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# Printer Driver User Guide

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# **1** Introduction

This guide helps you navigate through the Product Library, printer Properties, and Printing Preferences. In the process, it describes the features and settings available for your printing system model. It also provides instructions on how to install, use, and upgrade the printer driver.



Some features and options may not be applicable to your printing system model.

This guide is intended for both the system administrators and end users, and contains the following chapters:

#### **Chapter 2 - Installation**

Provides instructions on how to install and upgrade the printer driver and utilities.

Guides you through options to run utility programs and access documents such as release notes and the printer Operation Guide.

#### **Chapter 3 - Driver Overview**

Defines the buttons or settings that appear in the lower panel of the Printing Preferences dialog box.

This also provides instructions on how to access and open the Help topics in HTML format.

#### **Chapter 4 - Device Settings**

Explains how you can select installed device options so the associated features can be used in the printer driver.

Provides instructions on how to specify Administrator, User, PDL, and Compatibility settings.

#### **Chapter 5 - Quick Print**

Explains how you can apply basic print settings to print jobs.

#### Chapter 6 - Basic

Provides instructions on how to specify the most commonly used printer driver settings.

#### Chapter 7 - Layout

Explains how you can arrange document data on printed pages without affecting the original document.

#### **Chapter 8 - Imaging**

Provides instructions on how to manage print quality and color or grayscale settings.

#### **Chapter 9 - Publishing**

Provides instructions on how to create covers and inserts for a print job, insert sheets between transparencies, and set the first page of every chapter to print on the front side of the paper.

#### Chapter 10 - Job

Explains how you can store print jobs in the memory installed in your printing system model.

#### Chapter 11 - Advanced

Introduces special features that extend the capabilities of your printing system model.

## **Document Conventions**

The following icons are used in the manual to call your attention to certain pieces of information:



V

This is a NOTE icon. This indicates information that is helpful to know.

This is a CAUTION icon. This indicates important information that you need to know, including such things as data loss if the procedure is not done properly.

# **Supported Operating Systems**

The printer driver is compatible with the following Microsoft Windows operating systems:

- Windows 10
- Windows 8.1
- Windows 7
- Windows Server 2019
- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2012
- Windows Server 2008 R2
- Windows Server 2008

# **2** Installation

A printer driver is an application that manages communication between the printer and computer.



Some features and options may not be applicable to your printing system model.

In the Installer window, you can select either of the following:

#### **Quick Installer**

A fast and easy way to install the driver and scan tool.

#### **Custom Installer**

Access the Product Library window and select from the following:

#### **Custom Install**

Select from individual drivers and utilities. Once installed, make sure to configure the printer driver settings in printer Properties and Printing Preferences.

#### Upgrade

Update the driver and utilities to a newer version. This feature is available only if there is a product that needs to be upgraded. In a client/server environment, you can only upgrade older drivers from the server but not from a client computer. For more information, contact your printing system dealer.

#### Maintenance

Run certain utilities.

#### Documents

Access release notes, the printing system operation guide, and other materials.

#### Uninstall

Remove drivers and utilities.

#### Automatic reorder

Discover and register your internet-connected printing system for automatic toner replacement. This feature is available only in some countries or regions.

Once installed, make sure to configure the printer driver settings in printer Properties and Printing Preferences.



In Windows operating systems, you must have administrator rights to install the printer driver.

# The Driver

For Windows 7 or later, and Windows Server 2008 or later, you can install a driver from the Microsoft Windows Update site if a certified driver is available and the system is connected to the web.

We recommend that you continue to install the driver from the Product Library disk for an expanded feature set. For Windows, if the Found New Hardware Wizard dialog box appears, click **Cancel**. If the Hardware Installation warning appears, click **Continue Anyway**.

# **Preparing to Install the Driver**

- 1 Turn on the computer and the printer.
- 2 Insert the Product Library disk into the disk drive.
- **3** Run the installer. You may need to allow the installer to make changes to your computer.

If the installer fails to start, then navigate to the disk drive in File Explorer and run Setup.exe.

- **4** Read and accept the license agreement.
- 5 Depending on your system configuration, you may select from a list of available languages.

# **Quick Installer**

This installer type lets you quickly install the device through a USB or network connection in Windows operating systems.

If the installer cannot find your printing system model, contact your system administrator.



Depending on your operating system, you must install Microsoft .NET Framework 4.0 or later, to use Status Monitor.

# Installing with Quick Installer

- 1 Make sure that your printing system and computer are turned on and connected by USB or network cable.
- 2 Insert the Product Library disk into the disk drive.
- 3 Run the installer. You may need to allow the installer to make changes to your computer.



If the installer fails to start, then navigate to the disk drive in File Explorer and run Setup.exe.

- 4 Read and accept the license agreement.
- 5 Click Quick Installer. A list of devices connected to your computer appears.

If your printing system model does not appear on the list, remove and then reinsert both ends of the USB or network cable. Click **Refresh** to rediscover devices.

**6** Select your printing system model from the list.

#### 7 Click Install.



The installation of the KYOCERA Quick Scan tool is set to ON by default. If you do not want to install the tool during this process, then set it to OFF. This tool is available only in some printing system models.

8 When the installation completes, select from the following options:

#### Make this your default printing device

Select this option to send most or all of your print jobs to this printing device.

#### Set the printing device to print on both sides of each sheet

Depending on your country or region, this option appears and is selected on the Finished page. The driver is set to duplex mode by default. You can make exceptions to the default later by selecting options in the driver Quick Print or Basic tab.

#### **Open KYOCERA Quick Scan after exiting installer**

This option launches the KYOCERA Quick Scan after exiting the installer. This is available only in some printing system models.

#### Automatic reorder

This lets you discover and register your internet connected printing system for automatic toner replacement. This feature appears depending on your country or region.

#### 9 Click Save and exit installer.

If the installation fails, resolve any issues, and then reinstall the printer driver. If necessary, contact your system administrator.

## **Custom Installer**

Custom Installer refers to detailed device, driver, and utility installation for a USB, network connection, or parallel connection (available only in some models) in Windows operating systems. The installer can discover devices that are turned on, and connected by USB or network cable, or you can manually select your own printing system model and port name.

When you make a selection in Custom Install, it is highlighted with a blue background. You can install more than one product from the Device list, but they must be selected and added to the Products to Install list.

You can also install utilities without printing systems or drivers by selecting the **Utilities** tab on the Custom Install dialog box. You can select the utilities you want from the Name list and add it to the Products to Install list.

You can create a Package file (.EXE) of all drivers and utilities in the Products to Install list by clicking the right arrow located next to the Install button. If you have many computers to update, you do not need to run the installer on each computer. The created package can be distributed via email or a shared drive. Each user can run the package on their computer that automatically installs the driver or utility in that package.

If the installer cannot find your printing system, contact your system administrator.



Depending on your operating system, you must install .NET Framework 4.0 or later, to use Status Monitor.

# Installing with Custom Installer

- Make sure that your printing system and computer are turned on and connected by USB or network cable.
- 2 Insert the Product Library disk into the disk drive.
- 3 Run the installer. You may need to allow the installer to make changes to your computer.

If the installer fails to start, then navigate to the disk drive in File Explorer and run Setup.exe.

- **4** Read and accept the license agreement.
- 5 Click **Custom Installer** to open the Product Library window.
- 6 At the bottom of the Product Library window, select your preferred language.
- 7 Click Custom Install. A list of devices connected to your computer appears.
- 8 In the device list, select a printing device and add it to the Products to Install list.

If your model does not appear on the list, then do one or more of the following:

- Remove and then reinsert both ends of the USB or network cable. Click the Refresh icon to rediscover devices.
- Use the search box. Type the printer model name, IP address, host name, or USB port, and then press **Enter**.
- · Select Add custom device, and then:
  - **1** Select the printing system model and port name.
  - **2** To add a port connected to your system, click **Add Port** and then follow the instructions on the screen.

- 3 Click **OK**. The printing device appears in the Products to Install list.
- 9 In the driver list, select a driver and add it to the Products to Install list.

You can select and install one or more drivers at the same time.

- 10 In the Utilities tab, select a utility and add it to the Products to Install list. If a more recent version of a utility is installed, the utility shows a message that a newer version is installed.
- 11 If you prefer to use a host name for the Standard TCP/IP port, then select **Use host name as port name**. This option is not available with a USB connection.
- **12** Review your settings, and then click **Install**.
- **13** A Data Collection dialog box appears. Select a participation option and click **OK** to continue the installation.
- **14** When the installation completes, select from the following options:

#### Print a test page

Select the check box to test the connection and operation of the printing system. If the installation is successful, the Windows Printer Test Page, containing your computer name and information on your printer driver and port settings, prints at the newly installed printing system.

#### Set Duplex as default

Depending on your country or region, this option appears and is selected on the Finished page. The driver is set to duplex mode by default.

You can make exceptions to the default later by selecting options in the driver Quick Print or Basic tab.

#### **Enable event notification**

Select the check box to enable event notification in the Status Monitor Notification dialog box in the Advanced tab.

#### **Show Quick Print tab**

With Quick Print, you can define basic print options into group profiles that can be accessed easily. The Show Quick Print tab option also appears in **Device Settings > Administrator > General**.

Click the plus sign to expand the list of options:

- The Set Quick Print tab as default option makes the Quick Print tab the first tab you see when you open the driver.
- The Set Basic tab as default option makes the Basic tab the first tab you see when you open the driver.
- The Hide other tabs option makes the Quick Print tab the only tab in the driver.

#### 15 Click Finish.

If the installation fails, resolve any issues, and then reinstall the printer driver. If necessary, contact your system administrator.

# **Creating an Installation Package for Distribution**

- 1 Make sure that your printing system and computer are turned on and connected by USB, network, or parallel cable. Parallel connection is available only in some models.
- 2 In the Product Library window, click **Custom Install**.
- 3 In the device list, select a printing device and add it to the Products to Install list.
- 4 In the driver list, select a driver and add it to the Products to Install list.
- 5 In the Utilities tab, select a utility and add it to the Products to Install list.
- **6** Click the right arrow next to the Install button, and then click **Package**.
- **7** Click **Browse** to select a destination folder for the package, and then enter a package name.
- 8 Select from the following options:

#### Silent installation

Create a package that performs installation in the background with no user interface.

#### Show a notification when errors occur

Enable notification of any errors that may occur during a silent installation. This option is available only if Silent installation is selected.

- 9 Click OK > Finish.
- **10** Notify your users of the installation package name and location.

# **Installing Utilities Only**

- 1 In the Product Library window, click Custom Install.
- 2 In the Utilities tab, select a utility and add it to the Products to Install list. If a more recent version of a utility is installed, the utility shows a message that a newer version is installed.



A message appears next to a utility if that prerequisite is missing.

- 3 If you want to remove a product from the Products to Install list, select it and click **Delete**. To remove all products, click the **Remove all** icon at the bottom of the list.
- **4** Review your settings, and then click **Install**.

5 Click Finish.

If the installation fails, resolve any issues, and then retry the installation. If necessary, contact your system administrator.

# **Editing Driver Properties**

- 1 In the Product Library window, click **Custom Install**.
- 2 In the device list, select a printing device and add it to the Products to Install list.
- 3 In the driver list, select a driver and add it to the Products to Install list.
- 4 In the Products to Install list, click **Edit** in one of the devices.
- 5 The Device dialog box opens and shows the model name and the IP address or USB. If there are multiple drivers, the settings for each driver are separated into tabs. Select the tab of the driver you want to configure. For every assigned driver, the following driver properties appear:

#### Printer name

Enter a name for the device to a maximum of 63 characters.

#### Share the printer

Select this option to share this printing system with others. If selected, enter a Share name for the printing system to a maximum of 63 characters.

#### Set as default printer

Select this option to send most or all of your print jobs to this printing device.

6 Click OK.

# **Editing Utility Properties**

- 1 In the Product Library window, click **Custom Install**.
- 2 In the Utilities tab, select KYOCERA Net Viewer and add it to the Products to Install list.
- 3 In the Products to Install list, click Edit in the KYOCERA Net Viewer utility product.
- **4** A dialog box opens to show the utility options. Make your selections.

#### **Device management**

Finds devices and manages device settings.

#### Accounting management

Establishes accounts for device groups and manages the account settings.

#### Host management

Manages printer drivers and print queues.

5 Click OK.

#### SNMP Settings

Simple Network Management Protocol (SNMP) is an application layer protocol that governs the management of device agents and network management systems. Managed devices, such as printing systems, collect and store management information for the network management systems.

With the SNMP Settings icon, you can specify an SNMP v1/v2 Read community name that is used during device discovery. This name is like a password for SNMP communication. The default name is public.

You can also specify support for SNMPv3 encryption and authentication by selecting from the options provided.

If a discovery is in process, or at least one discovery device has been added to the Devices list, the SNMP Settings icon is unavailable.



SNMP settings selected during installation do not affect selecting SNMP settings in **Device Settings > Administrator > General**.

# **Selecting SNMP Settings**

- 1 In the Product Library window, click **Custom Install**.
- 2 Under the Device box, click the SNMP Settings icon.
- 3 In the Product Library dialog box, select one of the following SNMP settings:

#### Use SNMP v1/v2

Type a Read community name.

#### Use SNMP v3

Type a user name and password, and if necessary, an option for authentication and privacy.

- 4 To restore the default setting, click Reset to default.
- 5 Click OK.



If you enter a different Read community name, the device list is cleared. Click the **Refresh** icon to rediscover devices.

# **Data Collection**

With this feature, you can help improve the printer driver software. When enabled, driver data is collected anonymously. You can make this selection during driver installation or at any time by clicking the logo or About button in Device Settings or Printing Preferences.

# Upgrade

The installer can detect outdated driver or utility components on your computer. You can select driver or utility components and upgrade them to the most recent version. If there are upgrades available, a list appears when you click **Upgrade**.

In a client/server environment, you can only upgrade older drivers from the server but not from a client computer. For more information, contact your printing system dealer.

# **Upgrading Driver Components**

- 1 In the Product Library window, click **Upgrade**.
- 2 From the Upgrade list, select the drivers and utilities to upgrade on your computer.
- 3 Click Upgrade.
- 4 In the Finished dialog box, click **Finish**.

# Maintenance

With this feature, you can access any of the following utilities.



Some options may not be applicable to your printing system model.

#### **Optional Printer Components**

You can expand functionality with Help modules in other languages, common printer profiles, plug-in modules, and the Net Manager application.

#### **Quick Network Setup**

You can configure the most common networking settings.

#### **Maintenance Menu**

You can adjust features such as print and scan positions.

#### **Configuration Tool**

You can modify the printing system's factory default settings.

#### Wi-Fi Setup Tool

You can configure the Wi-Fi settings.

# **Optional Printer Components**

You can expand the functionality of your printer driver by installing optional components.

For the XPS driver, you can only install Common Profiles and Help Modules.

# **Installing Optional Printer Components**

1 In the Product Library window, navigate to:

#### Maintenance > Optional Printer Components > Run

- 2 Select one or more printing systems and click Next. On any page you can click Back to correct any settings.
- 3 In the Select Components dialog box, expand the options for detailed selections.

Under Common components, you can select Help modules in additional languages.

- 4 Under each printing system model, select one or more common profiles of predefined print settings.
- 5 Select one or more plug-in modules.

#### **Output to PDF**

Print and save documents from multiple sources to PDF.

#### **Security Watermark**

Print a nearly invisible image or text against a background pattern. The security watermark appears only when the printed page is photocopied.

#### **Color Optimizer**

Match a single color accurately in a print job.

#### China Red

Select or customize the specific color red or any other color in a print job.



This feature appears automatically if the region is set to a Chinese locale.

- **6** Under each printing system model, select **Net Manager**.
- 7 Review your settings, and then click **Install**.
- 8 Click Finish.

# **Documents**

With this feature, you can access guides about the driver, utilities, and printing system operation. Select and open any of the available files. Acrobat Reader 8.0 or newer is required to view PDF files.

# Uninstall

The uninstaller can find the printing system drivers on your local drive. It creates a list of those components in the Uninstall window. If you uninstall a driver, devices using that driver will also be removed.

# **Uninstalling Driver Components**

- 1 In the Product Library window, click **Uninstall**.
- 2 Select components from the list to uninstall. Select by device model, or click the plus sign to expand a list of individual devices. Above the list, you can also use the Select all check box to select or clear all items.
- **3** Click **Uninstall**.
- **4** In the Finished dialog box, click **Finish**. If prompted, restart your computer.

# **Automatic Reorder**

With this feature, you can set up an internet-connected printing system to automatically order toner when the low toner threshold is reached. The replacement order is calculated based on the low toner threshold and the current toner usage on the printing system. This feature is available only in some countries or regions.

# **Enabling Automatic Reordering**

1 In the Product Library window, click Automatic reorder.

A web browser opens the KYOCERA Document Solutions page containing information about the automatic reordering service.

**2** Follow the instructions on the computer screen.

# **Saving Energy and Resources**

Printing on both sides of a sheet of paper (duplex mode) reduces paper consumption and helps conserve environmental resources. If your printing system supports this feature, we recommend that you set duplex printing as a default setting. After clicking **Accept** in the license dialog box, depending on your region, a message about resource and energy conservation may appear. Read the message and click **OK**.

After installation is successful, Set Duplex as default appears and is selected on the Finished page. The driver is set to duplex mode by default.

You can make exceptions to the default later by selecting options in the driver Quick Print or Basic tab.

# **Printer Driver Settings Access**

The printer driver software can be accessed from the Print dialog box of an application, or from **Start** > **Control Panel**. If accessed from an application, then changes made to driver settings remain in effect until the application is closed. If accessed from Start, changes are maintained as the default printer settings.

# **Changing the Default Driver Settings**

- 1 In Control Panel, select **Devices and Printers**.
- **2** Right-click your printing system model, and then click **Printing preferences**.
- **3** Select the preferred features in all tabs.
- 4 Click **OK**.

