FUJI XEROX

DocuPrint CM405 df / CP405 d

PostScript User Guide

Adobe® PostScript® 3™

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Preface

Thank you for purchasing the DocuPrint CM405 df / CP405 d. This guide describes procedures for installing the Adobe PostScript® Driver Library software and preparing to use them for printing. Before using the product, read the guide carefully and make sure that you are using it correctly.

This guide assumes that an operator has a basic knowledge of the operating environment of the personal computer in use, networking environments, and how to operate a personal computer. For information on the environment of the personal computer in use, basic knowledge of networking environments, and how to operate a personal computer, refer to the manuals provided with the personal computer, operating system, and network system.

Refer to this guide as necessary to maximize the usefulness and performance of this product.

Related Information Sources

The following additional sources of information are available for the printer.

- Lifting Your Printer
- Safety Guide
- Setup Guide
- Operator Panel Guide
- User Guide
- Quick Reference Guide (DocuPrint CM405 df only)

NOTE:

- Please note that the screenshots shown in this guide apply to a fully configured printer and therefore may not exactly represent the configuration being used.

Using This Guide

This section describes how to read this guide.

■ Organization of This Guide

This guide consists of the following chapters.

Chapter 1 Overview

This chapter provides an overview of the contents of this guide, including model names and other information.

Chapter 2 Installing of Print Drivers for Windows Computers

This chapter describes the procedure for installing the print driver on Windows computers.

Chapter 3 Installing of Print Drivers for Mac OS X Computers

This chapter describes the procedure for installing the print driver and utility software on Mac OS X.

Chapter 4 Print Driver Settings

This chapter describes the print driver settings you can choose to print documents and images.

Chapter 5 Barcode Settings

This chapter describes the types of compatible barcodes, designated character sets for barcodes, sizes of printed barcodes, and other settings.

■ Conventions

This section describes the conventions used throughout this guide.

- In this document, "Computer" refers to a personal computer or workstation.

Orientation

Orientation is used to mean the direction of images on the page. When the image is upright, the paper (or other media) can be either long edge feed or short edge feed.

Long Edge Feed (LEF)

When loading documents long edge feed into the document feeder, load with one of the long edges facing into the document feeder, with the short edges facing the front and back of the document feeder. When loading paper long edge feed into a paper tray, place the paper with one of the long edges toward the front of the tray and one of the short edges on the left hand side.

Short Edge Feed (SEF)

When loading documents short edge feed into the document feeder, load with one of the short edges facing into the document feeder, with the long edges facing the front and back of the document feeder. When loading paper short edge feed into a paper tray, place the paper with one of the short edges toward the front of the tray and one of the long edges on the left hand side.
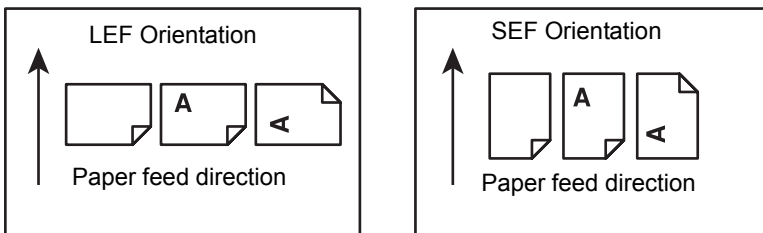
[Square Brackets]

Names of screens, tabs, buttons, features and option categories are enclosed in square brackets. They are also used when referring to file and folder names on a computer.

For example:

- Click [Browse] to specify a folder on the CD-ROM.
- Click [Have Disk].

Italic Typeface

Text written in Italics is used to indicate references to other sections and chapters.

For example:

- See *Print Driver Properties on page 10* to configure the printer.

Notes

Notes are statements that provide additional information.

For example:

NOTE:

- You can restore defaults by clicking [Defaults].

Contents

1

Overview

Printer Name when Installing Print Driver

The model name to be selected when installing the print driver is displayed under the "Printer Name when Installing" in the table below.

Printer Name when Installing	Model being used
FX DocuPrint CM405 df	DocuPrint CM405 df
FX DocuPrint CP405 d	DocuPrint CP405 d

PPD File Names Corresponding to Print Drivers

PPD file names correspond to printer names as follows.

