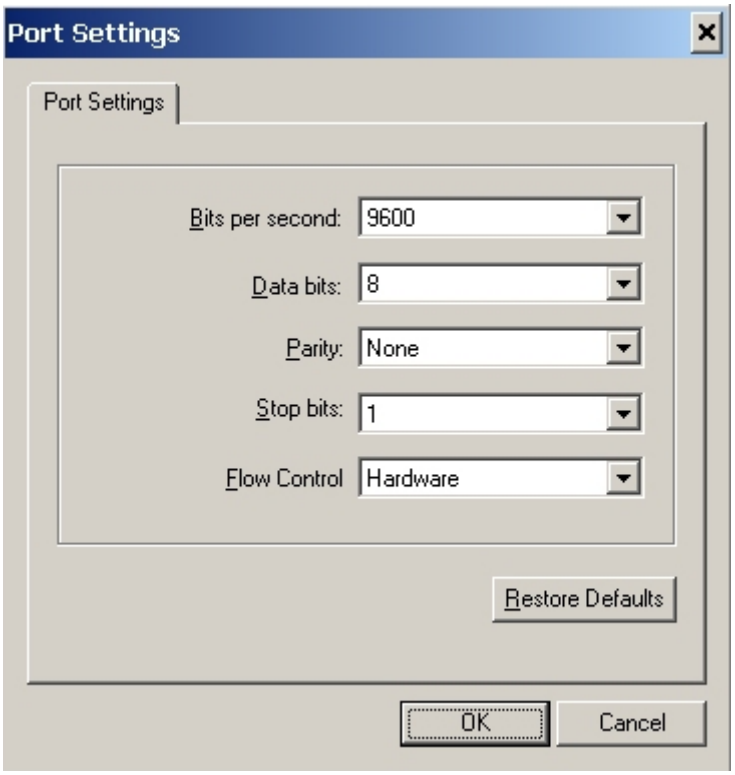


Figure 3 - Serial Port Settings

Adding a Parallel Printer

To add a parallel printer, select the Parallel Communication Type. The available parallel ports will be shown in the Port combo box. Select the port to which the printer is connected.

Adding a Network Printer

To add an Ethernet printer, select the Network Communication Type. Then enter the TCP/IP address and the communications port number for the printer. Press the printer's (or the PrintServer Ethernet adapter's) networking configuration status button next to the ethernet interface on the printer and status label will print.

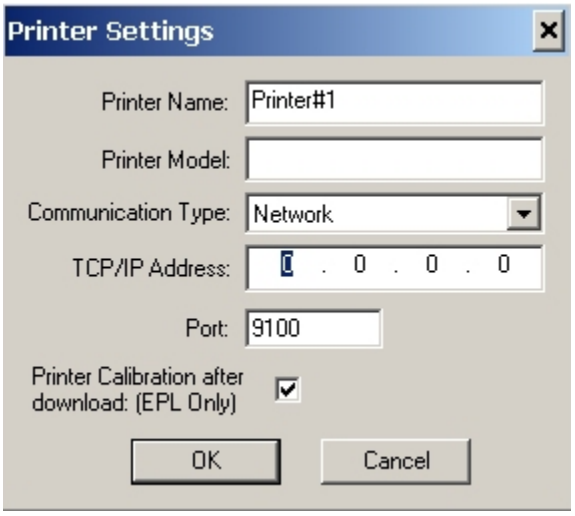


Figure 4 - Configuring a Network Printer

Adding a USB Printer

USB printers can only be added by using Auto-Detect. All printers connected via the USB interface will have the list designation of USB. The program can support as many USB printers as the computer can support. The maximum number of USB devices that can be supported by the computer (typically) would be 255.

Modify Printers in the List

To change printer settings for a printer that is already in the list, select the printer and press the "Modify Printer" toolbar button , select the "Printer→Modify…" menu option, or right click on the printer in the list and select "Modify Printer…". The Printer Settings dialog will appear as shown in Figure 4. If the printer you are modifying is a USB printer the printer settings dialog will resemble Figure 5..