# **3 Driver Overview**

Overview images appear in the lower panel of the Printing Preferences dialog box. Each image illustrates different driver settings. Images are changed automatically when some driver settings are selected, or you can click the tabs on the left side to change the image.



If the vertical screen resolution of your computer is 864 pixels or less, the lower panel of the Printing Preferences dialog box does not appear.

- The printing system image displays most attached devices. Source and Destination selections are highlighted in green. The storage device icon appears when a job storage option is selected in the Job tab.
- The page image is updated based on page selections made in the Quick Print tab, Basic tab, and Layout tab.
- The color image illustrates color settings. With Black selected, the image illustrates grayscale settings selected in the Imaging tab.

The current page description language (PDL) is displayed in all of the images. When printing from an application, you can change the PDL temporarily to enable driver features.



Some features and options may not be applicable to your printing system model.

# **Online Help**

The printer driver software provides settings to customize output from your printing system. The printer driver offers user assistance with HTML help. When selecting printer driver options, please refer to the HTML Help topics for answers to questions and assistance with problem solving.

To open HTML help within the Printing Preferences tabs, Device Settings, and all other dialog boxes, press F1 on your keyboard, or click the question mark icon in the upper right corner and click again in the dialog box.

# Selecting a PDL in Printing Preferences

- In the overview image area, click the current page description language (PDL).
- 2 Select from the following PDL options:
  - If you select PCL XL, you can select Skip blank pages and Smart duplex printing.
  - If you select KPDL, you can select either Skip blank pages or Data passthrough. You can also select Smart duplex printing. Note that if you select Data passthrough, EMF spooling is unavailable in the Advanced tab.

When accessing the printer driver from the application's Print dialog box, Data passthrough is unavailable.

- If you select PDF, you can click PDF Settings to open the PDF Settings dialog box.
- If you installed the XPS driver, you can click XPS Settings to open the XPS Settings dialog box.
- **3** To improve the output quality of graphics created by your application, select **GDI compatible mode**.

When Skip blank pages is set to On or Use layout settings, GDI compatible mode is unavailable.

4 Click **OK** in all dialog boxes.

# **Settings List**

The tree view in the lower panel of each tab displays current settings for most driver features. You can scroll down to view features for all driver tabs. As each option is selected, the current selection is displayed in the tree view. You can click the minus (-) or plus (+) sign to hide or show details.

# **Print Preview**

The Print preview check box appears in the lower pane of each tab. After selecting driver settings, you can use Print preview to check the print job. Text and images are displayed in the preview, along with any optional Watermark or Security Watermark.

If you are satisfied with the preview, you can print. Or you can cancel printing if you want to change driver settings.

# **Previewing a Print Job**

- Select preferred driver settings in all tabs, or select a profile.
- 2 In any tab, select **Print preview**.
- **3** Click **OK** in all dialog boxes.
- 4 When the Print preview dialog box appears:
  - Click the arrow buttons to view document pages.
  - Click the magnifying glass icons to zoom in or out.
- **5** To close the preview and make additional changes in driver settings before printing, click the "X" button.
- **6** If you are satisfied with the preview, click the printer button to print the job.

# **The About Dialog**

A logo or About button appears in the Device Settings and Printing preferences dialog boxes. Click to open the About dialog box that displays buttons for driver version, driver plug-in information, and Data Collection options for improving the software.

# **Displaying Version Information**

- 1 In Device Settings or the Printing Preferences dialog box, click the logo or About button, then **Version** to view the following driver information:
  - File Name
  - Version
  - Description
  - Date
  - Manufacturer
  - Comments
- **2** To view copyright information, click **Legal Notices**.
- 3 Click **OK** in all dialog boxes.

# **Displaying Plug-in Information**

- 1 In Device Settings or the Printing Preferences dialog box, click the logo or About button, then **Plug-in** to view the following plug-in information:
  - Module
  - Description
  - Version
- 2 Click **OK** in all dialog boxes.

# **Improving the Software**

- 1 In Device Settings or the Printing Preferences dialog box, click the logo or About button, then **Data Collection**.
- 2 Read the privacy policy and select a participation option.
- 3 Click **OK** in all dialog boxes.

# **4 Device Settings**

In Device Settings, you can select installed device options so the associated features can be used with the printer driver. You can match the memory setting in the driver with the memory installed in your printing system, which lets the driver manage font downloads more efficiently. You can also specify Administrator, User, PDL, and Compatibility settings.



Some features and options may not be applicable to your printing system model.

# Accessing Device Settings

- 1 In Control Panel, select **Devices and Printers**.
- **2** Right-click your printing system model, and then select **Printer properties**.
- **3** Click **Device Settings**.

# **Device Options**

With this feature, you can extend the capabilities of your printing system for source, finishing, and job storage.

In a client/server environment, this feature is unavailable to a client logged in as a restricted user.

# **Setting Device Options**

- In Device Settings > Device options, select the check boxes for all installed devices.
- 2 Click OK.

# **Auto Configure**

With this feature, you can detect the devices installed on a printing system that is connected to a network. Auto Configure can detect input devices, output devices, storage devices, memory, and RAM disk size. When your computer is connected to the printing system through a TCP/IP or WSD port, the Auto Configure button appears in Device Settings. Auto Configure updates the Device options list, Memory, RAM disk, and overview images to keep the printer driver consistent with the printing system configuration. Auto Configure varies by operating system.

Not all installed devices are detected by using Auto Configure. Before selecting **OK** in Device Settings, check the settings to make sure that they are correct.

## Silent Auto Configuration

Silent auto configuration checks the printing system every 10 minutes for changes in optional devices or memory. When a change is detected, the driver is automatically updated with the new settings.

In a client/server environment, this feature is unavailable to a client logged in as a restricted user.

# **Enabling Auto Configuration**

- 1 Verify that all optional devices are attached to the printing system, and that it is turned on and ready to print.
- 2 In Device Settings, click Auto Configure.

The Auto Configure dialog box opens. Select from Auto configure options:

#### **Auto Configure Now**

Click the button at any time to retrieve the current settings from the printing system. It is recommended to do this when Silent auto configuration is turned off.

#### Silent auto configuration

Select to let the driver check the printing system at every occurrence of a fixed time period. The driver regularly checks for any changes in optional devices or memory.

3 Click OK in all dialog boxes.

## Memory

Memory is the amount of standard and optional memory installed in the printing system. To maximize the downloading of printing system fonts, the driver must be set to match the total printing system memory. By default, the Memory setting matches the standard memory in the printing system. If optional memory is installed, set the memory in the printer driver to match the total amount of memory.

# **Setting the Memory**

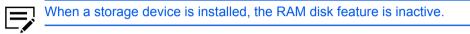
- 1 Install optional DIMM in the printing system.
- 2 In Device Settings > Memory, type or select the amount of total installed memory.

If your printing system includes the Auto Configure feature, you can use it to obtain information about the memory size.

# **RAM Disk**

Available in some models, the RAM disk functions as a virtual storage device, saving print requests into the printing system's memory. Because the RAM disk is temporary memory, all data stored there is lost when the power is turned off. The setting for RAM disk size must match the operation panel setting. The maximum RAM disk size depends on the amount of installed memory.

If selected, the Ignore application collation feature in the Compatibility Settings dialog box lets the driver control collation. The RAM disk can help increase the print speed of collated multiple copies by sending the print job just once.



In a client/server environment, this feature is unavailable to a client logged in as a restricted user.

# Setting RAM Disk

- 1 In Device Settings > Device options, select RAM disk and then set its size.
- 2 At the printing system's operation panel, turn on RAM disk and then set its size.



The RAM disk size in both operation panel and Device Settings must match.

# **Administrator Settings**

With this feature, an administrator can set options that include controlling accessibility, displaying features in the interface and setting a password to control access to the Administrator Settings options.

In a client/server environment, this feature is unavailable to a client logged in as a restricted user.

# General

In the General tab, an administrator can control the display of the Quick Print tab. Some SNMP settings, a job email notification, and other miscellaneous settings can also be selected.

# **Show Quick Print Tab**

With this feature, an administrator can control the display of the Quick Print tab. You can define basic print options into group profiles for improved accessibility.

With a cleared check box for Show Quick Print tab, the tab does not appear in the Printing Preferences dialog box.

#### To enable this feature, in **Device Settings > Administrator > General**, select **Show Quick Print tab**.

With a selected check box for the Show Quick Print tab, the tab appears in the Printing Preferences dialog box. When you select the **Show Quick Print tab** check box, you can access additional check boxes:

#### Hide other tabs

Displays only the Quick Print tab to the user.

#### Set Quick Print tab as default

Opens to this tab when you access Printing Preferences.

#### **Hide Edit Quick Print control**

Prevents users from customizing the Quick Print tab.

# **Send Count Information**

With this feature, an administrator can embed count information in the print job, which can be used by some applications for accounting purposes. Count information includes the number of copies produced as well as duplex printing, multiple pages per sheet, color mode, color page count, and paper size values.

Send Count information is selected automatically when Net Manager is used.

When PDF is selected as the PDL, or in the XPS driver, only color page count information is embedded in the print job.

To enable this feature, in **Device Settings > Administrator > General**, select **Send Count information**.

# **Send Application Name**

With this feature, an administrator can send the application name with a print job, so that a different printing process is used for each application.

This option is unavailable when PDF is selected as the PDL.

To enable this feature, in **Device Settings > Administrator > General**, select **Send Application name**.

## **Associate Profile with Application**

With this feature, an administrator can associate a profile with an application so that all printing from the application uses the same profile settings. Before using this feature:

- A profile must be created in the Profiles dialog box, accessed from any Printing Preferences tab.
- An association must be created between a profile and an application in the Application Based Printing dialog box, accessed from the Profiles dialog box.

This feature is enabled by default. To disable this feature, clear the **Associate Profile** with application check box in **Device Settings > Administrator > General**.

# **Password Protect Administrator Settings**

With this feature, an administrator can set Password protect administrator settings in the Administrator Settings dialog box to prevent unauthorized changes in this dialog box. If selected, this setting prompts you to enter a password and confirm the password. This password protection blocks access to all Administrator Settings options.

# **Setting the Administrator Password**

- In Device Settings > Administrator > General, select Password protect administrator settings.
- 2 In the Password dialog box, enter a password, using at least 4 and no more than 16 characters. Reenter the password in Confirm password and click OK.

# **Clearing the Administrator Password**

- 1 In Device Settings, click Administrator.
- 2 In the Enter Password dialog box, type the password and click **OK**.
- 3 In the Administrator Settings dialog box, clear the **Password protect** administrator settings check box, and click **OK**.

# **Hide Factory Default Profile**

With this feature, an administrator can hide or show the Factory Default profile in the Quick Print tab and the Profiles dialog box.

- With the check box selected, the Factory Default profile does not appear in the lists.
- With the check box cleared, the Factory Default profile appears in the lists.

### **Hide Lower Pane**

With this feature, an administrator can reduce the size of the Printing Preferences dialog box by hiding the lower pane. The overview images and settings list are removed from view. PDL selection, Profiles buttons, and the Print preview check box are still available.

For some screen display and screen resolution settings, the Hide lower pane check box is selected automatically.

#### **SNMP Settings**

Simple Network Management Protocol (SNMP) is an application layer protocol that governs the management of devices agents, and network management systems. Managed devices, such as printing systems, collect and store management information for the network management systems. SNMP security levels are

specified by settings in the SNMP settings dialog box. With SNMPv3, encryption and authentication support are provided. SNMP settings must be made in the printer driver and in the printing system's home page.

The following SNMP options are available:

#### SNMPv1/v2c

It communicates with the managed device using Read community name and Write community name.

#### SNMPv3

Security enhancements for authentication and encryption require a user name and password. Authentication and privacy options are available by clicking Settings.

#### Apply to other models

This option displays a list of installed printing systems to apply the selected SNMP settings.

# **SNMPv3 Options**

You can select **SNMPv3** options for secure communication with the printing system.

## **Authentication**

This option provides an algorithm to check that a transferred file has arrived intact. Message Digest 5 (MD5) and Secure Hash Algorithm 1 (SHA1) are hash algorithms used to authenticate packet data.

#### MD5

This option provides a cryptographic hash function with a 128-bit hash value.

#### SHA1

This option produces a message digest that is 160 bits long. SHA1 is the successor to MD5.

## **Privacy**

This option uses encryption for secure communication. It is available after you select the **Authentication** option. You may select one **Privacy** option.

#### DES

This option uses the Data Encryption Standard (DES) for encryption. DES turns cleartext into ciphertext via an encryption algorithm. It encrypts and decrypts data using 8-byte blocks and a 56-bit key.

#### AES

This option uses the Advanced Encryption Standard (AES) for encryption. AES is a symmetric block cipher that can process data blocks of 128 bits, using cipher keys with lengths of 128, 192, and 256 bits. It is more secure than DES.

# **Selecting SNMP Settings**

- 1 In Device Settings > Administrator > General, click SNMP Settings.
- 2 Select SNMPv1/v2c or SNMPv3.
  - For SNMPv1/v2c, type the **Read community name** and **Write community name**, to a maximum of 32 characters.
  - For SNMPv3, type a user name to a maximum of 32 characters and a password from 8 to 32 characters.
- **3** To set authentication and privacy options for SNMPv3, click **Settings**.
- 4 In the SNMPv3 Settings dialog box, select from the available options, and click OK.
- **5** Under Apply to other models, you can choose from available models. The SNMP settings are applied to all selected models.
- 6 Click OK.

# Job Email Notification

With this feature, an administrator can send an email address with a print job. When the job finishes printing, the device sends an email notification to the email address. This is useful when the device is printing many jobs and a user must wait for a job to print.

For a restricted user in a client/server environment, the Administrator button in Device Settings becomes the Identity button. A user can enter email notification data in the Identity Settings dialog box.

# **Selecting Email Notification Options**

- In Device Settings > Administrator > General, select Notify when printing is completed.
- 2 Choose an email address option:
  - Select **Use specific email address**, and type a valid email address. In a client/server environment, a client user can change this address.
  - Select **Prompt for email address**, and click **OK**. When you click **OK** in the Print dialog box, type a valid email address in the Print Options or Identity Settings dialog box, and click **OK**.
- **3** For some models, select **Notify when printing is interrupted** if you want to be alerted to a printing problem.
- 4 Click **OK** in all dialog boxes.

# **Lock Settings**

With this feature, an administrator can specify settings at the tab or feature level in the driver, and then lock them. The settings are then applied to all print jobs, and changes are restricted. The settings are locked in **Device Settings** > **Administrator** > **Lock Settings**. For example, a driver setting could be set for printing duplex documents. This would save paper, resulting in cost savings and ecological benefits.

Locking a setting will also lock the feature where it appears in other tabs. For example, selecting **Duplex** will also select and lock that feature in the Quick Print and Basic tabs.

The administrator can also set a password that is required to temporarily unlock a feature.

In a client/server environment, this feature is unavailable to a client logged in as a restricted user.

# **Lock Settings Options**

The Lock Settings tab displays driver settings that an administrator can lock. Once locked, user changes are restricted and the settings are applied to all print jobs. Once the settings are made, the Password settings option can be accessed. This lets an administrator control usage of paper and toner amounts.

#### Black & White mode

This option disables all color settings and prints all jobs with black toner only. It is locked in the Quick Print, Basic, and Imaging tabs.

#### EcoPrint

This option locks the EcoPrint setting selected in the Quick Print, Basic, or Imaging tab.

#### Duplex

This option locks the current Print on both sides setting selected in the Quick Print or Basic tab.

#### Multiple pages per sheet

This option locks the current Pages per sheet setting in the Quick Print tab and the Multiple pages per sheet setting in the Layout tab. The Pages per sheet option in the Layout tab is not locked.

#### Profile with application

This option locks a defined profile of driver settings by application.

#### Job tab

This option locks settings selected in the Job tab.

#### Security watermark

This option locks the Security Watermark settings selected in the Advanced tab. Security Watermark is an optional plug-in.

#### Watermark

This option locks the Watermark settings selected in the Advanced tab.

#### Password settings

The password set by the administrator locks the selected driver features. When the administrator sets the password, the Unlock icon appears in the driver tabs or the Application Based Printing dialog box. To unlock a feature, click Unlock and type the password.

# **Locking Driver Settings**

- In Device Settings > Administrator, click Lock Settings.
- 2 Select the check box for each driver feature to be locked.
- 3 Select the Password settings check box if you wish to set a password to temporarily unlock settings.

In the Password Settings dialog box, type a password from 4 to 16 characters. Confirm the password, and click **OK**.

To remove the password, clear the **Password settings** check box. In the Unlock Password dialog box, type the password, and click **OK**.

4 To save your Lock Settings selections, click OK.

When a password is set, the Unlock icon appears in driver tabs where the locked features appear. To unlock a feature and change its settings temporarily, click **Unlock** and type the password.

# **User Login**

Available in some models, this feature lets an administrator provide job restriction by user. This is in contrast to the Job accounting feature, which assigns privileges by division or department.

You can create and store up to 100 login user names and passwords in the printer driver and register on the printing system. For some models, the maximum is 1000.

Users are identified by user name and password. The user name can be in the user principal name UPN format: username@domain.com. This feature limits printing privileges to specified users for secure printing and accounting. The number of pages printed by each user is tracked by the printing system.

Users added in the printer driver must also be manually registered at the printing system's operation panel.

In a client/server environment, some options are unavailable to a client.

For a restricted user in a client/server environment, the Administrator button in Device Settings becomes the Identity button. A user can enter user login data in the Identity Settings dialog box.

# **User Login Options**

User login settings selected in the driver are applied to every print job sent from your computer.

#### Use specific name

This option can be used to specify a name and password to use the same User login for every print job. If this option is selected, the user does not have to type the name and password for each print job.

A client computer in a client/server environment can accept the default name and password set by the administrator or type another name and password. To restore the default values, click **Reset**.

#### Prompt for name

This option prompts the user for a name and password. You can use a name that is not on the list, and the name is not added to the list. When sending a print job, type a name and password when prompted, then click **OK** to print.