Printer Names / PPD File Names for Windows

Model being used	PPD File Name	Printer Name
DocuPrint CM405 df	FXKOAEE1.PPD	FX DocuPrint CM405 df PS
DocuPrint CP405 d	FXKLAEE1.PPD	FX DocuPrint CP405 d PS

Printer Names / PPD File Names for Mac OS X

Model being used	PPD File Name	Printer Name
DocuPrint CM405 df	FX DocuPrint CM405 PS	FX DocuPrint CM405 PS
DocuPrint CP405 d	FX DocuPrint CP405 PS	FX DocuPrint CP405 PS

Available Software and Corresponding OS

The following OS and software on the PostScript Driver Library CD are available for use.

Software for Windows

Category	Software	Corresponding OS
Print Driver	Microsoft Corp. print driver (MS Pscript5) + Fuji Xerox Corp. Plugin Driver + PPD File	• Windows XP • Windows XP (64-bit) • Windows Server 2003 • Windows Server 2003 (64-bit) • Windows Vista • Windows Vista (64-bit) • Windows 7 • Windows 7 (64-bit) • Windows Server 2008 • Windows Server 2008 (64-bit) • Windows Server 2008 R2 • Windows 8 • Windows 8 (64-bit) • Windows Server 2012
PPD File	Windows PPD File for Applications	• Windows XP • Windows XP (64-bit) • Windows Server 2003 • Windows Server 2003 (64-bit) • Windows Vista • Windows Vista (64-bit) • Windows 7 • Windows 7 (64-bit) • Windows Server 2008 • Windows Server 2008 (64-bit) • Windows Server 2008 R2 • Windows 8 • Windows 8 (64-bit) • Windows Server 2012
Screen Fonts	Adobe Inc. Windows Screen Fonts PostScript 3 Standard 136 Fonts	• Windows XP • Windows XP (64-bit) • Windows Server 2003 • Windows Server 2003 (64-bit) • Windows Vista • Windows Vista (64-bit) • Windows 7 • Windows 7 (64-bit) • Windows Server 2008 • Windows Server 2008 (64-bit) • Windows Server 2008 R2 • Windows 8 • Windows 8 (64-bit) • Windows Server 2012
Adobe Reader	Adobe Reader 10.1.2 *	-

* For systems corresponding to Adobe Reader, refer to the homepage of Adobe Systems Incorporated, etc.

Software for Mac OS X

Category	Software	Corresponding OS
Print Driver	PPD File and plug-in Installer	Mac OS X 10.3.9-10.8 (Except for 10.4.7)
Printer Description File	English Language	-
Screen Font	Western Languages	-

NOTE:

• Adobe Reader for Mac OS X is not included on the CD-ROM.
  Use "Preview" on Mac OS X, or download Adobe Reader from the Adobe website.

Settings for the Printer

When you install Adobe PostScript, the PostScript settings applicable to the printer you selected are installed.

2

Installing of Print Drivers for Windows Computers

Supplied CD-ROM

The CD-ROM provided with the printer contains the following contents.

NOTE:

- CD-ROM supports Windows XP, Windows Server 2003, Windows Vista, Windows Server 2008, Windows 7, Windows Server 2008 R2, Windows 8 and Windows Server 2012.

[DocuPrint_XXXX] folder in [Win2K_Vista] folder

Contains the PPD files, plug-in files, and the inf file for installing the print driver that adds our product's functions to the English version of Microsoft Corporation's PostScript Driver. This corresponds to the 32bit version OS.

[DocuPrint_XXXX] folder in [WinX64] folder

Contains the PPD files, plug-in files, and the inf file for installing the print driver that adds our product's functions to the English version of Microsoft Corporation's PostScript Driver. This corresponds to the 64bit version OS.

[DocuPrint_XXXX] folder in [WinPPD] folder

Contains the PPD files for the English version. Use when adding PPD files in applications, etc.

[WinScreenFont] folder in [Utility] folder

Contains 136 screen fonts (19 TrueType fonts and 117 Type1 fonts), corresponding to printer fonts.