Note: When "Print Configuration Label after Download" is selected, the printer will perform sensor calibration then print a configuration label. This ensures that the media sensor is calibrated correctly as a firmware download will overwrite any existing values.

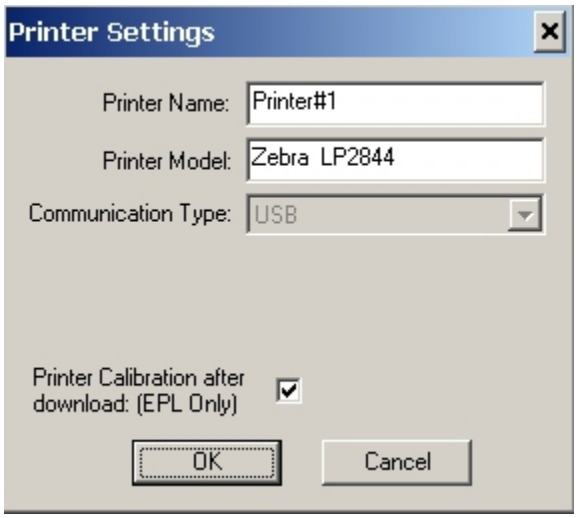


Figure 5 - Modifying a USB Printer's Configuration

Delete Printers from the List

To delete printers from the list, press the "Delete Printer(s)" toolbar button , select the "Printer→Delete" menu option, or right click on the printer(s) to be deleted and select "Delete Printer(s)".

Print Test Page

Below are the three ways in which a Test Page can be printed;

1) Select the Printer(s) desired and press the "Print Test Page" toolbar button or .

2) Select the menu option "Printer→Print EPL Test Page" or "Printer→Print ZPL Test Page."

3) Right click on the selected printers and select "Print EPL Test Page", or "Print ZPL Test Page".

Select the firmware file to download

In order to download firmware to your printer(s), you must configure the firmware file to send each printer. Select the file by clicking on a printer and pressing the "Select Firmware File" toolbar button , selecting the "File→Select Firmware File" menu option or right clicking on the select printer(s) and select "Select Firmware File". The file that you select will appear in the printer list.

If multiple printers use the same firmware file, select those printers using standard Microsoft list selection keys (e.g., hold shift down to select a range of printers, hold control down to select individual printers). Once selected, use the same actions described above to select the firmware file.

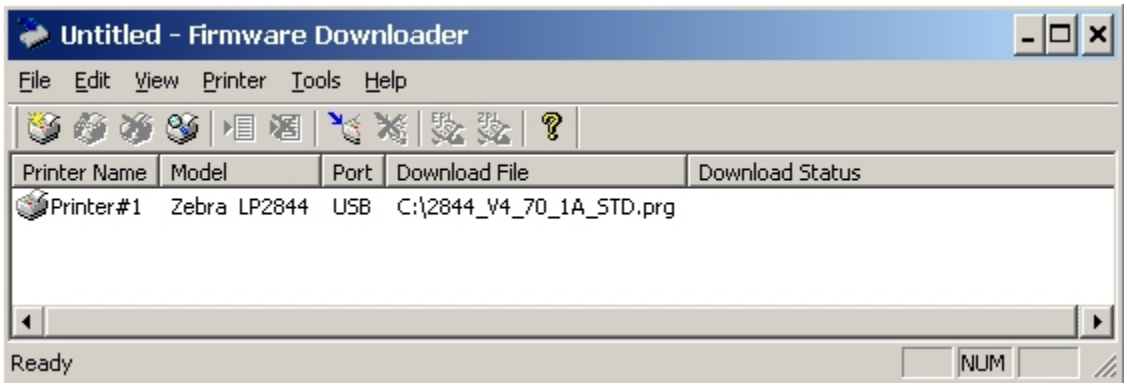
Printers that are present in the list, but do not have a firmware file selected will be ignored when Downloading starts. Refer to the Update the printer firmware section for more details.

