



USING YOUR MACHINE IN LINUX

You can use your machine in a Linux environment.

This chapter includes:

- **Getting Started**
- **Installing the MFP Driver**
- **Using the MFP Configurator**
- **Configuring Printer Properties**
- **Printing a Document**
- **Scanning a Document**

Getting Started

The supplied CD-ROM provides you with Xerox's MFP driver package for using your machine with a Linux computer.

Xerox's MFP driver package contains printer and scanner drivers, providing the ability to print documents and scan images. The package also delivers powerful applications for configuring your machine and further processing of the scanned documents.

After the driver is installed on your Linux system, the driver package allows you to monitor a number of MFP devices via fast ECP parallel ports and USB simultaneously. The acquired documents can then be edited, printed on the same local MFP or network printers, sent by e-mail, uploaded to an FTP site, or transferred to an external OCR system.

The MFP driver package is supplied with a smart and flexible installation program. You don't need to search for additional components that might be necessary for the MFP software: all required packages will be carried onto your system and installed automatically; this is possible on a wide set of the most popular Linux clones.

Installing the MFP Driver

System Requirements

Supported OS

- Redhat 7.1 and above
- Linux Mandrake 8.0 and above
- SuSE 7.1 and above
- Caldera OpenLinux 3.1 and above
- Turbo Linux 7.0 and above
- Slackware 8.1 and above

Recommended Hardware Requirements

- Pentium IV 1 GHz or higher
- RAM 256 MB or higher
- HDD 1 GB or higher



NOTES:

- It's also necessary to claim swap partition of 300 MB or larger for working with large scanned images.
 - The Linux scanner driver supports the optical resolution at maximum. see "Scanner and Copier Specifications" on page E.3.
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Software

- Linux Kernel 2.4 or higher
- Glibc 2.2 or higher
- CUPS
- SANE

Installing the MFP Driver

- 1 Make sure that you connect your machine to your computer. Turn both the computer and the machine on.
- 2 When the Administrator Login window appears, type in *root* in the Login field and enter the system password.



NOTE: You must log in as a super user (*root*) to install the printer software. If you are not a super user, ask your system administrator.

- 3 Insert the printer software CD-ROM. The CD-ROM will automatically run.

If the CD-ROM does not automatically run, click the  icon at the bottom of the desktop. When the Terminal screen appears, type in:

```
[root@localhost root]#cd /mnt/cdrom/Linux
```

```
[root@localhost root]#./install.sh
```



NOTE: The installation program runs automatically if you have an autorun software package installed and configured.

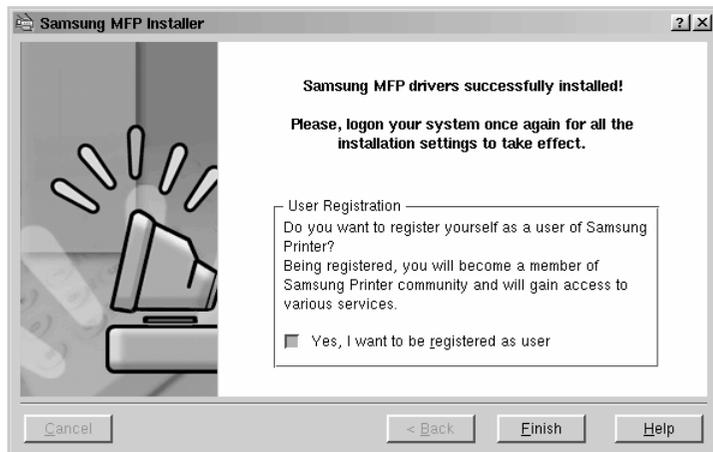
- 4 Click **Install**.



- 5 When the welcome screen appears, click **Next**.



- 6 When the installation is complete, click **Finish**.



The installation program has added the MFP Configurator desktop icon and Xerox MFP group to the system menu for your convenience. If you have any difficulties, consult the onscreen help that is available through your system menu or can otherwise be called from the driver package windows applications, such as MFP Configurator or Image Editor.