[WinAR] folder in [Utility] folder

Contains Adobe Reader (10.1.2) for Windows use.

[DocuPrint_XXXX] folder in [WinICC] folder

Contains ICC profile for Windows use.

Readme file

Contains cautionary notes about how to use the print driver. Ensure you read this before using the printer.

■ Hardware/Software Requirements

The minimum system requirements for the Windows print driver are described below.

• Computer System

Personal computer running Windows XP/Windows Server 2003/Windows Vista/Windows 7/Windows Server 2008/Windows Server 2008 R2/Windows 8/Windows Server 2012.

• Basic Software

- Windows XP
- Windows XP (64-bit)
- Windows Server 2003
- Windows Server 2003 (64-bit)
- Windows Vista
- Windows Vista (64-bit)
- Windows Server 2008
- Windows Server 2008 (64-bit)
- Windows Server 2008 R2
- Windows 7
- Windows 7 (64-bit)
- Windows 8
- Windows 8 (64-bit)
- Windows Server 2012

Installing the Print Driver

Installing the print driver via the Windows "Add Printer Wizard" or the "Driver Installation Tool" included with the printer enables you to add our product's functions to your Microsoft PostScript driver. For installing the print driver, the following two methods are available:

- Standard

  Automatically detects the LPR (TCP/IP) printer, and sets up multiple printers in one operation. This setup method is recommended when not specifying particular conditions.

  - Collectively installing printers connected to the TCP/IP network

    For the method of installation, see *Collectively Installing Printers Connected to a TCP/IP Network (Standard) on page 15*.

- Custom

  You can specify LPR (TCP/IP)/SMB printers, shared printers and install the printer. This sets up one printer in one operation.

  - LPR (TCP/IP) Printer

    Specify and install LPR (TCP/IP) printers.

    For the method of installation, see *Installing Printers Connected to a TCP/IP Network on page 17*.

  - SMB Printer

    Specify and install SMB printers.

    For the method of installation, see *Installing Printers Connected to a Windows Network on page 18*.

  - Shared Printer

    Specify and install shared printers.

    For the method of installation, see *Installing Printers Connected to a Windows Network on page 18* and *Installing Shared Printers on a Windows Server on page 19*.

  - Local Printer

    Specify existing ports of computers and install printers. Since printer options are not set automatically, set them with the printer properties dialog after installing.
    For the method of installation, see *Using Existing Ports and Installing on page 20*, and *Installing Local Printers on page 22*.

■ Collectively Installing Printers Connected to a TCP/IP Network (Standard)

This section describes how to start the "Driver Installation Tool" and add printers to computers by following the procedure below.

This section describes how to install the print driver for Windows 7, as an example.

NOTE:
- To cancel the installation of the print driver during installation, click [Cancel] in the dialog box. You can also click [Back] to delete the settings in that dialog box and return to the previous dialog box.

1 Start Windows 7.

> **NOTE:**
> - Log in as Administrator or as an user within the Administrator group. Refer to the Windows 7 documentation for details about the Administrator group.

2 Insert the PostScript Driver Library CD in the CD-ROM drive.

The [AutoPlay] dialog box is displayed.

3   Click [Run Launcher.exe].

    NOTE:
- If the [User Account Control] dialog box appears, click [Yes] to continue the installation.
  The [PostScript Printer Driver Version Check Tool] dialog box is displayed.

4   Click [Next] and follow the on-screen instructions until the [Setup] screen of the "Driver Installation Tool" is displayed.

5   Click [Standard].

    The [Printer Selection] screen is displayed.

    Printers connected to LPD and TCP/IP within the same subnet are detected, and a list is displayed in [Printers found].

6   From [Printers found], select the model to be used.

    NOTE:
- Available printers are selected with a check mark.
- If the model to be used is not detected, confirm as follows.

      IP address of printer
  You can confirm the IP address of the printer by printing a System Settings page (for the DocuPrint CM405 df) or Printer Settings page (for the DocuPrint CP405 d). For details, refer to the manual contained in the Driver CD Kit.