#### Login user name

Click to add, delete, edit, import, or export login user names and passwords. Once a Login user name list is created, the list can be exported as a group by saving it as a text file (.CSV, .KXC, and .TXT). To import a Login user name list, browse for an existing list and save it in your printer driver.

#### Prompt for name and validate

This option prompts for a name and password. For the job to print, the name and password entered must be on the Login user name list. You can use the login user names entered in the Login user name list of the driver. When sending a print job, type a name and password when prompted, then click **OK** to print. This option ensures that the job prints, only after verifying that the selected name is saved in the driver.

#### Validate user name (computer) or prompt for login user name

This option searches for the Windows User name in the driver's Login user name list. Validation is done every time the user prints a job. If the Windows User name exists in the Login user name list, the associated driver Login user name and password from the list are used for the print job. If the Login user name is not associated with the Windows User name, a message appears to prompt you to enter the Login user name and password you want to be associated with your name.

If a match is not found, the driver checks for administrator or user permissions. With user permissions, the print job is canceled, and the user is prompted to contact an administrator to establish printing permissions. With administrator permissions, the driver prompts for the Login user name and password. Along with the Windows User name, these are then added to the list so succeeding print jobs do not require the user to enter a Login user name and password again.

# **Printing with User Login**

After login user names are assigned and user login mode is set to **On** at the printing system, you can choose **User login** to print in user login mode.

In a client/server environment, the client is automatically set to the User Login selection made in the server.

1 From Device Settings, navigate to:

#### Administrator Settings > User Login > User Login

- 2 Select a user login option:
  - Use specific name
  - Prompt for name
  - · Prompt for name and validate
  - Validate user name (computer) or prompt for login user name

You can only select the last two options if you add or select a user name from the login user name list. Click the buttons to view and manage the list.

- 3 Click **OK** in all dialog boxes.
- **4** Print the document from the application.
- 5 If prompted, type or select a name and password, and click **OK**.

## **Job Accounting**

Available in some models, this feature lets an administrator control the printing system. With Job accounting, account IDs (identification numbers) can be assigned to users or departments. A specific account ID can be assigned, and then required before printing. After account IDs are created, from the printing system operation panel you can view the number of copies associated with a specific ID, as well as limit the number of copies for individual IDs. Account IDs can be a maximum of 8 digits.

You must enable Job accounting on the printing system. You can assign up to 100 account IDs on the printing system and store in the printer driver. For some models, the maximum is 1000.

In a client/server environment, some options are unavailable to a client computer.

For a restricted user in a client/server environment, the Administrator button in Device Settings becomes the Identity button. A user can enter Job Accounting data in the Identity Settings dialog box.

# **Job Accounting Options**

Job accounting supports the following options:

### Use specific account ID

Select this option to track the print jobs of a user or group with an account ID. It sends the account ID with each print job.

When printing, the user can type a different account ID in the Job tab. This does not change the default account ID that was set in **Administrator > Job Accounting**.

A client computer in a client/server environment can accept the default account ID set by an administrator or type another account ID. Clicking **Reset** restores the default values.

### Prompt for account ID

Select this option to track the print jobs of a user or group with an account ID as well as prompt for an account ID. At the time a print job is sent, the user is prompted to enter a Job accounting ID.

### Account IDs

Add, edit, or delete account IDs from the list. You can store up to 100 account IDs in the driver. For some models, the maximum is 1000. When connected through a TCP/IP port or WSD port, you can retrieve an account ID list stored on a printing system. After an account ID list is created, the list can be exported as a group by saving it as a text file (.CSV, .KXC, .TXT). To import an account ID list, browse for an existing list and open it.

### Prompt for account ID and validate

Select this option to prompt for an account ID that is saved in the driver. When sending a print job, type an account ID when prompted and click **OK** to print. The account ID is validated against the account ID list. If typed incorrectly, you are prompted to type it again.

### **Display account ID list**

Select this option to display the account ID list at the time of printing. The print job can be assigned to a user or group. The account ID list is stored in the driver and more than one ID must be established for the list to appear.

### Validate user name (computer) or prompt for account ID

This option searches for the Windows User name in the driver's Account IDs list. Validation is done every time the user prints a job. If the Windows User name exists in the Account IDs list, the associated driver account ID from the list is used for the print job. If the Account ID is not associated with the Windows User name, a message appears to prompt you to enter the Account ID you want associated with your user name.

If a match is not found, the driver checks for administrator or user permissions. With user permissions, the print job is canceled, and the user is prompted to contact an administrator to establish printing permissions. With administrator permissions, the driver prompts for the account ID. Along with the Windows User name, this is then added to the list so succeeding print jobs do not require the user to enter an account ID again.

# **Retrieving an Account ID List**

- In Device Settings > Administrator > Job Accounting, select Job Accounting, and click Retrieve.
- 2 In the Retrieve Job Accounting List dialog box, enter a user name and password, and then select the authentication type.
- 3 Click OK.

The retrieved account ID list replaces the existing list.

# Adding or Editing an Account ID

- In Device Settings > Administrator > Job Accounting, select Job accounting.
  - To create an account ID, click Add.
  - To edit an existing account ID, select it from the list and click Edit.
- 2 Under Account ID, enter a number to a maximum of 8 digits.
- **3** Under Description, enter a description of the account ID, such as a user or group.
- **4** Under User name, enter a Windows user name, to a maximum of 20 characters. The user name is not case-sensitive.
- 5 Click Add to add the name to the user names (computer) list.
- **6** To remove an account ID from the list, select it and click **Delete**.
- 7 Click OK.

# **Printing with Job Accounting**

**1** From Device Settings, navigate to:

#### Administrator > Job Accounting > Job accounting

- 2 Select one of the following options:
  - Use specific account ID
  - Prompt for account ID
  - · Prompt for account ID and validate
  - Display account ID list
  - Validate user name (computer) or prompt for account ID



You can only select the last three options if you add or select an account ID from the account ID list. Click the buttons to view and manage the list.

- 3 Click **OK** in all dialog boxes.
- **4** Print the document from the application.
- 5 If prompted, type or select an account ID, and click **OK**.

## **Net Manager**

Net Manager is a server-based application that provides centralized user authentication, authorization, user access control, and secure pull printing features. The Net Manager application must be installed separately. It is also necessary to make settings in the printer driver **Device Settings** > **Administrator** > **Net Manager** to integrate with Net Manager. This Net Manager driver feature is installed as an optional component of the driver.

The XPS driver does not support Net Manager. For more information about Net Manager, please contact your printing system dealer.

An administrator can set the Net Manager server and user information for users and groups to print according to defined policies. When Auto detect site server address is selected, Server becomes Master server. You can enter the master server address, and the site server is automatically retrieved for authentication. This allows network printing at any company location without changing the server address each time.

When policies restrict printing features, Net Manager reconfigures the printer driver so that the restricted printing features are unavailable to the user or group. The Net Manager options let you choose how conflicts are handled between a policy and a driver selection.

For greater security, you can use a registered User Login name as the Net Manager user name. The User Login password is not required. When this feature is used, Net Manager options are not available.

With secure pull printing, you can select the printing system that will print after sending the job. To use the secure pull printing feature, the driver must be connected to the Net Manager spooler server using the Net Manager spooler port. Print jobs are held in the Net Manager spooler server until the user is authenticated on the printing system.

For a restricted user in a client/server environment, the Administrator button in Device Settings becomes the Identity button. A user can enter Net Manager data in the Identity Settings dialog box. If you select **Use Windows authentication**, the Identity button cannot be used.

# **Selecting Net Manager Options**

In Device Settings > Administrator > Net Manager, select a Net Manager option:

#### Use the user login as the Net Manager user name

If you select this option, proceed to step 7.

When you click Print, you can enter a registered User Login name in the Print Options or Identity Settings dialog box. The print job is sent to the Net Manager server.

#### **Net Manager**

If you select this option, proceed to step 2.

2 Enter the server address.

If site servers are managed by the master server, select **Auto detect site server address**. Under Master server, enter the master server address.

- **3** Enter the port number. The default port number is 9094.
- **4** Select an authentication option:

#### **Use Windows authentication**

Select to use Windows login information for Net Manager authentication. The Net Manager Login dialog box does not appear during printing unless Windows authentication fails. If you select this option, proceed to step 6.

In a workgroup environment, Use Windows authentication cannot be used.

#### Use specific name

Select to enter specific login information. If you select this option, proceed to step 5.

- 5 Type the Login user name and Password. The Login user name can be in the user principal name (UPN) format to support multiple domains: username@domain.com
- 6 You can select No notifications for policy conflicts if you do not want a message to appear when policy conflicts occur during printing. When selected, choose a printing result:

#### **Continue printing**

Apply the policy and print the job

#### **Cancel printing**

Cancel the print job

7 Click **OK** in all dialog boxes.

## **Printing with Net Manager**

- From the application, open the Print dialog box. Click Preferences or Properties to open the Properties dialog box and view printing restrictions set by the policy.
- 2 If the Net Manager Login or Identity Settings dialog box appears, enter a Login user name and password. This dialog box is generated when an invalid or blank

Net Manager user name or password is set in the driver. The Net Manager Login dialog box does not appear if Use Windows authentication is selected in **Administrator > Net Manager**, except when the Windows authentication fails.

- **3** You can click **Do not ask again** to use the most recently-saved Login user name and password for each print job. When selected, the Net Manager Login dialog box does not appear again.
- 4 Click **Log** in to send the print job to the Net Manager spooler server, where the Login user name and password are authenticated.

The print job appears on the Job tab on the main Net Manager web application.

- **5** Depending on the Net Manager settings and before the job is printed, the Print Options dialog box appears with information about your print quota. Click **OK** to continue.
- 6 On the printing system's operation panel, enter your authentication credentials to release spool jobs. You can print from any printing system managed by the Net Manager server.

# **User Settings**

With this feature, you can specify user and department names, select the default unit of measure, and change the driver display language.

In a client/server environment, Department and Units are unavailable to a client logged in as a restricted user. User name and Language preference can be changed.

# Identification

With this feature, you can identify your print job with a User name and Department name, to a maximum of 31 characters. Double-byte characters are supported. The User name can be used to identify a print job stored on the storage device.

In a client/server environment, a client user can change the User name. This does not change the default user name selection on the server.

# **Setting User Identification**

- In Device Settings > User, type your preferred name in the User name text box.
- 2 Type your department or group name in the Department text box.
  - You can type a maximum of 31 characters in the User name and Department text boxes.
- **3** Click **OK** in all dialog boxes.

## Units

With this feature, you can set **Inches** or **Millimeters** as the unit of measurement. This is used for the following settings:

- · Page Sizes settings in the Basic tab
- Spacing setting in the Add Watermark and Edit Watermark dialog boxes in the Advanced tab
- · Poster settings in the Layout tab
- · Gutter settings in the Layout tab

## Selecting a Unit of Measurement

- 1 In Device Settings > User, select Inches or Millimeters.
- 2 Click **OK** in all dialog boxes.

## Language Preference

With this feature, you can specify the user interface language of Device Settings in Properties and all tabs of Printing Preferences.

Available languages vary depending on your locale and your computer settings.

# **Setting Language Preference**

- In Device Settings > User, select the preferred language from the Select language list.
- 2 Click **OK** in all dialog boxes.

# Page Description Languages (PDL)

With this feature, you can specify the contents and layout of a printed page. In Device Settings, you can choose from PCL XL (Printer Command Language XL), PCL 5c/5e, KPDL, or PDF (Portable Document Format). To add PDF to the list of PDL choices, you must install the Output to PDF plug-in. The printer default is PCL XL, which is suitable for most printing purposes.

After you select a PDL, the selection appears in the lower corner of the overview image in Device Settings and in all Printing Preferences tabs. You can change the PDL temporarily from any Printing Preferences tab.

In GDI compatible mode, vector graphics are rasterized for printing as bitmap images. Use the **GDI compatible mode** option to improve the output quality of the graphic created by the application.

In a client/server environment, this feature is unavailable to a client logged in as a restricted user.

If your application supports the XML Print Specification, then XPS printing can be performed after installing the XPS driver. With the XPS driver, the only available PDL is XPS.

# **PDL Options**

The PDL options, available in the Page Description Languages (PDL) dialog box, are accessed in Device Settings.

## PCL XL

The most recent version of HP PCL and PCL 6. This PDL includes PCL 5c/5e features. PCL XL lacks backward compatibility with earlier PCL versions, though it is enhanced over PCL 5c/5e in these areas:

- Reduced file size
- Better print speed
- · Faster return to application
- Supports Security watermark
- Supports Line thinning

## PCL 5c/5e

- Fully compatible with earlier PCL versions
- Bidirectional communication support
- · Wide selection of fonts for use with Microsoft Windows applications
- Complex graphics might not print as well
- Start of the page/End of the page available in Prologue/Epilogue

## **KPDL**

KPDL is used when printing from applications that support PostScript 2 or 3.

- An emulation of PostScript printing
- Strong graphics reproduction
- Print speeds may be slower than PCL 5c/5e
- · Requires more printing system memory than PCL 5c/5e
- · Enables native TrueType font downloading
- Supports most Graphics settings options
- EMF Spooling unavailable when Data passthrough is selected

## PDF

Output to PDF is a plug-in that lets you print or save documents from multiple sources to Adobe Portable Document Format (PDF). The PDF format is independent of the operating system and application software used to create documents.

- · An alternative to existing commercial applications for creating PDF documents
- Retains original document appearance
- · Can be viewed and printed on operating systems that display PDF content
- Some driver features unavailable

# **PDL Settings**

For some page description languages, additional settings are available in the Page Description Languages (PDL) dialog box.

# PCL XL Settings

#### Skip blank pages

This option prevents the printing system from outputting any page that contains no data, or that has, at most, one space character. Selecting this option can save paper, and result in comparatively faster printing times.

- Select Off to print all pages, including blank pages.
- Select On to skip all blank pages.
- Select Use layout settings to print all pages when Booklet, Duplex, or Multiple pages per sheet feature is used. Otherwise, blank pages are skipped.

#### Smart duplex printing

This option automatically keeps a sheet of paper from being sent through the duplex unit if the sheet is only printed on one side. The duplex unit is bypassed for the following types of print jobs: a one-page document, one page from a multi-page document, or a multi-page document that prints onto a single sheet. Selecting this option can reduce wear on the mechanical duplex unit, and result in comparatively faster printing times.

## **KPDL Settings**

#### Skip blank pages

This option prevents the printing system from outputting any page that contains no data, or that has, at most, one space character. Selecting this option can save paper, and result in comparatively faster printing times.

- Select Off to print all pages, including blank pages.
- Select **On** to skip all blank pages.
- Select Use layout settings to print all pages when Booklet, Duplex, or Multiple pages per sheet feature is used. Otherwise, blank pages are skipped.

#### Smart duplex printing

This option automatically keeps a sheet of paper from being sent through the duplex unit if the sheet is only printed on one side. The duplex unit is bypassed for the following types of print jobs: a one-page document, one page from a multi-page document, or a multi-page document that prints onto a single sheet. Selecting this option can reduce wear on the mechanical duplex unit, and result in comparatively faster printing times.

#### Data passthrough

This option reduces errors when printing complex jobs from applications that use PostScript formatting. When selected, EMF spooling is unavailable in the Advanced tab.

## **PDF Settings**

Provides options for printing and saving documents to Adobe PDF format. See PDF topics for details.

# Selecting a PDL in Device Settings

- In Device Settings > PDL, select the preferred page description language from the Available languages list.
  - If you select PCL XL, you can select Skip blank pages and Smart duplex printing.
  - If you select KPDL, you can select either Skip blank pages or Data passthrough. You can also select Smart duplex printing. Note that if you select Data passthrough, EMF spooling is unavailable in the Advanced tab.
  - If you select **PDF**, you can click **PDF Settings** to open the PDF Settings dialog box.
- 2 Select the **GDI compatible mode** option to improve the output quality of graphics created by your application.

When Skip blank pages is set to On or Use layout settings, GDI compatible mode is unavailable.

3 Click **OK** in all dialog boxes.

# PDF

With this plug-in feature, you can print and save documents from multiple sources to Adobe PDF format. This feature can be used as an alternative to existing commercial applications for creating PDF documents. Documents saved as PDF retain their original appearance, and can be viewed and printed on operating systems that display PDF content.

For a document using mixed paper sizes, all pages in the PDF use the size of the first page.



With PDF selected as the PDL, only a limited set of driver options are available.

# **PDF Options**

You can select PDF options if you have installed the Output to PDF plug-in. The following options are available in the PDF Settings dialog box:

### **Embed fonts**

This option ensures that document fonts appear accurately in the PDF file on the screen. This option ensures accurate reproduction but significantly increases the file size.

### **Compress data**

This option enables flat compression for the generated PDF document. This option significantly reduces the file size.

### Print and save options

From the list, select whether to print (Print only), save a PDF file (Save to file), or both (Print and save). If a save option is selected, additional options are available in the PDF Settings dialog box.

#### Save as color

This option saves the PDF as a color document. This option does not appear when Print only is selected.

### Automatically save to default folder

Select to save a PDF file automatically in a default folder. Browse to a location to save your PDF file.

#### Date and time

- Select the check box to use the same file name plus the current date and time whenever the file is saved.
- Clear the check box to replace an existing file, if a file with the same name already exists.

#### Encryption

Encryption adds the selected level of encryption to the PDF. When selected, password protection is available so that a document cannot be opened or altered by unauthorized users.

#### Arc4 40

This encryption option provides low-level security for a PDF document. This option supports Adobe Acrobat and Adobe Reader 6.0 or earlier.

#### Arc4 128

This encryption option provides low-level security for a PDF document. This option supports Adobe Acrobat and Adobe Reader 6.0 and later.

### **AES 128**

This encryption option provides high-level security for a PDF document. This option supports Adobe Acrobat and Adobe Reader 7.0 and later.

### **AES 256**

This encryption option provides high-level security for a PDF document. This option supports Adobe Acrobat and Adobe Reader 9.0 and later.