Uninstalling the MFP Driver

- 1 When the Administrator Login window appears, type in *root* in the Login field and enter the system password.



NOTE: You must log in as a super user (*root*) to install the printer software. If you are not a super user, ask your system administrator.

- 2 Insert the printer software CD-ROM. The CD-ROM will automatically run.

If the CD-ROM does not automatically run, click the  icon at the bottom of the desktop. When the Terminal screen appears, type in:

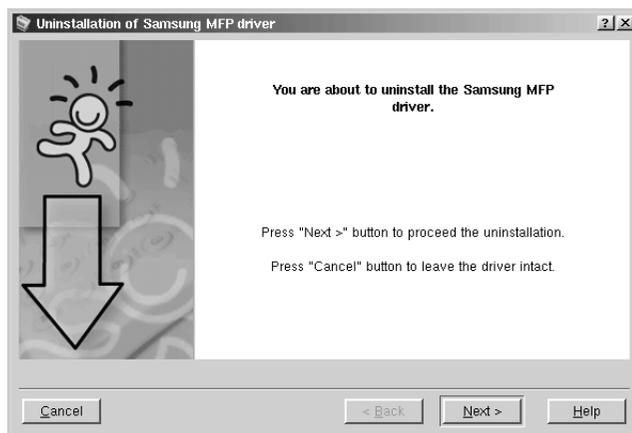
```
[root@localhost root]#cd /mnt/cdrom/Linux
```

```
[root@localhost root]#./install.sh
```



NOTE: The installation program runs automatically if you have an autorun software package installed and configured.

- 1 Click **Uninstall**.
- 2 Click **Next**.



- 3 Click **Finish**.

Using the MFP Configurator

MFP Configurator is a tool primarily intended for configuring MFP devices. Since an MFP device combines the printer and scanner, the MFP Configurator provides options logically grouped for printer and scanner functions. There is also a special MFP port option responsible for the regulation of access to an MFP printer and scanner via a single I/O channel.

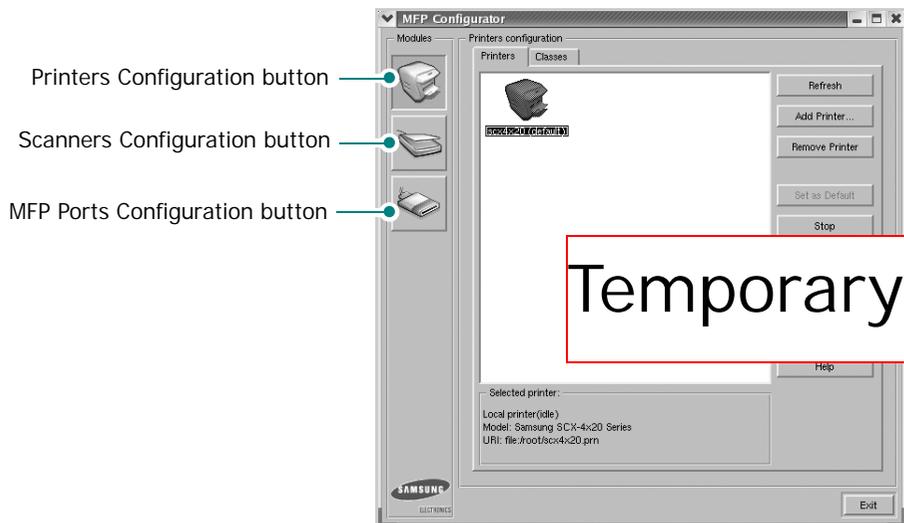
After installing the MFP driver (see page A.3), the MFP Configurator icon will automatically be created on your desktop.

Opening the MFP Configurator

- 1 Double-click **MFP Configurator** on the desktop.

You can also click the Startup Menu icon and select **Xerox MFP** and then **MFP Configurator**.

- 2 Press each button on the Modules pane to switch to the corresponding configuration window.



You can use the onscreen help by clicking **Help**.