Save/Restore Printer Settings

Once you have created your list of printers you can save the settings to a file for later use. To save the printer settings select the menu option "File→Save Printer Settings" File. You will be prompted for a file name for the settings file. Printer settings files are stored as .zps files. If you exit the application without saving your printer settings you will be prompted as well.

To restore previously saved printer settings, select the menu option "File→Load Printer Settings File". This will erase any printers that are displayed in the printer list, and replace them with the printers saved in the settings file.

Update the printer firmware



Firmware Downloader Ready to start download

Once you have configured the printers in the list, you are ready to start updating the printers.

To start downloading to ALL configured printers in the list, press the "Download to All Printers" toolbar button or select the "Printer→Download All" menu option.

To start downloading to SPECIFIC printers in the list, select the printers of interest and select the "Printer→Download To Selected" menu option.

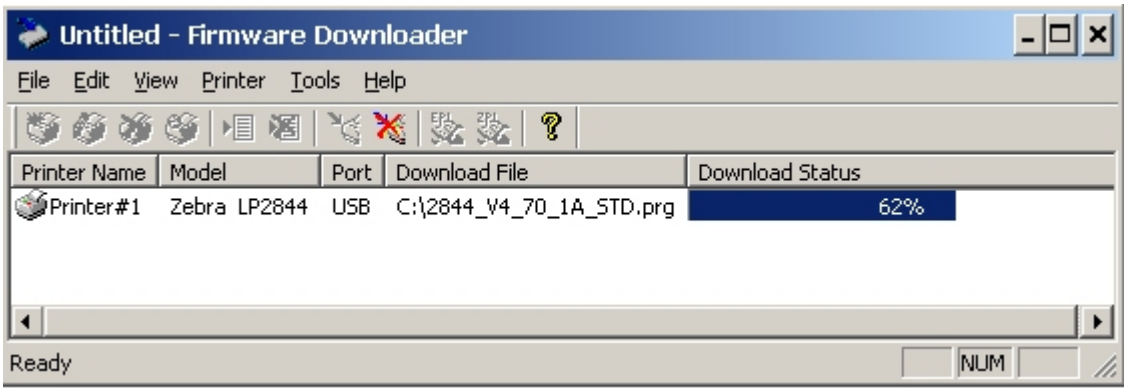


Figure 6 - Firmware Downloader Downloading Firmware File

Once Downloading has begun the Progress of each printer will be shown in the "Download Status" column as shown in Figure 6. The "Cancel Download" toolbar button and the "Printer→Cancel Download" menu options become active. To cancel ALL downloads in progress, select either one of these methods or right click on the printer list and choose "Cancel Download".

Simultaneous Downloads

If you have many printers to update and are looking for a way to accelerate the overall time it takes to update the printer firmware, you can increase the number of simultaneous downloads. Selecting the "Tools→Options…" menu option will show the dialog in Figure 7.

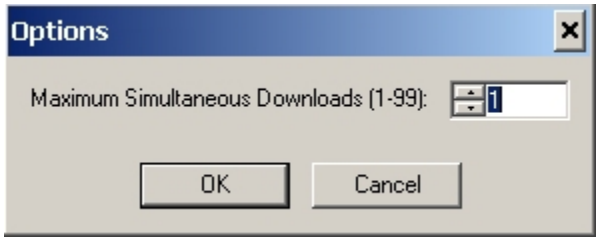


Figure 7 - Options Dialog

The default number of simultaneous downloads is 1. Increasing this number causes several printers to updated simultaneously. NOTE: More simultaneous downloads require more of your computer resources. Some computers may slow down with simultaneous downloads or as more printers are added for simultaneous downloading.