### **Password protection**

Select passwords for changing security settings and for opening a document. Passwords are supported to a maximum of 16 characters.

#### Change security settings

Select the check box and type an owner password. Within Adobe Acrobat, this password is required to change the document restrictions set in the security section of the PDF. When a document with this password is opened in Adobe Reader, it cannot be printed or edited, and document data cannot be copied.

#### **Open document**

Select the check box and type a user password. The user password must be entered at the time the PDF document is opened. This password must be different from the owner password.

# **Printing and Saving to PDF**

- 1 In **Device Settings** > **PDL**, in the Available languages list, select **PDF**.
- 2 Click PDF Settings.
- 3 In the PDF Settings dialog box, under Print and save options, select whether to print or save or both.

If a save option is selected, select additional folder, encryption, and password options.

- 4 Click **OK** in all dialog boxes.
- **5** Open and print the document.
- 6 Name and save the PDF file.

# **XPS Driver**

For Windows 7 or later, and Windows Server 2008 or later, you can use the XML Paper Specification (XPS). This Page description language provides an additional method for displaying, processing, and printing documents. As both a PDL and a document format, XPS requires compatible printing system hardware and software written for the Windows Presentation Foundation (WPF) architecture. PCL and KPDL are not compatible with an XPS environment. Therefore, an XPS driver supports a single PDL setting. The XPS driver can be installed from the Product Library disk. In the Product Library window, click **Custom Install**. In the Custom Install page, select a printing system model, and then in the Drivers tab, select **KX XPS Driver**.

Some driver features are unavailable when using the XPS driver. The user interface varies between the KX XPS Driver and the KX Driver.

## **XPS Options**

You can select XPS options when using the XPS driver.

The following options are available in the XPS Settings dialog box:

#### Print and save options

From the list, select whether to print, save, or both. If a save option is selected, additional options are available in the XPS Settings dialog box.

#### Automatically save to default folder

Select to save an XPS file automatically in a default folder. Browse to a location to save your XPS file.

#### Date and time

- Select the check box to use the same file name plus the current date and time whenever the file is saved.
- Clear the check box to replace an existing file, if a file with the same name already exists.

## **Printing and Saving to XPS**

- 1 In Device Settings > PDL, click XPS Settings.
- 2 In the XPS Settings dialog box, under Print and save options, select whether to print or save or both.

If a save option is selected, select additional folder options.

- 3 Click **OK** in all dialog boxes.
- **4** Open and print the document.
- 5 Name and save the XPS file.

## **Compatibility Settings**

With this feature, you can specify media source values, override the application's Collate setting, and combine the Source and Media type lists in the Basic tab.

For some models, you can also align mixed paper sizes and disable reverse order printing for face-up output.

In a client/server environment, this feature is unavailable to a client logged in as a restricted user.

To restore all the options in the Compatibility Settings dialog box to default, click **Reset**.

## **Media Source Enumeration**

Media source enumeration supports compatibility for media source values unique to the printer driver, such as those for cassettes or feeders. Your newly installed printer driver maintains identical media source support with the driver it replaces, whether for this driver or one from another manufacturer. If media source macros exist for the older driver, then the alignment of media source values maintains support without the need to change the macros.

Use the Driver Info utility (\Utility\Driver Info\DrvInfo.exe) to compare the source values for all installed drivers.

If the values for a given media source differ between printer drivers, you can reassign an enumerated value to create a match between the drivers.

## **Setting Media Sources**

- In Device Settings > Compatibility, from the Media source enumeration list select the paper supply method. The current value is listed in the Enumerated value box.
- 2 Type an Enumerated value for the media source, and click Apply. To align settings with a different driver, this value should align with those in the other driver.
- 3 Click **OK** in all dialog boxes.

# **Ignore Application Collation**

With this feature, you can bypass the Collate setting in software applications, and gives priority to the printer driver setting.

With the check box selected, the printer driver Collate setting is used. With the check box cleared, the application Collate setting is used.

## **Selecting Printer Driver Collation**

- 1 In Device Settings > Compatibility, select Ignore application collation.
- 2 Click **OK** in all dialog boxes.

## **Combine Source and Media Type Lists**

With this feature, you can change the driver's Basic tab so that Media type and Source are combined into one list, labeled Source. In the combined list, Media types are listed first, followed by cassettes and multipurpose tray.

## **Creating a Combined Source List**

- In Device Settings > Compatibility, select Combine source and media type lists.
- 2 Click **OK** in all dialog boxes.

## **Removing a Plug-in**

You can remove an installed plug-in from the driver. If removed, the plug-in features do not appear in the driver interface.



To remove the Output to PDF module, PDF must not be selected as the PDL.

- 1 In Device Settings, click the logo or About button, then **Plug-in**.
- 2 Select a plug-in module from the list, and click **Delete**, then **Yes**.
- **3** Click **OK** in all dialog boxes.

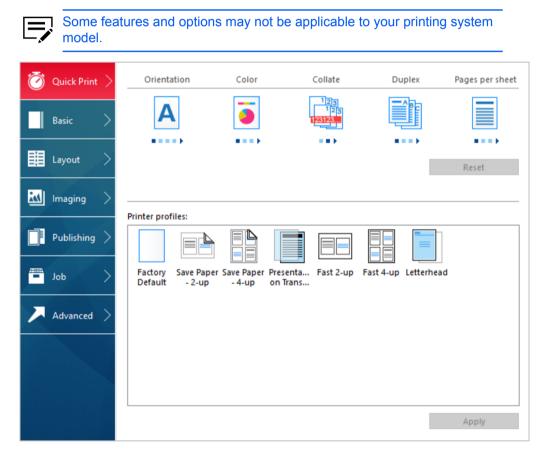
# **5 Quick Print**

In the Quick Print tab, you can apply basic print settings to print jobs. You can select options quickly in a simple user interface.

Any Quick Print settings can be saved as a group, called a profile, and applied to any print job. Profiles support common printing tasks.

To return to the original settings, click **Reset**. The Reset button is available when accessing the printer driver from the application's Print dialog box.

The administrator can set the view of the Quick Print tab through the Installation process, or in **Device Settings > Administrator**.



## **Quick Print Options**

You can set up to five print options on the Quick Print tab. You can create your own customized view of print options with Edit Quick Print Options. You can also select from profiles that have been set with predefined options for frequently run print jobs.

# **Orientation**

With this feature, you can specify the paper orientation of the print job. Click the **Orientation** icon repeatedly to change between portrait, landscape, rotated portrait, and rotated landscape printing formats. The rotated options rotate the job orientation 180 degrees.

Orientation also appears in the Basic tab. Changes in Quick Print or Basic tab are reflected in the other tab.

## Color

With this feature, you can choose whether to print the document in full color, auto color, or black and grayscale. Click the Color icon repeatedly to change between available color printing options.

When Auto color is selected, only black toner is used to print black and grayscale.

Color also appears in the Basic and Imaging tabs. Changes in Quick Print, Basic, or Imaging tab are reflected in the other tabs.

An administrator can ensure that all jobs are printed with black toner only by selecting Black & White mode in Device Settings > Administrator > Lock Settings.

## Collate

With this feature, you can specify the order in which the pages of a multiple copy job are printed.

Click the **Collate** icon to change between On, Off, On (reverse order), and Off (reverse order). Reverse order options are available only in some models.

With On selected, the first time the print job is sent to the printing system, the data is rendered as page images in the printing system's memory. The remaining job copies are printed from the stored data. This avoids the extra processing involved in sending every copy from the computer to the printing system.

With On selected, the driver prints the complete job set by set (123, 123). With Off selected, it prints each page by set (111, 222). For example, with On selected, three copies of a five-page document outputs as pages one through five in succession, three times.

The printer driver automatically overrides the application's Collate setting and uses the printer driver setting. You can use the application's Collate setting by clearing the Ignore application collation check box in the Compatibility Settings dialog box accessed from Device Settings.

For some models, if On (reverse order) or Off (reverse order) is selected, the printed pages appear in reverse order. These options are available when Printer default is not selected under Destination in the Basic tab. For some models with a face-up destination, Off (reverse order) can be disabled in **Device Settings** > **Compatibility**.

Collate also appears in the Basic tab. Changes in the Quick Print or Basic tab are reflected in the other tab.

## **Duplex**

With this feature, you can print on both sides of each page. A duplex unit can turn the paper over to allow printing on the reverse side. Click the **Duplex** icon to change between the following options:

Off

Disable duplex printing.

#### Flip on long edge

Turn the long edge of the page to view the content.

#### Flip on short edge

Turn the short edge of the page to view the content.

When the document contains blank pages and you do not want to include them in the print job, under **Page Description Languages (PDL)** > **Skip blank pages**, select **On**. To include the blank pages in the print job, select **Off** or **Use layout settings**.

Duplex should be turned on before using Lock Settings. When Duplex is turned off, using Lock Settings makes it unavailable to all users.

An administrator can ensure that all jobs are printed on both sides by selecting **Duplex** in **Device Settings > Administrator > Lock Settings**.

Duplex also appears in the Basic tab. Changes in Quick Print or Basic tab are reflected in the other tab.

## **Pages per Sheet**

With this feature, you can print several pages on a single sheet of paper for the purpose of reviewing the document and conserving paper. The size and readability of the multiple pages decrease as the number of pages per sheet is increased. Click the **Pages per sheet** icon repeatedly to change between 2 pages per sheet, 4 pages per sheet, and off.

This feature also appears as Multiple pages per sheet in the Layout tab. You can select additional pages per sheet, set the arrangement of the pages, and print borders around each of the pages.

When Pages per sheet is selected, Scaling and Poster are unavailable in the Layout tab.

When the document contains blank pages and you do not want to include them in the print job, under **Page Description Languages (PDL)** > **Skip blank pages**, select **On**. To include the blank pages in the print job, select **Off** or **Use layout settings**.

Pages per sheet should be turned on before using Lock Settings. When Pages per sheet is turned off, using Lock Settings makes Pages per sheet unavailable to all users.

An administrator can ensure that all jobs are printed with multiple pages on a sheet by selecting **Multiple pages per sheet** in **Device Settings** > **Administrator** > **Lock Settings**.

# **EcoPrint**

With this feature, you can change the text and graphics to appear lighter in the print job. EcoPrint does not increase print speed. Click the **EcoPrint** icon to change between On and Off.

EcoPrint also appears in the Basic and Imaging tabs. Changes in Quick Print, Basic, or Imaging tab are reflected in the other tabs.

EcoPrint should be turned on before using Lock Settings. When EcoPrint is turned off, using Lock Settings makes EcoPrint unavailable to all users.

An administrator can ensure that all jobs are printed in EcoPrint mode by selecting **EcoPrint** in **Device Settings > Administrator > Lock Settings**.

# **Edit Quick Print Options**

The assortment of icons at the top of the Quick Print tab can be customized to include features that you use most often. Any number of icons from 0 to 5 can be displayed. All icons can be removed from view if you want to use only the Printer profiles options in the Quick Print tab.



An administrator can hide the Edit button by selecting **Hide Edit Quick Print control** in **Device Settings** > **Administrator**. The Edit button is unavailable when the driver is accessed from an application's Print dialog box.

# **Selecting Quick Print Options**

- 1 In Control Panel, select Devices and Printers.
- 2 Right-click your printing system model, and then click **Printing preferences**.
- **3** Select the **Quick Print** tab and click **Edit**.
- 4 In the Edit Quick Print Options dialog box, add or remove a feature to the Quick Print tab:
  - To add, select the feature under Available, and click the arrow to move the feature to Selected. A maximum of 5 features appear under Selected.
  - To remove, select the feature under Selected, and click the arrow to move the feature to Available. To use only the Printer profiles in the Quick Print tab, move all features to Available.
  - To change the position of the features under Selected, click the up or down arrow. The feature at the top appears first in the Quick Print tab.
  - To restore the list to factory default options, click Reset.
- 5 Click OK.

# **Profiles**

With this feature, you can save printer driver settings as a profile. You can select multiple options in the Quick Print and other Printing Preferences tabs, save them to a profile, and use all of them at once when you apply the profile. You can then use that profile to print the same type of print job again without having to reselect all the settings. In Printing Preferences, the Save As and Profiles buttons appear at the bottom of all tabs.

In **Device Settings > Administrator**, you can choose to display or hide the Factory Default profile. Settings made in Device Settings cannot be saved to a profile. To reset the printer driver to the default settings, select the Factory Default profile, and then click **Apply**.



You can edit only the Factory Default profile. Other profiles cannot be edited, but can be deleted, imported, or exported.

In a client/server environment, a client can choose between client profiles or server profiles. The client is automatically set to the default profiles made in the server. In the Advanced tab, select or clear the **Enable client profile** check box.

# **Selecting a Profile**

- 1 Do either of the following:
  - From the Quick Print tab, select a profile.
  - From any Printing Preferences tab, click **Profiles**, and then select a profile.

The settings list shows a summary of settings for that profile.

2 Click Apply, then OK.

## Saving a Profile

- 1 Set the printing options you want for your print job by opening Printing Preferences and selecting all your driver settings.
- 2 In any tab, do either of the following:
  - · Click Save As.
  - Click Profiles, then Save.
- **3** Type the name of the profile, select an icon, and then type a description.
- 4 Click OK.

The newly added profile appears in the Profiles dialog box and Quick Print tab.

# **Editing the Factory Default Profile**

- 1 In any tab, click **Profiles**.
- 2 In the Select profile section, select the Factory Default profile, and click Edit.
- **3** You can edit any of the three options: **Name**, **Icon**, and **Description**.
- 4 Click **OK** to save the edited changes.

The newly edited profile appears in the Profiles dialog box and the Quick Print tab.

5 Click **Apply** to use the selected Factory Default profile in the current print job, or click **OK** to close the dialog box.

# **Deleting a Profile**

- 1 In any tab, click **Profiles**.
- 2 In the Select profile section, select the profile to be deleted, and click **Delete**.
- **3** In the delete confirmation box, click **Yes** to accept.
- 4 Click **Close** to close the Profiles dialog box.

# **Importing a Profile**

- 1 In any tab, click **Profiles**, then **Import**.
- **2** Browse for an existing profile (.KXP), select it, and click **Open**.

A message appears if any of the profile settings in the imported file are unavailable in the existing driver. Select **Yes** to import the profile, or **No** to cancel the import.

If you selected Yes, the newly imported profile appears in the Profiles dialog box.

**3** Click **Apply** to use the selected profile for the current print job, or click **OK** to close the dialog box.

The newly added profile appears in the Quick Print tab.

# **Exporting a Profile**

- 1 In any tab, click **Profiles**.
- 2 In the Select profile section, select the profile to be exported, and click **Export**.

- 3 In the Export Profile dialog box, name and save the profile.
- 4 Click **OK** to close the Profiles dialog box.

# **Application Based Printing**

With this feature, an administrator can associate a profile with an application so that all printing from the application uses the same profile settings. This makes profiles easier to use and ensures consistent printing from an application. For example, a duplex printing profile can be applied to all spreadsheet printing to save paper, or reports in Microsoft Word can be set to print with consistent stapling and print quality.

Associations between profiles and applications can be created at any time in the Application Based Printing dialog box, accessed from the Profiles dialog box. A maximum of 25 associations can be created. To use the associations in printing, you must select **Associate Profile with application** in **Device Settings** > **Administrator** > **General**.

In a client/server environment, a user on a client computer can view details about server associations but cannot change settings or select another profile.

An administrator can ensure that all jobs from an application are printed with an associated profile by selecting **Device Settings > Administrator > Lock Settings**, and then selecting **Profile with application**.

# **Adding an Association**

- 1 In any tab, click **Profiles**.
- 2 In the Profiles dialog box, click **Application**.
- **3** In the Application Based Printing dialog box, click **Add**.
- **4** In the Add Association dialog box, enter a name for the association.
- 5 Under Select application, choose an application by one of the following methods:
  - · Select Application name, and select an installed application from the list.
  - Select Filename (\*.exe), and enter a valid executable file name (.EXE) for an application that allows printing, or click Browse to find a file located on your computer.
- 6 Under Select profile, select a profile from the list.
- 7 Click **OK** in all dialog boxes.

## **Deleting an Association**

1 In any tab, click **Profiles**.

- 2 In the Profiles dialog box, click **Application**.
- 3 In the Application Based Printing dialog box, select the association to be deleted, and click **Delete**.
- 4 In the confirmation box, click **OK** to accept.
- 5 Click **OK** in all dialog boxes.

# **Editing an Association**

- 1 In any tab, click **Profiles**.
- 2 In the Profiles dialog box, click **Application**.
- 3 In the Application Based Printing dialog box, select the association to be edited and click Edit.
- 4 In the Edit Association dialog box, you can change the settings under Association name, Select application, or Select profile.
- 5 Click **OK** in all dialog boxes.

# 6 Basic

In the Basic tab, you can specify the most commonly used printer driver settings.

To return to the original settings, click **Reset**. The Reset button is available when accessing the printer driver from the application's Print dialog box.

Some fea model.	atures and options may not be appl	icable to your printing system
🗑 Quick Print >	Print size: A4 [100%] ~	Collate: On
Basic >	Page Sizes	
Layout >	Source: Auto source selection	Orientation: Portrait
🔣 Imaging >	Media type: Unspecified $\checkmark$	
Publishing >	Destination: Printer default $\checkmark$	Duplex: Off
- dol -	Copies:	
🔎 Advanced >		Color: Full color
	Carbon copies Settings	
	Batch copies Settings	● ○ ○ EcoPrint
		Reset

# **Print Size**

With this feature, you can select the output size of the document. To use this setting, ensure that the Page Sizes setting matches the page size setting in your application. If the print size is different from the page size in your application, then each page is enlarged or reduced to match the print size.

The percentage value shown in brackets indicates the size of the print size setting relative to the page size setting.

When any envelope size is selected, a message appears, and Envelope is automatically selected as the media type.

# **Page Sizes**

With this feature, you can choose the document size in the application. Once selected, the Print size list displays the percentage value of the print size setting relative to the page size setting.