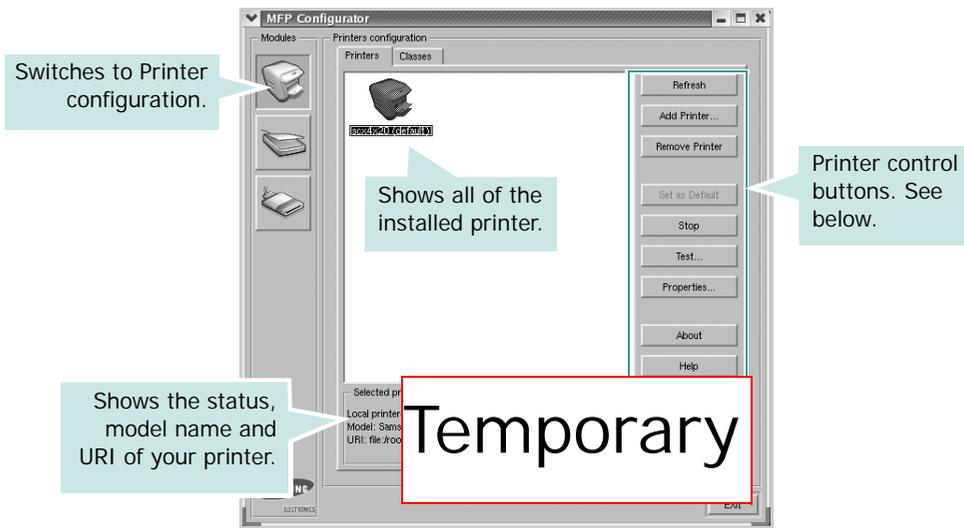
- 3 After changing the configurations, click **Exit** to close the MFP Configurator.

Printers Configuration

Printers configuration has the two tabs; **Printers** and **Classes**.

Printers Tab

You can see the current system's printer configuration by clicking on the printer icon button on the left side of the MFP Configurator window.

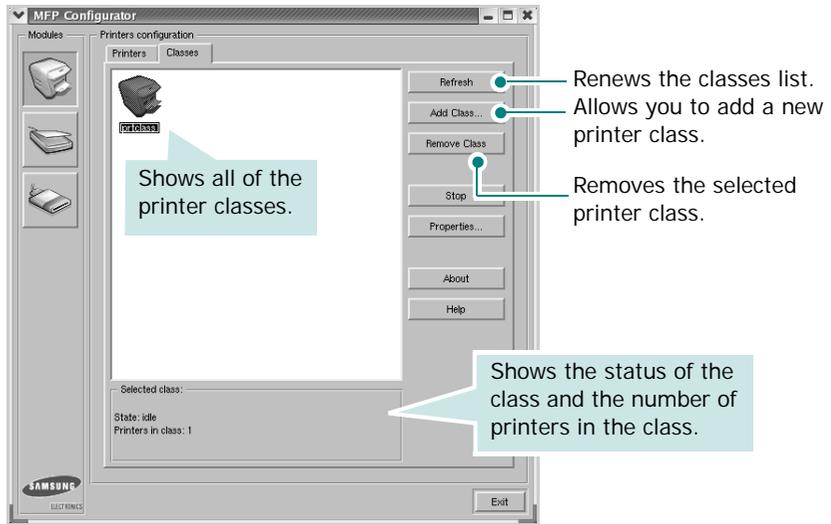


You can use the following printer control buttons:

- **Refresh**: renews the available printers list.
- **Add Printer**: allows you to add a new printer.
- **Remove Printer**: removes the selected printer.
- **Set as Default**: sets the current printer as a default printer.
- **Stop/Start**: stops/starts the printer.
- **Test**: allows you to print a test page to check if the machine is working properly.
- **Properties**: allows you to view and change the printer properties. For details, see page A.11.