      Whether the SNMP UDP/IP port is enabled
  If the model to be used is still not detected, click [Back], [Custom] and proceed with the installation.

      For details about [Custom], see:
  Installing Printers Connected to a TCP/IP Network on page 17
  Installing Printers Connected to a Windows Network on page 18
  Installing Shared Printers on a Windows Server on page 19
  Using Existing Ports and Installing on page 20
  Installing Local Printers on page 22

      You can select multiple printers.
  Confirm the IP addresses and names of the models displayed, and select the printers to install. When selecting printers displayed in the list in [Printers found], a printer graphic is displayed at the left side.

7   Click [Next].

    The [Software License Agreement] screen is displayed.

8   Read through the license agreement carefully and if you have no objections to it, select [Yes], and then click [Install].

    Installation begins.

    The graphic of the printer being added, and the address or model name of the printer being installed are displayed.

    When setup completes, the [Setup Complete] screen is displayed.

9   From the [Printer Installed] list, select one model and click [Properties].
    The printer's [Properties] dialog box is displayed.

10   Select the [Configuration] tab, set the option settings, and click [OK] to close the [Properties] dialog box.
    For details about option settings, see *Configuration Tab Settings on page 48*.

    NOTE:
- If you install multiple printers, be sure to set the option settings for each printer by repeating the steps 9 and 10.

11   Click [Test Page].
    The test print page is printed from the printer.

12   Click [Finish].

    A confirmation message is displayed.

13 Click [Yes].

This completes the installation of the print driver.

■ Installing Printers Connected to a TCP/IP Network

This section describes how to specify and install LPR (TCP/IP) printers by following the procedure below.

NOTE:
- To cancel the installation of the print driver during installation, click [Cancel] in the dialog box. You can also click [Back] to delete the settings in that dialog box and return to the previous dialog box.

1 Start Windows 7.

> **NOTE:**
> - Log in as Administrator or as an user within the Administrator group. Refer to the Windows 7 documentation for details about the Administrator group.

2 Insert the PostScript Driver Library CD in the CD-ROM drive.

The [AutoPlay] dialog box is displayed.

3 Click [Run Launcher.exe].

> **NOTE:**
> - If the [User Account Control] dialog box appears, click [Yes] to continue the installation.
>   The [PostScript Printer Driver Version Check Tool] screen is displayed.

4 Click [Next] and follow the on-screen instructions until the [Setup] screen of the "Driver Installation Tool" is displayed.

5 Click [Custom].

The [Select Connection Method] screen is displayed.

6 Select [LPR(TCP/IP) Printer], and click [Next].

The [LPR(TCP/IP) Printer] screen is displayed.

Printers connected to LPD and TCP/IP within the same subnet are detected, and a list is displayed in [Printers found].

7 From [Printers found], select your printer model, and click [Next].

A dialog box confirming installation is displayed.

> **NOTE:**
> - If the printer to be used is not displayed in [Printers found], because of your computing environment, execute the following operations.
>
>   When using IPv4 (Internet Protocol Version 4):
>   If you know the host name or IP address, select [IP Address] or [Host Name], and directly enter the host name or IP address. Enter the IP address in the format "X.X.X.X" (enter a number 255 or lower for "X", and do not omit periods). To search for printers, click [Search Scope], and specify the IP subnet address. You can confirm the IP address of the printer by printing a System Settings page (for the DocuPrint CM405 df) or Printer Settings page (for the DocuPrint CP405 d). For details, refer to the manual contained in the Driver CD Kit.
>
>   When using IPv6 (Internet Protocol Version 6):
>   Select [IP Address] or [Host Name], and directly enter the host name or IP address. To specify the IP address of a printer on another subnet, be sure to specify a global address.
>   You cannot search for printers specifying a search range.

8 Confirm the settings, and select [Yes].

The [Software License Agreement] screen is displayed.

9   Read through the license agreement carefully and if you have no objections to it, click [Yes], then click [Install]. Installation begins.

The graphic of the printer being added, and the address or model name of the printer being installed are displayed.

When setup completes, the [Setup Complete] screen is displayed.