For some models, when a large page size (A0, A1, A2, B1, B2, B3) is selected, the scaling percentage may be less than 20%. A message appears stating that the print result is not guaranteed. The Poster feature in the Layout tab is unavailable for large page sizes.

You can create a page size with your chosen dimensions for printing on non-standard size paper. You can then save the custom setting to the Page Sizes and Print size lists for later selection.

In a client/server environment, a client can select between client custom page sizes and server custom page sizes. In the Advanced tab, select or clear the **Enable client custom paper size** check box.

The Page Sizes dialog box displays the unit of measurement in inches or millimeters. You can change the unit setting in the User Settings dialog box by accessing **Device Settings** > **User**. In a client/server environment, the unit setting is unavailable to the client computer.

# **Creating a Custom Page Size**

- 1 In the Basic tab, click **Page Sizes**.
- 2 In the Page Sizes dialog box, click **New**.
- 3 A default custom name appears in the Name box. Type a name for your custom page size.
- **4** Type or select values for the short edge and long edge. If a typed value exceeds the allowable limit, it automatically adjusts to the limit.
- 5 When finished, click **Save**.
- 6 Click **OK** to close the Page Sizes dialog box.

The custom page size appears in the Print size list, which is used for enlarging and reducing the sizes of prints.

## **Deleting a Custom Page Size**

- 1 In the Basic tab, click **Page Sizes**.
- 2 In the Page Sizes dialog box, select the custom size to delete.
- 3 Click Delete.

4 Click **OK** to close the Page Sizes dialog box.

# **Printing with Custom Size Pages**

- 1 Load custom-sized paper into the multipurpose tray.
- 2 In the Basic tab, select the name of your custom page size in the Print size list.
- 3 Click **OK** in all dialog boxes.

## **List Enhancement**

With List enhancement, you can view a list of commonly used print sizes and page sizes. The sizes frequently used in printing appear at the top of the list. The printer driver determines the preferred print size and page size. For mixed-paper documents, the driver uses only the first page of the document. To reset the arrangement of Print Size and Page Size, clear the **List enhancement** check box.



Custom paper sizes are not included in the sorting of Print Size and Page Size.

## Source

With this feature, you can specify the tray or cassette that supplies paper for a print job. The default is Auto source selection, which instructs the printer to search for the media requested by the application or the printer driver. If the selected tray or cassette empties during a print job, then the printer searches for another source and continues the job.

Some media types, such as transparencies, labels, and envelopes must be supplied from the multipurpose tray. Ensure that the paper is properly loaded by following the instructions outlined in the printing system's Operation Guide.



Source and Media type are separate items in the dialog box, but can be combined using the Combine source and media type lists setting in **Device Settings** > **Compatibility**. If they are combined, Media type is unavailable on the Basic tab, and media types can be selected in the Source list.

# Media Type

With this feature, you can select a type of media. If the selected media is found, it is used for the print job. The choices shown may change depending on the selection in Source. The default is Unspecified and if selected, the driver does not switch to another source tray if the selected tray is empty. If you select **Auto media selection**, the printer searches for another tray or cassette using the same paper size and media type.

When any envelope size is selected as the print size, a message appears, and Envelope is automatically selected as the media type.

You can display the custom media type names from the printing system. If any names have been changed at the printing system, the new names appear in place of default names. To display the printing system names, use the Auto Configure feature in Device Settings.

Some media types, such as transparencies, labels, and envelopes must be supplied from the multipurpose tray. Ensure that the paper is properly loaded by following the instructions outlined in the printing system's Operation Guide.

With this feature, you can print on envelopes by selecting **Envelope** from the Media type list. For some models, when the job is sent for printing, a message appears. Follow the printer model specific instructions in the printing system's Operation Guide for printing envelopes. After your job is finished, return the switches to their original position.



Source and Media type are separate items in the dialog box, but can be combined using the Combine source and media type lists setting in **Device Settings** > **Compatibility**. If they are combined, Media type is unavailable on the Basic tab, and media types can be selected in the Source list.

# **Destination**

With this feature, you can specify which output tray is used for the print job output.

## Copies

With this feature, you can specify the number of copies to print. You can print up to 999 copies. For some models, the maximum is 9999.

# **Carbon Copies**

With this feature, you can print additional copies on paper from different trays or cassettes. This is useful for printing copies of documents such as invoices on different colored paper or media type. The maximum number of copies can be printed for each carbon copy.

You can use the Prologue/Epilogue feature in the Advanced tab to add a logo or heading to each carbon copy.

When Carbon copies is selected, Batch copies, Booklet in the Layout tab, and all the features in the Publishing tab are unavailable.

Carbon copies is unavailable when Net Manager is selected in **Device Settings** > Administrator > Net Manager.

# **Printing Carbon Copies**

1 In the Basic tab, select a source and number of copies for the original copy.

- 2 For each carbon copy, load the preferred media types or colored paper into additional paper sources.
- **3** Select the **Carbon copies** check box.
- 4 Click Settings.
- **5** In the Carbon Copy Settings dialog box, select the number of copies for each source.

The total number of copies for all sources is displayed under Total.

- 6 Select a Source or Media type or both for each carbon copy.
- 7 Click **OK** in all dialog boxes.

## **Batch Copies**

With this feature, you can separate the copies of a print job into batches. You can select the number of copies in each batch. To use this feature, a storage device must be installed.

You can name each batch printing job and save the settings for later use. This is useful for exporting and importing batch settings.

A cover page can be added to each batch, printed with an optional job name and title. The cover page can be a different size, media type, and orientation from the main document. Size, media type, and source options can be different from those in the Basic tab. When User login or Job accounting is selected in **Device Settings** > **Administrator**, a cover page cannot be added.

This feature turns on the Collate feature in the Quick Print and Basic tabs. When used with Quick copy, only one batch is saved in the storage device, and batch cover pages are not saved or printed.

Batch copies is available when PCL XL or PCL 5c/5e is selected as the PDL. When using this feature, Copies and Carbon copies are unavailable.

Batch copies is unavailable when Net Manager is used.

## **Printing Batch Copies**

- 1 In the Basic tab, select Batch copies.
- 2 Click Settings.
- 3 In the Batch Copy Settings dialog box, click **New** to add batches to the list.
- **4** Under Copies, enter the number of copies for the selected batch.
- 5 To add a cover page to all batches, select **Print batch cover page**, and then select cover page options:

- Enter a **Batch job name** if you want a job name printed on the cover page of all batches.
- For each batch, enter a **Batch cover page title** if you want a title printed on the cover page.
- Select options for Print size, Source, Media type, and Orientation. Note that a change in one setting may adjust other selections to make them compatible.
- 6 Click **OK** in all dialog boxes.

You can remove a batch by selecting it in the list and clicking **Delete**.

You can import a batch list (.BCI) by clicking **Import** and browsing for a valid batch file from your computer or network.

You can save the current batch list (.BCI) to your computer or network by clicking **Export**. A saved list can be imported into another printer driver.

## Collate

With this feature, you can specify the order in which the pages of a multiple copy job are printed.

Click the **Collate** icons to change between On, Off, On (reverse order), and Off (reverse order). Reverse order options are available only in some models.

With On selected, the first time the print job is sent to the printing system the data is rendered as page images in the printing system's memory. The remaining job copies are printed from the stored data. This avoids the extra processing involved in sending every copy from the computer to the printing system.

With On selected, the driver prints the complete job set by set (123, 123). With Off selected, it prints each page by set (111, 222). For example, with On selected, three copies of a five-page document outputs as pages one through five in succession, three times.

The printer driver automatically overrides the application's Collate setting and uses the printer driver setting. You can use the application's Collate setting by clearing the Ignore application collation check box in the Compatibility Settings dialog box accessed from Device Settings.

For some models, if On (reverse order) or Off (reverse order) is selected, the printed pages appear in reverse order. These options are available when Printer default is not selected under Destination in the Basic tab. For some models with a face-up destination, Off (reverse order) can be disabled in **Device Settings** > **Compatibility**.

Collate also appears in the Quick Print tab. Changes in Quick Print or Basic tab are reflected in the other tab.

# **Printing Collated Documents**

1 In the Basic tab, set **Collate** to On.

- **2** Type or select the number of complete sets of the print job in the Copies box.
- 3 Click OK.

# Orientation

With this feature, you can specify the paper orientation of the print job. Click the **Portrait**, **Landscape**, **Rotated portrait**, or **Rotated landscape** icon. If a rotated option is selected, the print job orientation is rotated 180 degrees.

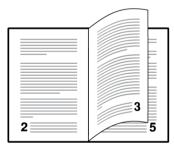
Orientation also appears in the Quick Print tab. Changes in Quick Print or Basic tab are reflected in the other tab.

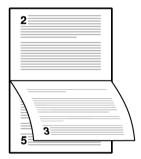
# **Duplex**

With this feature, you can print on both sides of each page. A duplex unit can turn the paper over to allow printing on the reverse side. To enable duplex printing, select either of the following options:

## Flip on long edge

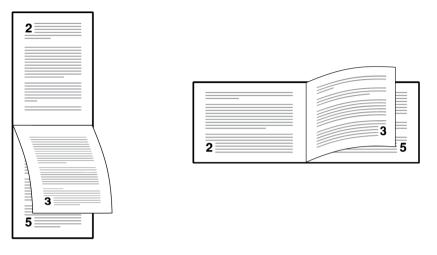
Turn the long edge of the page to view the content.





## Flip on short edge

Turn the short edge of the page to view the content.



When the document contains blank pages and you do not want to include them in the print job, under **Page Description Languages (PDL)** > **Skip blank pages**, select **On**. To include the blank pages in the print job, select **Off** or **Use layout settings**.

Duplex also appears in the Quick Print tab. Changes in Quick Print or Basic tab are reflected in the other tab.

Duplex should be turned on before using Lock Settings. When Duplex is turned off, using Lock Settings makes it unavailable to all users.

An administrator can ensure that all jobs are printed on both sides by selecting **Duplex** in **Device Settings > Administrator > Lock Settings**.

# **Printing in Duplex Mode**

- 1 In the Basic tab, click the Flip on long edge or Flip on short edge icon.
- 2 Click **OK** in all dialog boxes.

## Color

With this feature, the following options are available:

#### Full color

This mode prints full four-color text and graphics.

#### Auto color

This mode uses only black toner to print black and grayscale.

#### Black

This mode prints with black toner only, suppressing all color settings.

Color also appears in the Quick Print tab and in the Imaging tab. Changes in Quick Print, Basic, or Imaging tab are reflected in the other tabs.

An administrator can ensure that all jobs are printed with black toner only by selecting Black & White mode in **Device Settings** > **Administrator** > **Lock Settings**.

# **EcoPrint**

With this feature, you can make an entire image, text and graphics, appear lighter in the print job. EcoPrint does not increase print speed.

EcoPrint also appears in the Quick Print and Imaging tabs. Changes in Quick Print, Basic, or Imaging tab are reflected in the other tabs.

EcoPrint should be set to On before using Lock Settings. When EcoPrint is disabled, using Lock Settings makes it unavailable to all users.

An administrator can ensure that all jobs are printed in EcoPrint mode by selecting **EcoPrint** in **Device Settings > Administrator > Lock Settings**.

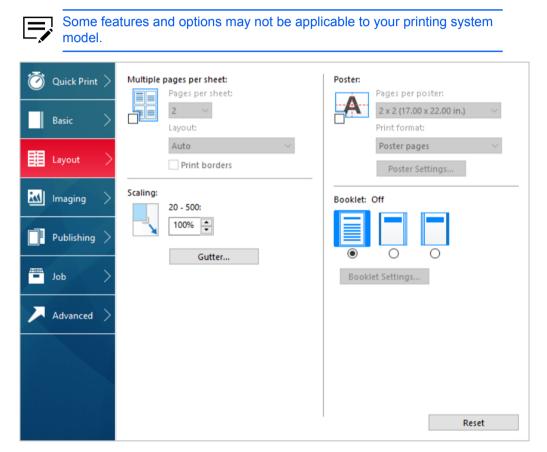
# **Selecting EcoPrint**

- In the Basic tab, select the EcoPrint check box.
- 2 Click OK.

# 7 Layout

In the Layout tab, you can arrange document data on printed pages without affecting the original document.

To return to the original settings, click **Reset**. The Reset button is available when accessing the printer driver from the application's Print dialog box.



# **Multiple Pages per Sheet**

With this feature, you can print several pages on a single sheet of paper for the purpose of reviewing the document and conserving paper. The size and readability of the multiple pages decrease as the number of pages per sheet is increased. You can set the arrangement of the pages as well as print borders around each of the pages in the Layout tab.

This feature also appears as Pages per sheet in the Quick Print tab, where you can select 2 pages per sheet, 4 pages per sheet, and off.

If Multiple pages per sheet is selected, Scaling and Poster are unavailable.

When the document contains blank pages and you do not want to include them in the print job, under **Page Description Languages (PDL)** > **Skip blank pages**, select **On**. To include the blank pages in the print job, select **Off** or **Use layout settings**.

Multiple Pages per Sheet should be turned on before using Lock Settings. When Multiple Pages per Sheet is turned off, using Lock Settings makes it unavailable to all users.

An administrator can ensure that all jobs are printed with multiple pages on a sheet by selecting **Multiple pages per sheet** in **Device Settings > Administrator > Lock Settings**.

# **Printing Multiple Pages per Sheet**

- 1 In the Layout tab, click the Multiple pages per sheet icon.
- 2 In the Pages per sheet list, select the number of pages to print on each sheet of paper.
- 3 In the Layout list, select the direction the pages should flow.
- **4** If you want to print a border around each page, select **Print borders**.
- 5 Click **OK** in all dialog boxes.

# Scaling

With this feature, you can increase or decrease text and graphics on a page.

You can also select a gutter setting that enlarges the margins to accommodate manual stapling or manual hole punch.

If other Layout tab options are selected, Scaling is unavailable.

# **Setting Scaling on the Page**

- 1 In the Layout tab, type or select a scaling percentage from 20 to 500.
- 2 Click **OK** in all dialog boxes.

## **Gutter**

With this feature, you can increase the margins around your text and graphics on the left side and at the top of the printed sheet. Gutter is often used for binding, hole punch, or stapling to make a print job easier to read. This creates a larger margin space by shifting the printable area to the right, or down, as much as one inch (25.4 mm).

Gutter width displays the unit of measurement in inches or millimeters. You can change the unit setting in the User Settings dialog box by accessing **Device** 

**Settings** > **User**. In a client/server environment, the unit setting is unavailable to the client computer.

### **Creating a Gutter**

- 1 In the Layout tab, click **Gutter**.
- 2 Under Gutter width, type or select a value between 0.20 to 1.00 inch (5.0 to 25.4 mm).

#### Short edge (top)

This selection modifies the outside margin on the top edge of the page.

#### Long edge (left)

This selection modifies the outside margin on the left side of the page.



Availability of Gutter settings varies depending on Orientation and Duplex settings in the Basic tab.

3 If the content extends too close to the edge of the page, select Reduce image to fit. The content appears slightly reduced and away from the edge of the page.

If the content does not extend beyond the page when the gutter increases, clear **Reduce image to fit**.

4 Click **OK** in all dialog boxes.

### Poster

With this feature, you can create a document size that is larger than the paper your printing system can support. You can print a poster up to 25 times larger than the original document. Segments of the poster document are printed on several sheets of paper and with the assistance of poster settings, you can reassemble the sheets easily to create a poster.

If Poster is selected, other Layout tab options are unavailable.

#### Pages per poster

You can select the poster size in relation to the original document size. Each option shows the number of sheets to be printed and the maximum poster size.

Pages per poster displays the unit of measurement in inches or millimeters. You can change the unit setting in the User Settings dialog box by accessing **Device Settings** > **User**. In a client/server environment, the unit setting is unavailable to the client computer.

#### Print format

You can print a proof sheet, along with the poster, to guide you in assembling the printed poster sheets.

#### **Poster pages**

This selection prints all of the sheets to be assembled as a poster.

#### **Proof sheet**

This selection prints all the poster pages on one sheet with markings that display the sheet assembly.

#### Poster pages and proof sheet

This selection prints all poster sheets and a one-page proof sheet.

#### **Poster settings**

You can select options, in any combination to make it easier to create a poster. These options print visual cues on the poster sheets that provide help in cropping and assembling the pages.

#### **Overlap edges**

This selection duplicates the edges of document data on adjoining sheets. Poster appearance is improved when the edges overlap slightly. Select the check box, then type or select a value between 0.00 and 1.20 inches (0.0 and 30.4 mm). This option reduces the final poster size slightly.

#### Print crop marks

This selection prints a border at the edges of each poster sheet. You can crop each sheet on the border before assembling the sheets. This option ensures that data on adjoining sheets matches precisely.

#### Print assembly marks

This selection prints numbers at the edges of each sheet, matching numbers on adjoining sheets. Assemble each sheet edge to the same numbered edge on another sheet.

### **Printing a Poster**

- 1 In the Layout tab, click the **Poster** icon.
- 2 In Pages per poster, select the poster size. Each option describes the number of sheets it takes to represent one finished poster page.
- 3 In Print format, select one of the options for a finished print format.
- 4 Click **Poster Settings** to select options in any combination. These options ensure a precise assembly of the pages to create the poster.
- 5 Click **OK** in all dialog boxes.

### **Booklet**

With this feature, you can print a two-page layout on both sides of each sheet of paper. For some models, you can fold and bind the booklet in the center. Folded booklets are half the size of the selected paper.

Additional booklet options are available in the Booklet Settings dialog box.

#### Layout

You can select from the following booklet layout settings:

#### Create from driver settings

Uses the driver settings for page sequence and pages per sheet. Select this option when the booklet layout is not created in the application.

#### Create from application settings

Uses the application settings for page sequence and pages per sheet. Select this option when the application creates the booklet layout.

#### Staple and fold settings

When a folding unit is installed, you can select from the following settings. Otherwise, None is automatically selected.