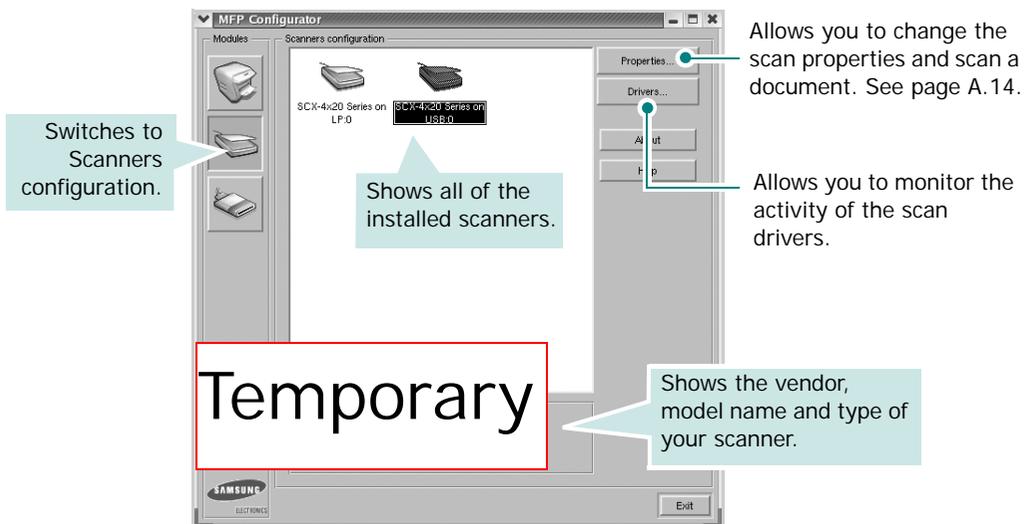
Classes Tab

The Classes tab shows a list of available printer classes.



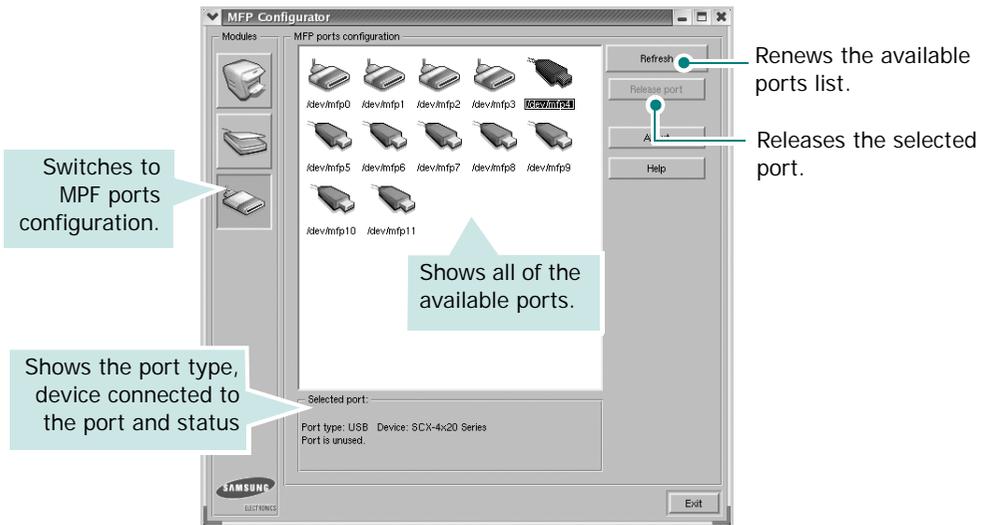
Scanners Configuration

In this window, you can monitor the activity of scanner devices, view a list of installed Xerox MFP devices, change device properties, and scan images.



MFP Ports Configuration

In this window, you can view the list of available MFP ports, check the status of each port and release a port that is stalled in busy state when its owner is terminated for any reason.



Sharing Ports Between Printers and Scanners

Your machine may be connected to a host computer via the parallel port or USB port. Since the MFP device contains more than one device (printer and scanner), it is necessary to organize proper access of “consumer” applications to these devices via the single I/O port.