10   Click [Properties].
The printer's [Properties] dialog box is displayed.

11   Select the [Configuration] tab, set the option settings, and click [OK] to close the [Properties] dialog box.
For details about option settings, see *Configuration Tab Settings on page 48*.

12   Click [Test Page].

The test print page is printed from the printer.

13   Click [Finish].

A confirmation message is displayed.

14   Click [Yes].

This completes the installation of the print driver.

■ Installing Printers Connected to a Windows Network

This section describes how to specify and install the shared printer such as a SMB printer by following the procedure below.

This procedure uses the TCP/IP protocol.

NOTE:
• To cancel the installation of the print driver during installation, click [Cancel] in the dialog box. You can also click [Back] to delete the settings in that dialog box and return to the previous dialog box.

1   Start Windows 7.

> **NOTE:**
> • Log in as Administrator or as an user within the Administrator group. Refer to the Windows 7 documentation for details about the Administrator group.

2   Insert the PostScript Driver Library CD in the CD-ROM drive.

The [AutoPlay] dialog box is displayed.

3   Click [Run Launcher.exe].

> **NOTE:**
> • If the [User Account Control] dialog box appears, click [Yes] to continue the installation.
> The [PostScript Printer Driver Version Check Tool] screen is displayed.

4   Click [Next] and follow the on-screen instructions until the [Setup] screen of the "Driver Installation Tool" is displayed.

5   Click [Custom].

The [Select Connection Method] screen is displayed.

6   Select [SMB Printer], and click [Next].

The [SMB Printer] screen is displayed.

7 Enter the host name of the printer to be used in [Host Name], or select the model to be used from [Printers which can be selected], and click [Next].

A dialog box confirming installation is displayed.

NOTE:
- You can print a System Settings page (for the DocuPrint CM405 df) or Printer Settings page (for the DocuPrint CP405 d) and confirm the host name of the printer to be used.
If the printer to be used is not displayed in [Printers which can be selected], select the domain name or the work group name of the model to be used in [Workgroup], and click [Select Model].

8 Confirm the settings and select [Yes].

The [Software License Agreement] screen is displayed.

9 Read through the license agreement carefully and if you have no objections to it, select [Yes], and click [Install].

Installation begins.

The graphic of the printer being added, and the address or model name of the printer being installed are displayed.

When setup completes, the [Setup Complete] screen is displayed.

10 Click [Properties].
The printer's [Properties] dialog box is displayed.

11 Select the [Configuration] tab, set the option settings, and click [OK] to close the [Properties] dialog box.
For details about option settings, see *Configuration Tab Settings on page 48*.

12 Click [Test Page].

The test print page is printed from the printer.

13 Click [Finish].

A confirmation message is displayed.

14 Click [Yes].

This completes the installation of the print driver.

■ Installing Shared Printers on a Windows Server

This section describes how to specify and install the shared printer by following the procedure below.

NOTE:
- To cancel the installation of the print driver during installation, click [Cancel] in the dialog box. You can also click [Back] to delete the settings in that dialog box and return to the previous dialog box.

1 Start Windows 7.

NOTE:
- Log in as Administrator or as an user within the Administrator group. Refer to the Windows 7 documentation for details about the Administrator group.

2 Insert the PostScript Driver Library CD in the CD-ROM drive.

The [AutoPlay] dialog box is displayed.

3 Click [Run Launcher.exe].

NOTE:
- If the [User Account Control] dialog box appears, click [Yes] to continue the installation.
The [PostScript Printer Driver Version Check Tool] screen is displayed.

4 Click [Next] and follow the on-screen instructions until the [Setup] screen of the "Driver Installation Tool" is displayed.

5 Click [Custom].

The [Select Connection Method] screen is displayed.

6 Select [Shared Printer] and click [Next].

The [Shared Printer] screen is displayed.

7 Enter the name of the printer in [Share Name] in the format "\\computer name\shared printer name", or click [Browse] and select the shared printer on the screen displayed.

8 Click [Next].

The [Software License Agreement] screen is displayed.