#### None

Prints the booklet without stapling and folding.

#### Staple and fold

Prints, staples, and folds the booklet.

#### Fold only

Prints and folds the booklet without stapling.

When selecting the stapling or folding option, make sure to select the number of sheets in the booklet.

#### Auto

Divides document sheets equally into one or more booklets depending on the Staple and fold settings selections. For models that do not support a folding unit, you can print all document pages into a single booklet.

#### Number selected

Prints document pages into separate booklets, up to the selected number of sheets for each booklet. The final booklet may contain fewer sheets.

When Booklet is selected, other Layout tab options are unavailable.

A different paper source can be selected for the booklet cover. To include a cover on the booklet, select the **Publishing** tab, then select **Cover mode**.

When the document contains blank pages and you do not want to include them in the print job, under **Page Description Languages (PDL)** > **Skip blank pages**, select **On** or **Use layout settings**.

# **Printing a Booklet**

1 In the Layout tab, click the icon for one of the two binding options:

#### Left edge binding

This selection prints text that reads from left to right.

#### **Right edge binding**

This selection prints text that reads from right to left.

- **2** For additional booklet options, click **Booklet Settings**.
- **3** Select from available layout options.
- 4 Click **OK** in all dialog boxes.

# 8 Imaging

In the Imaging tab, you can manage print quality and color or grayscale settings.

To return to the original settings, click **Reset**. The Reset button is available when accessing the printer driver from the application's Print dialog box.

Some fea model.	atures and options may not be app	licable to your printing system
Ouick Print     Basic	Print quality: High quality V Trapping:	Color: Full color
Layout >	Fonts Graphics	Color reproduction:  Printer settings
🔝 Imaging >	Gloss mode	Settings Adjustment:
Publishing >	<ul> <li>Image: A state of the state of</li></ul>	None V Color conversion:
📕 Advanced 🗦		Print text as black  Print grays with black toner
		Reset

# **Print Quality and Custom Quality**

With these features, you can set the resolution for the print job. Resolution is a measurement, in dots per linear inch (dpi), that describes the sharpness and clarity of printed text and images. Custom Quality Settings lets you set a more refined resolution for the print job.

# **Print Quality Selection**

In the Imaging tab, select a Print quality setting from the list.

#### **High quality**

Select one of these settings to print from a high or low print resolution.

#### Custom

Click Custom to open a Custom Quality Settings dialog box. Depending on your printing system model, resolution can be set to Fine 1200 dpi, Fast 1200 dpi, 600 dpi, or 300 dpi.

### Trapping

In color printing, color toners are applied separately to a page. A color image has its component colors applied in color separations of cyan, magenta, yellow and black. These color separations must be aligned (registered) precisely to produce a quality full-color image. During printing, the paper or media type may shift slightly. While the shift might be very small, the gaps between the colors in the image can be noticeable. Color trapping corrects it by overlapping colors slightly so that minor alignment issues are corrected.



Trapping is unavailable when PCL 5c is selected as the PDL.

# **Setting Trapping Values**

1 In **Imaging > Trapping**, select a value for the print overlap pixel width:

- Light, 0.5-pixel trapping
- Medium, 1.0-pixel trapping
- Heavy, 1.5-pixel trapping
- Very heavy, 2.0-pixel trapping
- 2 Click OK.

### **Font Settings**

A computer font is a data file containing a set of glyphs (visual representations of textual elements), characters, or symbols. Common terms for fonts are:

#### **Outline fonts**

In contrast to bitmap fonts, these are defined as a set of mathematical lines and curves. An outline font is more easily scalable (designed to display and print clearly at any point size) than a bitmap font.

#### **Bitmap fonts**

These fonts define each character as a pattern of pixels (the smallest resolvable rectangular areas of an image). Such fonts are not easily scalable and distort when reduced or enlarged.

#### Native fonts

These are the basic or original fonts installed with the computer operating system. TrueType fonts are the native fonts used by Microsoft Windows.

#### TrueType fonts

These are a type of scalable outline fonts. TrueType has long been the most common format for fonts on Microsoft Windows.

#### System fonts

These are the primary fonts used by the operating system. They are typically accessed through an application interface or through a common font dialog box.

#### **Device fonts**

These fonts are stored either permanently or temporarily in the printing system memory.

# **Font Settings Options**

In the Font Settings dialog box, you can specify how TrueType fonts are sent to the printing system. The chosen method affects the speed and quality of the print job.

#### **Download as outlines**

This method is best suited for large documents or print jobs using multiple fonts and font sizes. Print speeds are faster because of the optimization features in this setting. The repetition of similar font data sent to the printing system is reduced, thereby increasing the print speed. Print speed is not increased when using Asian fonts such as Japanese, Chinese, and Korean, because of the large amount of font information used for these particular fonts.

#### Allow native download

This method improves text quality and increases print speed by converting TrueType fonts to Adobe Type 42 font format. This feature is available when KPDL is selected as the PDL.

#### Download as bitmaps

Downloading fonts as bitmaps provides more detail, however it creates large file sizes. This is best suited for print jobs with custom fonts, very small fonts (point size 1-4), or Asian fonts.

#### Substitute with device fonts

Font substitution is the process of using one font in place of another when the intended font is unavailable to a printing system. Font substitution may be critical for output of documents to printing systems that are not well supported by a large font inventory. Standard PostScript fonts are available for substitution.



GDI compatible mode does not support this method.

#### **Disable device fonts**

In some cases, the printing system substitutes fonts even if you send the TrueType fonts as outline fonts or bitmap images. Select Disable device fonts to prevent substitution of device fonts for TrueType fonts.

This option also improves portability of printable data. If cleared, device fonts may not match when sent to a different printing system.

Some Adobe applications have device font limitations. To overcome these limitations, select **Disable device fonts**. Device fonts are normally visible in the application font lists as printer icons next to the font name, unless there are equivalent system fonts, in which case the "TT" TrueType icon remains.

# **Selecting Font Settings**

- In Imaging > Fonts, select one of the methods for sending TrueType fonts.
- 2 Click **OK** in all dialog boxes.

### **Setting Font Substitution**

To set font substitution, you must open Printing Preferences outside of a printing application by the following procedure.

- 1 In Control Panel, select **Devices and Printers**.
- 2 Right-click your printing system model, and then select **Printing preferences**.
- 3 In the Imaging tab, navigate to:

#### Fonts > Substitute with device fonts > Fonts

In the Fonts Substitution dialog box, the System fonts list shows the fonts installed on your computer. The Available device fonts list shows the printing system fonts.

- **4** Select the system font, and then the available device font to be substituted.
- 5 To restore the default values, click **Reset**.
- 6 Click OK.

If the device font does not have similar font characteristics to the system font, character spacing in the document may appear incorrect.

# **Disabling Device Fonts**

1 In Imaging > Fonts, select the Disable device fonts check box.

2 Click **OK** to save your settings.

### **Graphics Settings**

Graphics are pictorial representations of information. Graphics can be functional (charts, diagrams) or artistic (drawings, photographs). With Graphics Settings, you can control the visual results of your printed graphics with options that can be set by the selected Page Description Language (PDL).

### Pattern Scaling

With this feature, you can help improve visual compatibility between screen and print output. Graphics objects, such as a shape or a path, often include patterns and fills that are composed of collections of printed dots.

- A pattern is a planned or random repetition of colors, shapes, lines, values, and textures to create a visual arrangement.
- A fill is the application of a color or grayscale to a graphics object.

If printed patterns and fills do not match the appearance of that on the screen, use **Pattern scaling** to select a different density of printed dots. In **Imaging > Graphics**, select a Pattern scaling setting:

#### Auto

This setting prints patterns and fills to match the on-screen appearance.

#### Coarse

This setting prints patterns and fills with the fewest number of lines, patterns, or dots. Coarse is the same as Auto when PCL XL or PCL 5c/5e is selected as the PDL.

#### Medium

This setting prints patterns and fills with a greater number of lines, patterns or dots than the Coarse setting. Medium is the same as Auto if KPDL is selected as the PDL.

#### Fine

This setting prints patterns and fills with the greatest number of lines, patterns, or dots. Printed patterns and fills may appear more dense than the on-screen appearance.

### Line Thinning

With this feature, you can reduce the pen width of lines used for barcodes and line drawings. Drawing values controlled by an application are not changed.



Line thinning is available when PCL XL is selected as the PDL. When GDI compatible mode is selected in the page description languages (PDL) dialog box, Line thinning is not available.

In **Imaging > Graphics**, select a Line thinning setting:

#### Off

Line thinning is not applied.

#### Barcodes

This setting reduces the pen width value for vertical and horizontal lines. It improves the readability of barcodes.

#### **Fine lines**

This setting reduces the pen width value for vertical, horizontal, and diagonal lines.

#### All

This setting reduces the pen width by a value of 1 for vertical, horizontal, and diagonal line used in barcodes or line drawings.

For some models, you can select **Correct fine line by device** to improve the quality of barcode printing. This feature enables correction of pen width by the device rather than by the driver.

### **Inversion Options**



This is available only when PDL is set to KPDL.

Inversion is the opposite of the normal order, arrangement, or position of an image or printed content.

In **Imaging > Graphics**, select an inversion option:

#### Reverse image

This setting prints images like a photo negative, reversing black and white areas of the image.

#### **Mirror print**

This setting prints the page content reversed, as it would appear in a mirror image.

### **Optimization**

This is available only when PDL is set to KPDL.

Optimization is a process or methodology of improving a printing system's function or effectiveness.

In Imaging > Graphics, select an optimization option.

#### Fast printing

This setting increases print speed and decreases spool size. It delivers images in binary format. It can be used for most everyday printing needs.

#### **Document portability**

This setting creates a PostScript file in ASCII text encoding. Unlike the binary format created in Fast printing, the ASCII text created with this selection can be edited.

# **CIE Option**



This is available only when PDL is set to KPDL.

With this feature, you can bypass the normal procedure of processing every aspect of the CIE color space used in applications such as Adobe Acrobat and Photoshop. This feature increases print speed for documents printed from these applications by optimizing CIE data. It has no effect on print jobs that do not use CIE data. CIE optimization should be selected for speed, not accuracy, so printed output may be different from appearance on the screen.

In Imaging > Graphics, select the CIE optimization check box.

### **Image Compression Mode**

This is available only when PDL is set to PCL XL or KPDL.

With this feature, you can select a method for compressing images depending on the preferred quality in printed images.

In Imaging > Graphics, select a compression option.

#### Smaller file size

Uses JPEG compression, this method produces a lower quality image.

#### **High quality**

Uses delta row compression, this method produces a higher quality image but creates a larger file size.

### **Gloss Mode**

Gloss mode simulates high-gloss copies by adding a glossy appearance to printed text and images.



If EcoPrint is On, Gloss mode is unavailable.

# **EcoPrint**

With this feature, you can change toner saturation in the print job, making the entire print image, including text and graphics, appear lighter. EcoPrint does not increase print speed. The amount of toner varies based upon your printing system model and the type of data printed (text, graphics, or both).

EcoPrint also appears in the Quick Print and Basic tabs. Changes in Quick Print, Basic, or Imaging tab are reflected in the other tabs.

EcoPrint should be turned on before using Lock Settings. When EcoPrint is turned off, using Lock Settings makes it unavailable to all users.

An administrator can ensure that all jobs are printed in EcoPrint mode by selecting **EcoPrint** in **Device Settings > Administrator > Lock Settings**.

### Selecting EcoPrint

1 In the Imaging tab, set **EcoPrint** to On or Off.

With EcoPrint enabled, some models let you select the amount of toner to save.

2 Click **OK**.

### Color

With this feature, the following options are available:

#### Full color

This mode prints full four-color text and graphics.

#### Auto color

This mode uses only black toner to print black and grayscale.

#### Black

This mode prints with black toner only, suppressing all color settings.

**Color** also appears in the Quick Print and Basic tabs. Changes in Quick Print, Basic, or Imaging tab are reflected in the other tabs.

An administrator can ensure that all jobs are printed with black toner only by selecting Black & White mode in Device Settings > Administrator > Lock Settings.

### **Color Reproduction**

With this feature, you can optimize the color rendering of photos and graphics.

- 1 In the Imaging tab, set **Color** to Full color or Auto color.
- 2 Select one of the following color reproduction options:

#### **Printer settings**

This option uses the printer settings only.

#### **Text and graphics**

This option is for printing documents that contain many graphs, charts or drawings.

#### Text and photos

This option is for printing documents with many photographic images.

#### Vivid colors

This color increases the color saturation of graphics and photos.

#### Publications

This option is for printing a mix of graphics and/or photos. Select this option to print close to the color shade of the screen.

#### Line art

This option is for printing figures or graphics drawn with lines. Select this option to print colored lines with pure simple color.

#### China red

This option appears if you selected the China Red plug-in as an optional component following installation of the printer driver. This plug-in appears automatically if the region is set to a Chinese locale.

#### Custom table

This option is for selecting a custom color table already installed on your printing system. All other Color reproduction options use the default color table.

#### Advanced

This option achieves greater consistency in color reproduction among various devices. It compensates for the different color spaces of color printing systems. Selecting and applying a set of profiles is called a color profile. Select to open the Color Correction dialog box for additional color printing options.

# China Red

With this plug-in feature, you can select the preferred red hue for an accurate display in a print job.

In the China Red dialog box, an eyedropper tool can be dragged into the on-screen document to select the color, or RGB values can be entered. A printed sheet produced using the printer icon lets you select one color.



When China red is selected, Color Optimizer is unavailable in the Advanced tab.

When installed, the China red option appears in **Imaging > Color reproduction**. This option is unavailable when:

- PDL is set to PDF or XPS.
- Black & White mode is selected in Device Settings > Administrator > Lock Settings.
- Color is set to Black in the Quick Print, Basic, or Imaging tab.



If Data passthrough is selected in the Page Description Languages (PDL) dialog box, China red can be selected, but China Red Settings is unavailable.

### **Printing with China Red**

- 1 Open the document containing the desired color.
- **2** From the application's File menu, click **Print**, then click **Preferences** or **Properties**.
- 3 In Imaging > Color reproduction, select China red.
- 4 Click Settings.
- **5** Select your color by one of the following methods:
  - Drag the eyedropper tool anywhere on the screen to select the desired color.
  - If you know the RGB values of the color, type or select the values.

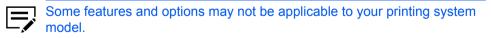
The color appears in the color preview box.

- 6 Click the printer icon to print a one-page table displaying variations of the selected color. From the printed sheet, select the preferred variation.
- 7 In the China Red dialog box, type or select the number/letter combination of the selected variation in the spin box next to the color preview box.
- 8 Click OK.

### **Color Correction**

With Color Correction, you can alter the colors in an image in order to print it properly. It attempts to match the colors of the original image to the printer's colors. ICM is Microsoft's Image Color Management, the standard for Windows.

The following options are available in the Color Correction dialog box.



#### None (application corrected)

With this option, color data processes without applying the adjustments contained in the printing system's internal color lookup tables. This is useful if the application provides its own color correction.

#### ICM (system corrected)

This option specifies color rendering in the print job to make it as close to the original as possible. ICM technology relies upon associating an output device like a printing system with a Color Profile. An ICM Profile for a printing system contains information about rendering accurate color information for that device. The settings for ICM must be set in the Color Management tab in the printing system Properties.

# **Selecting Color Correction**

- In Imaging > Color reproduction, select Advanced. In the Color Correction dialog box:
  - If you select None (application corrected), proceed to step 4.
  - If you select ICM (system corrected), proceed to step 2.
- 2 Select an option, then click **OK** to save the selection.

#### Optimize for exact color (colorimetric)

This option is for matching colors precisely in all print jobs, such as colors in a corporate logo.

#### Optimize for color contrast (best for images)

This option optimizes for color contrast by adjusting contrast to preserve detail throughout the tonal range. Select it for images or scanned photographs containing many colors or shades of color.

#### Optimize for color saturation (best for graphs)

This option optimizes for color saturation by adjusting hue to preserve the vividness of pure colors. Select for graphs or charts containing solid colors.

- For some models, you can select Monitor simulation (RGB) and Ink simulation (CMYK). Ink simulation (CMYK) is available when KPDL is selected as the PDL.
- 4 Click OK.

# **Selecting a Default Color Profile**

- 1 In Control Panel, select **Devices and Printers**.
- 2 Right-click your printing system model, and then click **Printer properties**.
- **3** Select the Color Management tab and click **Color Management**.
- 4 In the Devices tab, go to the device list, and then select the preferred color printer.
- 5 Select the **Use my settings for this device** check box.

- 6 In the Profile selection list, select Manual, and click Add.
- 7 In the Associate Color Profile dialog box, select an ICC profile, or click Browse to find a profile, and then click OK. The profile is added to the Profiles associated with this device list.
- 8 Select your preferred color profile and click **Set as Default Profile**.
- 9 Click Close.

### **Color Adjustment**

With this feature, you can customize the two color spaces in the driver and save up to three custom groups. Color space changes can be made to hue, saturation, and lightness (HSL) or to color balance levels.



If different custom settings are selected for Adjustment and Color
 Optimizer in the Advanced tab, the latest change takes precedence and is applied to the print job.

In a client/server environment, settings that a user makes in the client computer are saved for future use.

### Selecting Custom Color Adjustment

If a custom color setting has already been defined, you can select and apply it to a print job.

- 1 In Imaging > Color, click the Full color or Auto color icon.
- 2 Set the Adjustment setting to Custom 1, Custom 2, or Custom 3.
- 3 Click OK.

### Adjusting HSL (Hue, Saturation, Lightness)

- 1 In Imaging > Color, click the Full color or Auto color icon.
- 2 In the Adjustment list, select Edit.
- 3 In Adjustment Settings > Custom color adjustment, select Custom 1, Custom 2, or Custom 3.
- **4** Select **HSL (hue, saturation, and lightness)**.
- 5 Under Select preview image, click the icon to select one of three different images. Different colors are emphasized in each of the photographs to aid in the color adjustment process.