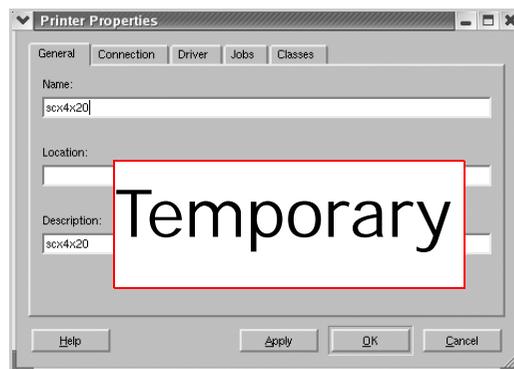
The Xerox MFP driver package provides an appropriate port sharing mechanism that is used by Xerox printer and scanner drivers. The drivers address their devices via so-called MFP ports. The current status of any MFP port can be viewed via the MFP Ports Configuration. The port sharing prevents you from accessing one functional block of the MFP device, while another block is in use.

When you install a new MFP printer onto your system, it is strongly recommended you do this with the assistance of an MFP Configurator. In this case you will be asked to choose I/O port for the new device. This choice will provide the most suitable configuration for MFP's functionality. For MFP scanners I/O ports are being chosen by scanner drivers automatically, so proper settings are applied by default.

Configuring Printer Properties

Using the properties window provided by the Printers configuration, you can change the various properties for your machine as a printer.

- 1 Open the MFP Configurator.
If necessary, switch to Printers configuration.
- 2 Select your machine on the available printers list and click **Properties**.
- 3 The Printer Properties window opens.



The following five tabs display at the top of the window:

- **General:** allows you to change the printer location and name. The name entered in this tab displays on the printer list in Printers configuration.
- **Connection:** allows you to view or select another port. If you change the printer port from USB to parallel or vice versa while in use, you must re-configure the printer port in this tab.
- **Driver:** allows you to view or select another printer driver. By clicking **Options**, you can set the default device options.
- **Jobs:** shows the list of print jobs. Click **Cancel job** to cancel the selected job and select the **Show completed jobs** check box to see previous jobs on the job list.
- **Classes:** shows the class that your printer is in. Click **Add to Class** to add your printer to a specific class or click **Remove from Class** to remove the printer from the selected class.

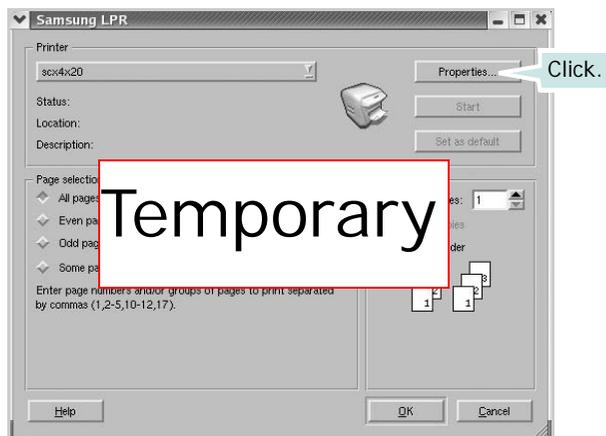
- 4 Click **OK** to apply the changes and close the Printer Properties Window.

Printing a Document

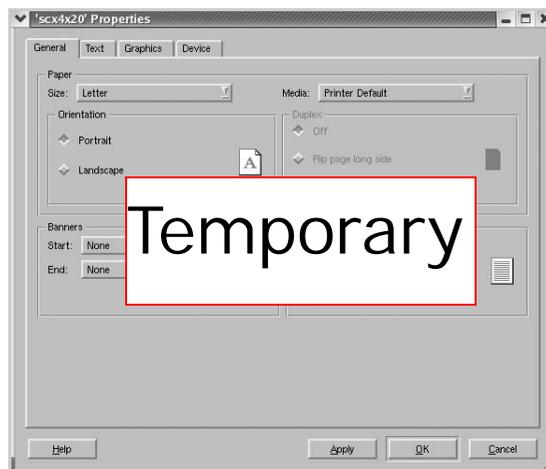
Printing from Applications

There are a lot of Linux applications that you are allowed to print from using Common UNIX Printing System (CUPS). You can print on your machine from any such application.

- 1 From the application you are using, select **Print** from the **File** menu.
- 2 Select **Print** directly using **lpr**.
- 3 In the Xerox LPR window, select the model name of your machine from the Printer list and click **Properties**.