- 6 Adjust the distribution and balance of hues.
  - For coordinated hue adjustment, from the Modify list, select Master. Type or select the Hue value between -180 and +180.
  - For specific hue adjustment, from the Modify list, select a color. Type or select the **Hue** value between -10 and +10.
- 7 Type or select the Saturation, Lightness, and Contrast values between -10 and +10.
- 8 To restore the default values, click **Reset**.
- 9 Click **OK** to save the new HSL settings.

# **Adjusting Color Balance**

- 1 In Imaging > Color, click the Full color or Auto color icon.
- 2 In the Adjustment list, select Edit.
- 3 In Adjustment Settings > Custom color adjustment, select Custom 1, Custom 2, or Custom 3.
- 4 Select Color balance.
- 5 Under **Select preview image**, click the icon to select one of three different images. Different colors are emphasized in each of the photographs to aid in the color adjustment process.
- **6** Select the relative values of each color between –10 and +10.
- 7 To restore the default values, click Reset.
- 8 Click **OK** to save the new Color balance settings.

### **Black and White Adjustment**

With this feature, you can change the brightness and contrast of graphics. These settings are useful if graphic images are printing too light, too gray, or too dark. Text remains unaffected.

### Adjusting Black and White Settings

- 1 In Imaging > Color, select the Black icon.
- **2** In the Adjustment list, select **Custom**.

A preview image in the Adjustment Settings dialog box illustrates any brightness and contrast changes.

**3** Type or select the Brightness value to lighten or darken the graphic images of the print job.

The brightest setting is +100; the darkest is -100. Zero is the default mid-level setting. Adjusting brightness allows for the customization of graphic images if images are printing too light or too dark.

4 Type or select the Contrast value to increase or decrease the proportion of light to dark in the graphic images of the print job.

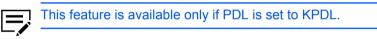
A high contrast setting decreases the grayscale spectrum, making light grays lighter and dark grays darker. A low contrast setting increases the grayscale spectrum, making light grays darker and dark grays lighter.

The highest contrast setting is +100; the lowest is -100. Zero is the default midlevel setting. Adjusting contrast is useful if graphic images are printing too gray, or too black and white. Text remains unaffected.

- **5** To restore the default values, click **Reset**.
- 6 Click **OK** to save the new black and white settings.

### **Color Conversion**

With this feature, you can choose how to apply color processing to your print job depending on how color data is received from the application.



In Imaging > Color conversion, select from the following options:

#### Printer settings

Select this option to use the settings currently on the device.

#### Speed priority

Select this option if the driver receives RGB data from the application.

#### **Quality priority**

Select this option if the driver receives full color data from the application.

### **Text and Graphics Effects**

Special settings are available for color or black and white printing, depending on your printing system model.

#### Print text as black

This option prints all color text as black. It produces faster printing of color print jobs by reducing the amount of data sent to the printer. In black and white printing, it increases the detail for light-colored text printed. White text and image colors are unaffected. When Auto Color is selected, this feature is turned off automatically.

#### Print grays with black toner

This option prints grayscale with black only. When Color is set to Full color, this feature is turned off. This feature is selected automatically when Auto color is selected in the Quick Print, Basic, or Imaging tab.

#### Print graphics as black

This option prints all color graphics with black, rather than grayscale. This feature is intended for CAD applications. Color must be set to Black.

#### **Composite overprint**

This is applicable only to some printing system models. This option blends overlapping images into a composite image. Make sure that KPDL and Data passthrough are selected in the Page Description Languages (PDL) dialog box. Color must be set to Full color.

### 9 Publishing

In the Publishing tab, you can create covers and inserts for a print job, insert sheets between transparencies, and set the first page of every chapter to print on the front side of the paper. The features on this tab are unavailable when PDF is selected as the PDL.

To return to the original settings, click Reset. The Reset button is available when accessing the printer driver from the application's Print dialog box.

🧭 Quick Print >	Cover mode:	Page insert:
Basic >	Front     Front and back     Print onto:     Front	Print onto:
Layout >	Outside Inside Back	Insert before pages: 
🔬 Imaging 🔷	Inside Outside Media for cover:	Auto (Unspecified)
Publishing >	Auto (Unspecified) 	Beginning pages for chapters:
	Print onto backing Media for backing:	_
Advanced >	Auto (Unspecified)	

# **Cover Mode**

With this feature, you can add cover pages to the front and back of your document. You can print on cover pages of a different weight or color than the main document. The source of the cover paper is specified by adjusting the Media for cover settings in the Publishing tab.

For some models, duplex printing must be selected in the Basic or Quick Print tab in order to print using the Front / Inside and Back / Outside options.

Cover mode cannot be used with Transparency interleaving.

# **Cover Mode Options**

Check Box Selection	Cover Insertion Type	
Front	Inserts a blank front cover.	
	F 1 2 3	
Front Front Outside	Prints on the outside surface of the front cover.	
Front	Prints on the inside surface of the front cover.	
Front Inside		
Front	Prints on the outside and inside surfaces of the front	
Front Outside	cover.	
Front Inside		

Check Box Selection	Cover Insertion Type
Front and back	Inserts blank front and back covers.
Front and back Front Outside	Prints on the outside surface of the front cover and inserts a blank back cover.
Front and back Front Inside	Prints on the inside surface of the front cover and inserts a blank back cover.

Check Box Selection	Cover Insertion Type	
Front and back Front Outside	Prints on both sides of the front cover and inserts a blank back cover.	
Front Inside		
Front and back Back Inside	Prints on the inside surface of the back cover and inserts a blank front cover.	
Front and back Back Outside	Prints on the outside surface of the back cover and inserts a blank front cover.	

Check Box Selection	Cover Insertion Type
Front and back Back Inside	Prints on both sides of the back cover and inserts a blank front cover.
Back Outside	
Front and back	Prints on both sides of the front and back covers.
Front Outside Front Inside Back Inside Back Outside	$\begin{bmatrix} 2 \\ 4 \\ 5 \end{bmatrix} \begin{bmatrix} 7 \\ 7 \end{bmatrix}$

# **Printing Covers**

- 1 In the Publishing tab, click the **Cover mode** icon.
- 2 Select **Front** or **Front and back** to specify the type of covers.
- **3** Select from Print onto options if you want to print on the covers.

- 4 In the Media for cover list, select the media type or source cassette for the front and back covers. When you choose the media type, a source cassette matching that media type is automatically selected.
- 5 Click **OK** in all dialog boxes.

### **Transparency Interleaving**

With this feature, you can insert a backing sheet between printed transparencies. The backing sheet, also known as an interleaf, helps keep transparencies clean and prevents them from clinging together. This feature is available only when printing on transparencies supplied from the multipurpose tray. You can print the same content on the backing pages as on the transparencies.

Transparency interleaving cannot be used together with Cover mode, Page insert, and Chapter page insert.

### **Inserting Backing Sheets Between Transparencies**

In Basic > Media type, select Transparency.

If Media type does not appear, then select Auto (Transparency)
 in the Source list. The media type and source lists have been combined in Device Settings > Compatibility.

- **2** In the Publishing tab, click the **Transparency interleaving** icon.
- 3 To print the transparency content on the inserted pages, select the Print onto backing check box.
- 4 In the Media for backing list, select the media type or source cassette. When you choose the media type, a source cassette matching that media type is automatically selected.
- 5 Click OK.

The printing system's operation panel prompts you to load transparencies into the multipurpose tray, and if necessary, load backing paper into the selected cassette.

### **Page Insert**

With this feature, you can insert a preprinted page or a page of a different paper type at specific points in a print job. The inserted page can also be printed on during the print job. Both sides of the page insert can be printed on by using the duplex unit.

Duplex printing must be selected in the Basic tab or Quick Print tab in order to print using the Back option.

Page insert cannot be used with Transparency interleaving.

# **Page Insertion Options**

Check Box Selection	Page Insertion Type	
Page insert	Inserts a blank page.	
Page insert	Prints on the front side of the inserted page.	
Front		
Page insert	Prints on the back side of the inserted page.	
Back		
Page insert	Prints on both sides of the inserted page.	
Front		
Back		

# **Printing Page Inserts**

- 1 In the Publishing tab, click the **Page insert** icon.
- 2 Select from available Print onto options:

#### Front

Prints on the front of the insert.

#### Back

Prints on the back of the insert.

- 3 In Insert before pages, type the page number to insert. A page is inserted between the page number you typed and the page before it.
- 4 From the Media for page list, select the media type or source cassette. When you choose the media type, a source cassette matching that media type is automatically selected.
- 5 Click **OK** in all dialog boxes.

### **Chapter Page Insert**

With this feature, you can force the initial page of each chapter in a document to print on the front side of the paper. You identify the first page of each chapter, up to 100 chapters. This feature is applicable for duplex printing and for printing multiple pages on a sheet.

Collate is enabled automatically in the Quick Print and Basic tabs.



Chapter page insert cannot be used with Poster and Booklet in the Layout tab, or Transparency interleaving in the Publishing tab.

This feature is unavailable when PCL 5c/5e is selected as the PDL.

# **Printing with Chapter Page Insert**

- In the Quick Print or Basic tab, select **Duplex**.
- 2 In the Publishing tab, click the Chapter page insert icon.
- 3 In Beginning pages for chapters, enter page numbers from 2 to 999, where each number is the first page of a chapter. You can type individual page numbers separated by commas.



- If Cover Mode, Print onto: Front / Outside and Front / Inside are selected, enter page numbers from 3 to 999.
- 4 Click **OK** in all dialog boxes.

# **10 Job**

In the Job tab, you can store print jobs in the memory installed in the printing system. You can also select a job name to use with Job storage features. You can use this tab to set or change the default settings that apply when you print a document from a Microsoft Windows application.

To return to the original settings, click **Reset**. The Reset button is available when accessing the printer driver from the application's Print dialog box.

An administrator can ensure that all jobs are stored or printed with the selected Job tab settings by navigating to **Device Settings** > **Administrator** > **Lock Settings** > **Job tab**.

Some fea model.	atures and options may not be ap	oplicable to your printing system
Imaging       >         Imaging </th <th>Job storage (e-MPS): Type: Proof and hold</th> <th>Job name:</th>	Job storage (e-MPS): Type: Proof and hold	Job name:
		Reset

# Job Storage (e-MPS)

Job storage (e-MPS) offers a set of options for saving print jobs in printing system memory, so that you can print or reprint them later. Print jobs can easily be reprinted later using the printing system's operation panel, and printing of sensitive documents can be restricted to approved users.

This feature is a multi-tier solution that provides advanced print management, directly from the desktop. By storing a job in the printing system, you can print it from the operation panel without sending it again from the computer.

To use the Job storage (e-MPS) features, you can set a user name in the User Settings dialog box, available in Device Settings. If you do not set a user name, the Windows login user name is the default.

Job storage (e-MPS) is unavailable when Net Manager is selected in **Device Settings** > Administrator > Net Manager.

# Job Storage (e-MPS) options

Some options may not be applicable to your printing system model.

	Access code required	When job is printed	When job is deleted from memory
Custom box	Optional	When printed from operation panel	When manually deleted or up to 31 days
Quick copy	No	When sent from the computer	When printing system is turned off, or storage device is full, or job retention date has passed
Proof and hold	No	One print when job is sent; remaining prints later	When printing system is turned off, or job retention date has passed
Private print	Yes	When access code is entered at operation panel	When printing system is turned off, or after printing, or job retention date has passed
Job storage	Optional	When printed from operation panel	When manually deleted

# **Quick Copy**

Quick copy is a Job storage (e-MPS) option that prints all copies of a print job and stores the job temporarily on the storage device for reprinting later. This feature is available when a storage device is installed and selected in Device Settings.

Quick copy is useful for printing the job again later in the day when you need additional copies at short notice. You can set the number of additional copies and print

the job from the printing system's operation panel without sending the job again from the computer.

The number of Quick copy or Proof and hold jobs that can be stored is set at the printing system's operation panel. When the designated number of jobs is reached, older jobs are replaced by new jobs. All Quick copy jobs are stored on the storage device after printing. Jobs are deleted when the printing system is turned off or the job retention date has passed. You can manually delete a job at the operation panel.

A print job replaces a job on the storage device having the same user name and job name. To prevent this, select **Use job name + date and time** under Overwrite job name.



If you are using this feature with an SD card, clear the **RAM disk** check box in Device Settings. The RAM disk settings in the device must also be turned off.

# Printing a Quick Copy Job

- 1 In the Job tab, click the Job storage (e-MPS) icon.
- 2 In the Type list, select **Quick copy**.
- **3** Click **OK**, and then send the print job.

# **Proof and Hold**

Proof and hold is a Job storage (e-MPS) option that prints one copy of a print job so that you can proof it before printing the remaining copies. This feature is available when a storage device is installed or a RAM disk is set up in the printing system and selected in Device Settings.

After the proof copy is printed and checked, remaining copies can be printed from the printing system's operation panel without sending the job again from the computer. If preferred, you can change the number of copies printed.



Proof and hold is unavailable for some applications such as Microsoft Excel.

The number of Proof and hold or Quick copy jobs that can be stored is set at the printing system's operation panel. When the designated number of jobs is reached, older jobs are replaced by new jobs. All Proof and hold jobs are stored on the storage device after printing. Jobs are deleted when the printing system is turned off or the job retention date has passed. You can manually delete a job at the operation panel.

A print job can replace a job on the storage device having the same user name and job name. To prevent this, select **Use job name + date and time** under Overwrite job name.

# **Printing a Proof and Hold Job**

- 1 In the Basic tab, select the number of copies to be printed.
- 2 In the Job tab, click the **Job storage (e-MPS)** icon.
- 3 In the Type list, select **Proof and hold**.
- 4 Click **OK**, and then send the print job.

### **Private Print**

Private print is a Job storage (e-MPS) option that saves jobs on the storage device or RAM disk for printing until a four-digit access code is entered. When the storage device or RAM disk reaches maximum capacity and a new job is sent to be stored, the oldest stored job is replaced by the new job. Private print jobs are deleted when the printing system is reset or turned off, or when the job retention date has passed. If you do not want the job deleted, select the Job storage feature.

When sending a sensitive document to the printing system, a user must type a fourdigit access code, which is attached to the print job along with the Job name and User name. You can also select a prompt option for typing the access code. The job is not printed until a user enters the access code at the printing system's operation panel. After the job is printed, it is removed from printing system memory.

The number of Private print jobs that can be stored is limited only by the storage capacity of the storage device or RAM disk. You can manually delete a job at the operation panel.

A print job can replace a job on the storage device having the same user name and job name. To prevent this, select **Use job name + date and time** under Overwrite job name.

# **Storing a Private Print Job**

- 1 In the Job tab, click the **Job storage (e-MPS)** icon.
- 2 In the Type list, select **Private print**.
- **3** Select a method for choosing an access code:
  - If you want to use the same access codes for print jobs, clear **Prompt for access code**, and then type four numbers in the Specify access code box.
  - If you want to use different access codes for print jobs, select **Prompt for access code**. When you click **OK** in the Print dialog box, type the access code in the Private Print dialog box that appears.
- 4 Click **OK**, and then send the print job.

### **Job Storage**

Job storage is a Job storage (e-MPS) option that stores a print job permanently on the storage device for printing later. You also have the option of protecting the print job from unauthorized printing by using an access code. This feature is available when a storage device is installed and selected in Device Settings.

Job storage is useful for jobs that need to be available for printing at any time, even if the printing system has been turned off and turned on again. Job storage jobs can only be removed manually from printing system memory.

You can also attach a four-digit access code to a Job storage job, so that you can print a job without anyone else seeing it, or restrict printing to approved users. When the access code is used, the job is not printed until a user prints it at the printing system's operation panel. After the job is printed, it remains in printing system memory.

The number of Job storage jobs that can be stored is limited only by the storage capacity of the storage device. You can manually delete a job at the operation panel.

A print job can replace a job on the storage device having the same user name and job name. To prevent this, select **Use job name + date and time** under Overwrite job name.



If you are using this feature with an SD card, clear the RAM disk check box in Device Settings. The RAM disk settings in the device must also be turned off.

# Storing a Job Storage Job

- 1 In the Job tab, select the **Job storage (e-MPS)** icon.
- 2 In the Type list, select **Job storage**.
- **3** Select a method for choosing an access code:
  - Clear Prompt for access code, and then specify the common access code for all print jobs.
  - Select Prompt for access code to use different access codes for each print job.



After sending the print job, enter the access code in the prompt that appears.

4 Click **OK**, and then send the print job.

# **User Login**

Available in some models, this feature provides job restriction by user. This is in contrast to the Job accounting feature, which assigns privileges by division or department. This feature appears in the Job tab when Use specific name is selected in **Device Settings > Administrator > User Login**.

In the Job tab, you can change the name and password temporarily for your print job. This does not change the default name and password that were set in Device

# Printing with User Login

Settings.

- 1 In the Job tab, under User Login, click Settings.
- 2 In the Identity Settings dialog box, type a name and password.
- 3 To restore the default values, click Reset.
- 4 Click **OK** in all dialog boxes.

### **Job Accounting**

With this feature, an administrator can control of a printing system. With Job accounting, account IDs (identification numbers) can be assigned to users or departments. This feature appears in the Job tab when Use specific account ID is selected in **Device Settings > Administrator > Job Accounting**.

In the Job tab, you can change the account ID temporarily for your print job. This does not change the default account ID that was set in Device Settings.

# **Printing with Job Accounting**

- 1 In the Job tab, under Job accounting, click **Settings**.
- 2 In the Identity Settings dialog box, type an account ID.
- **3** To restore the default value, click **Reset**.
- 4 Click **OK** in all dialog boxes.

### **Job Name**

A Job name is a unique identifier for each print job. It helps you find and print your job from the printing system's operation panel. When you send a print job using one of the Job storage (e-MPS) options, you can assign a custom name to the job or use the name of the application file.

For Microsoft Word and PowerPoint, you can choose to include or omit the application name from the application defined Job name. You can also ensure that jobs in printing system memory are not replaced by new jobs having the same Job name.

# **Don't Use Application Name**

With this feature, you can remove the application name from the job name in job storage features. By selecting **Don't use application name**, the file name you choose appears clearly in the job list. This feature is applicable only when printing from Microsoft Word or PowerPoint.

# **Overwrite Job Name**

With this feature, you can ensure that a saved print job is not replaced in printing system memory by a new job having the same Job name. If a user sends two print jobs with the same User name and Job name, the second job replaces the first job without any prompt. To prevent this, Overwrite job name can automatically change the Job name by adding the date and time the job is sent. This feature also helps you to track when print jobs were sent from the computer.

The selected option applies to a Job name with either Application defined or Custom selected. Overwrite job name options include:

#### **Replace existing file**

This option lets the current print job replace an existing job in printing system memory, if a job with the same User name and Job name exists.

#### Use job name + date and time

This option adds the current date and time to the end of the Job name. The previous print job with the same job name remains in the printing system memory.

# Selecting a Job Name

You can select a Job name to use with Job storage (e-MPS) features, so that you can find your job in the job list displayed on the printing system's operation panel. The selected Job name is saved with the print job when the job is sent to printing system memory.

1 In Job > Job name, select a name:

#### **Application defined**

This option uses the name of the application document as the Job name. For Microsoft Word or PowerPoint documents, selecting Don't use application name removes the name of the application so that only the document name appears as the Job name.

#### Custom

This option uses a unique name for each job. Type a name in the box, to a maximum of 79 characters.

2 Select an Overwrite job name option in case a job already exists in printing system memory with the same job name:

Job

#### **Replace existing file**

If a job with the same user and job name exists, the current print job replaces an existing job in printing system memory.

#### Use job name + date and time

Adds the current date and time to the end of the job name.

# **11 Advanced**

In the Advanced tab, you can choose special features that extend the capabilities of the printing system.

Clicking **Reset** sets the EMF spooling check box back to the last setting you made in the printer driver's Printing Preferences. The Reset button is available when accessing the printer driver from the application's Print dialog box.

Some features and options may not be applicable to your printing system model.		
Quick Print >	Plug-ins:	Watermark
Basic >	Security Watermark	Color Optimizer
📶 Imaging >		
Publishing >		
Job >		
📕 Advanced >		
	Status Monitor	
	Enable client profile	
		Reset

# **Prologue/Epilogue**

With this feature, you can insert a command file at the beginning of a print job or at the end. The command file uses programming commands from the printer-resident PRESCRIBE language. The Product Library disk includes a PRESCRIBE command language reference guide.

A command file is a set of instructions the printing system interprets to produce a given output. For example, a Prologue/Epilogue command file may contain a macro that places a graphic object such as a logo at the top of a letterhead document. Or a

heading can be added to carbon copies when using the Carbon copies feature in the Basic tab.

A Prologue/Epilogue file must be available on your computer before it can be added to a print job. To create this file, use a text editor like Windows Notepad. You can edit a Prologue/Epilogue file on your computer by clicking **Edit**. Editing and saving a command file replaces the contents of the existing local or network file.

You can remove a Prologue/Epilogue file from the list by selecting the file and clicking **Delete**. Only the file name is removed from the command file list. The file itself is not deleted, but remains on the network or local computer.

### **Insertion Point Options**

The insertion point is the location in the print job where the selected Prologue/ Epilogue command file is processed by the printing system. Each file in the list can be assigned only one insertion point.



The **Start of the page** and **End of the page** insertion points are available only when PDL is set to PCL 5c/5e.

#### Unassigned

The selected command file is not inserted into the print job. This selection can be used when you are working with multiple command files and want to use some but not others. Select Unassigned for the command files you do not want to use in the print job.

#### Beginning of the print job

The command file is inserted as the first page of the print job. The document starts printing on the second page.

#### End of the print job

The command file is inserted as the last page of the print job, which prints after the last page of the document.

#### Start of the page

The command file is inserted at the top of each page of the print job.

#### End of the page

The command file is inserted at the bottom of each page of the print job.

#### Only on odd pages

If Start of the page or End of the page is selected, this option can be selected to insert the command file into all odd-numbered pages.

#### Only on even pages

If Start of the page or End of the page is selected, this option can be selected to insert the command file into all even-numbered pages.

#### Pages

If Start of the page or End of the page is selected, this option can be selected to insert the command file into specified pages. In the text box, type individual page numbers separated by commas, or a page range separated by a hyphen.

# Selecting and Assigning a Prologue/Epilogue File

- 1 In Advanced > Prologue/Epilogue, click Browse to find a Prologue/Epilogue file (.TXT, .LOG) and add it to the Select Prologue/Epilogue file to insert list.
- 2 Select a file from the list.
- **3** Under Insertion point, select a place to insert the Prologue/Epilogue file, or select **Unassigned**.
- 4 Repeat steps 1-3 to include additional files.
- 5 Click OK.

# **Editing a Prologue/Epilogue File**

You can edit a Prologue/Epilogue file on your computer.

- In Advanced > Prologue/Epilogue, select a Prologue/Epilogue file name from the list, and click Edit.
- 2 After your text editor opens, make your changes to the file.
- 3 Save the file and exit.



Editing and saving a command file replaces the contents of the existing local or network file.

# **Deleting a Prologue/Epilogue File**

- In Advanced > Prologue/Epilogue, select a Prologue/Epilogue file name from the list, and click Delete.
- 2 In the delete confirmation box, click **Yes** to accept.



Only the file name is removed from the command file list. The file itself is not deleted but remains on the network or local computer.

# Watermark

A watermark is a recognizable image or pattern that can be placed on a page or throughout a document. You can choose one of the default watermarks, create your own text, or use an image. The preview area of the dialog box shows how

the watermark appears on a page. This is useful for adjusting the appearance and location of the watermark.

Any watermark can be edited, though a limited number of options can be changed for default watermarks.

If you want to use an image for the watermark, an image file must be available on your computer before it can be added to a print job.

Watermark Spacing displays the unit of measurement in inches or millimeters. You can change the unit setting in the User Settings dialog box by accessing **Device Settings** > **User**. In a client/server environment, the unit setting is unavailable to the client computer.

Watermark should be turned on before using Lock Settings. When Watermark is turned off, using Lock Settings makes it unavailable to all users.

An administrator can ensure that a watermark is printed on all jobs by selecting **Watermark** in **Device Settings > Administrator > Lock Settings**.

# Adding or Editing Watermark Text

In Advanced > Watermark, click New to create a custom watermark text.

You cannot edit default watermark text options. To edit a custom watermark text, select it from the list.

- 2 Enter your preferred watermark name and text.
- **3** Select your preferred font, size, style, and color.



You can set Color to Custom or to a predefined option.

- 4 In Count, specify the number of times that the watermark text appears on a page. In Spacing, set the distance between the watermark texts.
- 5 Set the angle, and horizontal or vertical position of the watermark.

The Rotate around center option sets the center of the watermark as its axis of rotation.

**6** Under Print onto, select the pages where you want to print the watermark:

#### All pages

Prints the watermark on each page of the document.

#### First page only

Prints the watermark on the first page.

#### All pages except first page

Prints the watermark on all pages excluding the first page.

#### Only on specified pages

Prints the watermark on specific pages.

#### Outside of front cover

Prints the watermark on the front cover. This option is available when Cover mode is selected in the Publishing tab. If Cover mode is set to Front / Outside or Front and back / Outside, Outside of front cover is automatically selected.

7 Click **Save**, and then click **OK** in all dialog boxes.

# Adding or Editing a Watermark Image

1 In Advanced > Watermark, click New to create a custom watermark image.

To edit a custom watermark image, select it from the list.

- 2 Enter a watermark name, and then set a watermark image.
- 3 Specify the scaling and opacity values.

The Auto option fits the image in the center of the page.

- **4** Select whether to print the watermark image in black or color.
- 5 Set the angle, and horizontal or vertical position of the watermark.

The Rotate around center option sets the center of the watermark as its axis of rotation.

**6** Under Print onto, select the pages where you want to print the watermark:

#### All pages

Prints the watermark on each page of the document.

#### First page only

Prints the watermark on the first page.

#### All pages except first page

Prints the watermark on all pages excluding the first page.

#### Only on specified pages

Prints the watermark on specific pages.

#### Outside of front cover

Prints the watermark on the front cover. This option is available when Cover mode is selected in the Publishing tab. If Cover mode is set to Front / Outside or Front and back / Outside, Outside of front cover is automatically selected. 7 Click **Save**, and then click **OK** in all dialog boxes.

### **Security Watermark**

With this plug-in feature, you can print a nearly invisible image or text against a background pattern. The security watermark appears only when the printed page is photocopied. This helps to identify printed pages that should not be photocopied, or to distinguish between original prints and photocopies. Six standard security watermarks are available as text or image, and you can create custom security watermark text.

The Optional Components Wizard offers the opportunity to install the Security Watermark plug-in following installation of the printer driver.

Security Watermark is available in the Advanced tab when PCL XL is selected as the PDL.

Any security watermark can be edited, though a limited number of options can be changed for default security watermarks.

A notable security watermark feature is the Document guard pattern, which prevents the document from being photocopied, scanned, faxed, or printed from memory. If a scan, fax, or print from memory is attempted, the process is stopped and a message appears on the printing system's operation panel.

For a security watermark to be effective, it must be nearly invisible in a printed page and clearly visible in a photocopied page. Because printing systems and driver settings can vary, you must adjust the density and contrast before printing a security watermark. This adjustment is also recommended when changing the background pattern, replacing the toner or printing system, and after heavy printing activity.

Selecting **Security Watermark** sets these driver features to the following values:

- Watermark in the Advanced tab is set to None.
- Resolution in Imaging > Print Quality > Custom > Custom Quality Settings is set to 600 dpi.
- Color reproduction in the Imaging tab is set to Line art.
- · EcoPrint in Quick Print, Basic, or Imaging tab is set to Off.
- Adjustment setting in the Imaging tab is set to None.
- Color Optimizer in the Advanced tab is set to None.

The reverse is also true. If these features are changed, then the Security Watermark selection is set to None, and cannot be used.

Security watermark should be turned on before using Lock Settings. When Security watermark is turned off, using Lock Settings makes it unavailable for all users.

The administrator can ensure that a security watermark is printed on all jobs by selecting **Security watermark** in **Device Settings > Administrator > Lock Settings**.

### Adding or Editing a Security Watermark

In Advanced > Security Watermark, click New to create a custom security watermark.



You cannot edit default security watermark options. To edit a custom security watermark, select it from the list.

- 2 Enter a security watermark name.
- **3** Set up to 3 lines of text.

#### None

This option leaves the line blank.

#### **User-defined**

This option inserts your specified text.

Other predefined options include information from the computer or printer driver, such as Computer name, User name, and Job ID.

- **4** Select your preferred font, size, style, and angle of the text.
- 5 Select a design for the security watermark background:

#### **Document guard**

The document guard design appears as the security watermark background.

#### Patterns

Select a predefined pattern for the security watermark background.

**6** Set the color of the watermark background to Black, Cyan, or Magenta.

**7** Select the best density and contrast settings:

#### Density

Select the shading density of the background pattern.

#### Contrast

Select the contrast level of the watermark text against the background.



To print a page displaying all contrast options against the selected density, click **Print Sample**. Repeat this for all density options. Select the sample with a nearly invisible security watermark, and then change the settings to match the chosen sample.

8 Under Print onto, select the pages where you want to print the security watermark:

#### All pages

Prints the security watermark on each page of the document.

#### First page only

Prints the security watermark on the first page.

#### All pages except first page

Prints the security watermark on all pages excluding the first page.

#### Only on specified pages

Prints the security watermark on specific pages.

#### Outside of front cover

Prints the security watermark on the front cover. This option is available when Cover mode is selected in the Publishing tab. If Cover mode is set to Front / Outside or Front and back / Outside, Outside of front cover is automatically selected.

- 9 To print the first available line of watermark text at the bottom of the page, select **Print as footer**, and then select an alignment option. This is useful because the security watermark itself is not normally visible on the printed page.
- **10** For Security Watermark, Overprint is set by default. The security watermark is printed over the document data so that it can appear clearly in a photocopy.
- 11 Click Save, and then OK in all dialog boxes.

# **Color Optimizer**

With this plug-in feature, you can match a single color accurately in a print job. Use this feature to print a document, such as a letterhead or company logo. The colors should be solid and consistent, with no shading. Multiple colors can be adjusted separately. Color Optimizer does not work in a document with photographs.

In the Color Optimizer dialog box, an eyedropper tool can be dragged into the onscreen document to select the color, or RGB values can be entered. A printed sheet produced using the printer icon lets you select from one of 121 color variations. Hue, Lightness, and Saturation settings are adjusted in the driver according to the selected variation.

You can create up to three custom settings for selections made in the **Color Optimizer > Color adjustment** feature. You can also select a **Color reproduction** option.



If different custom settings are selected for Color Optimizer and Adjustment in the Imaging tab, the latest change takes precedence and is applied to the print job.

When installed, the Color Optimizer button appears in the Advanced tab. The Color Optimizer button is unavailable for any of the following settings:

- PDF selected as the PDL
- Black & White mode selected in Administrator > Lock Settings
- Black selected in the Imaging, Basic, or Quick Print tab
- China red selected in Color reproduction in the Imaging tab

# **Optimizing RGB Color for Printing**

- 1 Open the document containing the preferred colors.
- 2 From the application's File menu, click **Print**, then click **Preferences** or **Properties** to open the Properties dialog box.
- 3 In Advanced > Color Optimizer > Color adjustment, select Custom 1, Custom 2, or Custom 3.
- 4 Under Color reproduction, select from available options.
- 5 Select each color by one of the following methods:
  - Drag the eyedropper tool anywhere on the screen to select the preferred color.
  - If you know the RGB values of the color, type or select the values.

The color appears in the color preview box.

- 6 Select any two of Hue, Lightness, or Saturation settings.
- 7 Click the printer icon to print a one-page table displaying variations of the selected color. From the printed sheet, select the preferred variation.
- 8 In the Color Optimizer dialog box, type or select the number/letter combination of the selected variation in the spin box next to the color preview box.
- 9 Click Add to add each color to the list, to a maximum of 10 colors. You can remove a color by selecting it in the list and clicking Delete.
- **10** If preferred, type a description of the custom setting in the Description box, to a maximum of 30 characters. The description appears only in the Color Optimizer dialog box.
- **11** Click **OK** or **Apply** to save the settings.

### **Status Monitor Notification**

The Status Monitor displays printing system status during printing. You can also set up sound and speech notifications for printing system events.

You can start a status monitor for each supported printing system. More than one status monitor can be displayed at one time.

# **Setting Status Monitor Notification**

- From the Advanced tab, click **Status Monitor**.
- 2 In the Status Monitor Notification dialog box, select the Enables event notification check box.
- 3 To add sound or speech notification, select an event from the Available events list:

- Cover open
- Paper jam
- Add paper
- Sleep
- Add toner
- Toner low
- Not connected
- · Printing completed
- Others
- 4 Under Sound file / Text to Speech, click to the right of the chosen event, and then:
  - To add a sound file, type the location of a sound file (.WAV), or click Browse to find a sound file located on your computer.
  - To add speech, type your preferred text, up to 260 characters. The Microsoft Text to Speech feature reads your typed text and plays it back in a spoken voice.
- **5** To add sound or speech to other events, repeat steps 3 and 4.
- 6 Click OK.

### **Viewing Status Monitor**

- 1 You can view information about the print job and the printing system in the status monitor:
  - The job tab displays information about each print job. To cancel a job, rightclick on the job and click Cancel.
  - The paper source tab displays information about each cassette and the multipurpose tray.
  - The toner tab displays the toner level.
  - The alert tab displays Ready or event information. For multiple events, click each event to view details.
- 2 You can hide or show details by clicking the arrow.
- **3** To display a list of options, click the tools icon, and select available options:

#### **Command Center RX**

For a network connection, opens a web browser to display the printing system's home page. This option is unavailable for a USB connection.

#### Notification

Opens the Status Monitor Notification dialog box.

#### www.kyoceradocumentsolutions.com

Opens a web browser to the KYOCERA Document Solutions home page.

Exit

Closes the status monitor.

# **EMF Spooling**

EMF (Enhanced MetaFile) is a spool file format used in printing by the Microsoft Windows operating system. When a print job is sent from an application, it is transferred to the spool file. The application writes to and the printer driver reads from the spool file simultaneously. For multiple or large documents, this quickly returns application control to the user while the printer is still printing the document.



When Data passthrough is selected in the Page Description Languages (PDL) dialog box, EMF spooling is unavailable.

# Selecting EMF Spooling

- 1 In the Advanced tab, select the **EMF Spooling** check box.
- 2 Click OK.

### **Enabling Client Custom Paper Size**

Client custom paper size refers to page size settings saved on a client computer. You have the choice to use your local custom sizes or the server custom sizes. This feature is intended for the client computer in a client/server environment.

- 1 From the Advanced tab, do either of the following:
  - Select the Enable client custom paper size check box for using custom page sizes locally in the driver.
  - Clear the Enable client custom paper size check box to select custom sizes from the server to apply to print jobs created by the driver. Server profiles are read-only.
- 2 Click OK.

# **Enabling Client Profile**

Client profile refers to profile settings saved on a client computer. This feature is available in both client computer and the server in a client/server environment.

In a server, an administrator can set the default value of the client computer to use either server or client profiles.

In a client computer, you can use your local profiles or the server profiles. If you are logged in using a privileged account, such as a local administrative account or a domain administrative account, then the server settings are applied to the client computer.

- **1** From the Advanced tab, do either of the following:
  - Select the **Enable client profile** check box to select custom profiles locally in the driver to apply to print jobs.
  - Clear the **Enable client profile** check box to select profiles from the server to apply to print jobs. Server profiles are read-only.
- 2 Click **OK**.

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