- 4 Change the printer and print job properties.



The following four tabs display at the top of the window.

- **General** - allows you to change the paper size, the paper type, and the orientation of the documents, enables the duplex feature, adds start and end banners, and changes the number of pages per sheet.
- **Text** - allows you to specify the page margins and set the text options, such as spacing or columns.
- **Graphics** - allows you to set image options that are used when printing images/files, such as color options, image size, or image position.
- **Device**: allows you to set the print resolution, paper source, and destination.

- 5 Click **OK** to apply the changes and close the WorkCentre PE120/120i Properties window.
- 6 Click **OK** in the Xerox LPR window to start printing.
- 7 The Printing window appears, allowing you to monitor the status of your print job.

To abort the current job, click **Cancel**.

Printing Files

You can print many different types of files on the Xerox MFP device using the standard CUPS way - directly from the command line interface. The CUPS `lpr` utility allows you do that. But the drivers package replaces the standard `lpr` tool by a much more user-friendly Xerox LPR program.

To print any document file:

- 1 Type `lpr <file_name>` from the Linux shell command line and press **Enter**. The Xerox LPR window appears.

When you type only `lpr` and press **Enter**, the Select file(s) to print window appears first. Just select any files you want to print and click **Open**.

- 2 In the Xerox LPR window, select your printer from the list, and change the printer and print job properties.

For details about the properties window, see page A.12.

- 3 Click **OK** to start printing.

Scanning a Document

You can scan a document using the MFP Configurator window.

- 1 Double-click the MFP Configurator on your desktop.
- 2 Click the  button to switch to Scanners Configuration.
- 3 Select the scanner on the list.



When you have only one MFP device and it is connected to the computer and turned on, your scanner appears on the list and is automatically selected.

If you have two or more scanners attached to your computer, you can select any scanner to work at any time. For example, while acquisition is in progress on the first scanner, you may select the second scanner, set the device options and start the image acquisition simultaneously.



NOTE: The scanner name shown in Scanners configuration can be different from the device name.

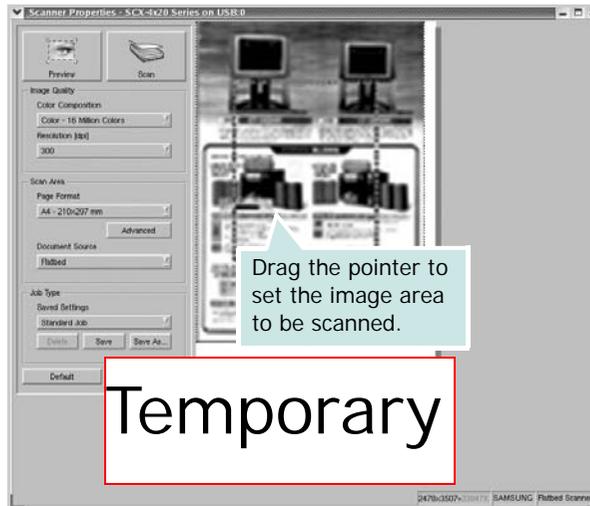
- 4 Click **Properties**.

- 5 Load the document to be scanned face up into the ADF (Automatic Document Feeder) or face down on the document glass. For details, see page 7.6.

For detailed guidelines for preparing an original document, see page 5.3.

- 6 Click **Preview** in the Scanner Properties window.

The document is scanned and the image preview appears in the Preview Pane.



- 7 Change the scan options in the Image Quality and Scan Area sections.

- **Image Quality:** allows you to select the color composition and the scan resolution for the image.
- **Scan Area:** allows you to select the page size. The **Advanced** button enables you to set the page size manually.

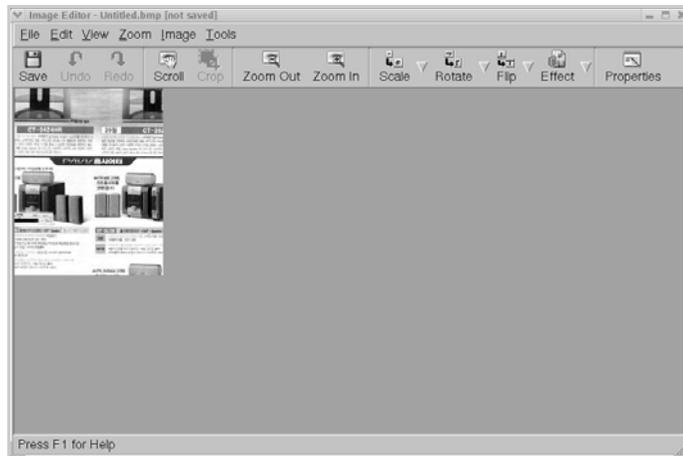
If you want to use one of the preset scan option settings, select from the Job Type drop-down list. For details about the preset Job Type settings, see page A.16.

You can restore the default setting for the scan options by clicking **Default**.

- 8 When you have finished, click **Scan** to start scanning.

The status bar appears on the bottom left of the window to show you the progress of the scan. To cancel scanning, click **Cancel**.

- 9 The scanned image appears in the new Image Editor window.



If you want to edit the scanned image, use the toolbar. For further details about editing an image, see page A.17.

- 10 When you are finished, click **Save** on the toolbar.
- 11 Select the file directory where you want to save the image and enter the file name.
- 12 Click **Save**.

Adding Job Type Settings

You can save your scan option settings to retrieve for a later scanning.

To save a new Job Type setting:

- 1 Change the options from the Scanner Properties window.
- 2 Click **Save As**.
- 3 Enter the name for your setting.
- 4 Click **OK**.

Your setting is added to the Saved Settings drop-down list.

To save a Job Type setting for the next scan job:

- 1 Select the setting you want to use from the Job Type drop-down list.
- 2 Click **Save**.

The next time you open the Scanner Properties window, the saved setting is automatically selected for the scan job.

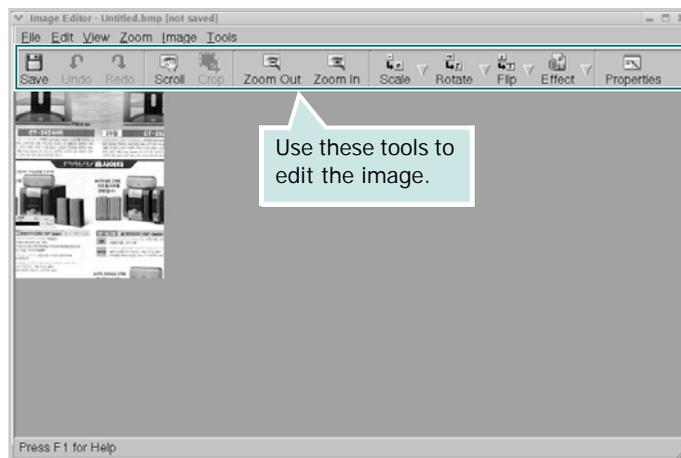
To delete a Job Type setting:

- 1 Select the setting you want to delete from the Job Type drop-down list.
- 2 Click **Delete**.

The setting is deleted from the list

Using the Image Editor

The Image Editor window provides you with menu commands and tools to edit your scanned image.



You can use the following tools to edit the image:

Tools	Function
	Saves the image.

Tools	Function
 Undo	Cancels your last action.
 Redo	Restores the action you canceled.
 Scroll	Allows you to scroll through the image.
 Crop	Crops the selected image area.
 Zoom Out	Zooms the image out.
 Zoom In	Zooms the image in.
 Scale	Allows you to scale the image size; you can enter the size manually, or set the rate to scale proportionally, vertically, or horizontally.
 Rotate	Allows you to rotate the image; you can select the number of degrees from the drop-down list.
 Flip	Allows you to flip the image vertically or horizontally.
 Effect	Allows you to adjust the brightness or contrast of the image, or to invert the image.
 Properties	Shows the properties of the image.

For further details about the Image Editor program, refer to the onscreen help.