> **NOTE:**
> • If the printer specified cannot be confirmed, the [Printer Specification] screen is displayed.
> Enter [IP Address], [Host Name] or [IPX Address], or select [Model], and click [Next]. A confirmation message is displayed, and click [Yes].

9 Read through the license agreement carefully and if you have no objections to it, select [Yes], then click [Install].
Installation begins.

The graphic of the printer being added, and the address or model name of the printer being installed are displayed.

When setup completes, the [Setup Complete] screen is displayed.

10 Click [Properties].
The printer's [Properties] dialog box is displayed.

11 Select the [Configuration] tab, set the option settings, and click [OK] to close the [Properties] dialog box.
For details about option settings, see *Configuration Tab Settings on page 48*.

12 Click [Test Page].

The test print page is printed from the printer.

13 Click [Finish].

A confirmation message is displayed.

14 Click [Yes].

This completes the installation of the print driver.

■ Using Existing Ports and Installing

This section describes how to specify existing ports of computers and install printers by following the procedure below. Since printer options are not set automatically, set them with the printer properties after installing.

NOTE:
• To cancel the installation of the print driver during installation, click [Cancel] in the dialog box. You can also click [Back] to delete the settings in that dialog box and return to the previous dialog box.

1 Start Windows 7.

> **NOTE:**
> • Log in as Administrator or as an user within the Administrator group. Refer to the Windows 7 documentation for details about the Administrator group.

2 Insert the PostScript Driver Library CD in the CD-ROM drive.

The [AutoPlay] dialog box is displayed.

3 Click [Run Launcher.exe].

> **NOTE:**
> - If the [User Account Control] dialog box appears, click [Yes] to continue the installation.
>   The [PostScript Printer Driver Version Check Tool] screen is displayed.

4 Click [Next] and follow the on-screen instructions until the [Setup] screen of the "Driver Installation Tool" is displayed.

5 Click [Custom].

The [Select Connection Method] screen is displayed.

6 Select [Local Printer], and click [Next].

The [Local Printer] screen is displayed.

7 Select an existing port from [Port] and the model from [Model], and click [Next].

The [Software License Agreement] screen is displayed.

> **NOTE:**
> - Do not select the following host names.
>   - IP address (host name): ART
>   - IP address (host name): PS
>   - IP address (host name): Emulation

8 Read through the license agreement carefully and if you have no objections to it, select [Yes], then click [Install].
Installation begins.

The graphic of the printer being added, and the address or model name of the printer being installed are displayed.

When setup completes, the [Setup Complete] screen is displayed.

9 Click [Properties].
The printer's [Properties] dialog box is displayed.

10 Select the [Configuration] tab, set the option settings, and click [OK] to close the [Properties] dialog box.
For details about option settings, see *Configuration Tab Settings on page 48*.

11 Click [Test Page].

The test print page is printed from the printer.

> **NOTE:**
> - A printer selected with [Default Printer Setup] becomes the default printer.
> - Click [Setup Sharing], and you can set the printer as a shared printer on the screen displayed.
> - Click [Change Name], and you can change the printer name on the screen displayed.
> - Click [Printing Preferences], and you can change the information set on the properties of the printer displayed.
> - Click [Start Again], and you can return to the initial screen and continue to add printers.

12 Click [Finish].

A confirmation message is displayed.

13 Click [Yes].

This completes the installation of the print driver.

■ Installing Local Printers

This section describes how to specify a USB port of the computer that the printer is connected to and install the print driver by following the procedure below. Since printer options are not set automatically, set them with the printer properties dialog after installing.

NOTE:
- To cancel the installation of the print driver during installation, click [Cancel] in the dialog box. You can also click [Back] to delete the settings in that dialog box and return to the previous dialog box.

1 Start Windows 7.

> **NOTE:**
> - Log in as Administrator or as an user within the Administrator group. Refer to the Windows 7 documentation for details about the Administrator group.

2 Insert the PostScript Driver Library CD in the CD-ROM drive.

The [AutoPlay] dialog box is displayed.

3 Click [Run Launcher.exe].

> **NOTE:**
> - If the [User Account Control] dialog box appears, click [Yes] to continue the installation.
> The [PostScript Printer Driver Version Check Tool] screen is displayed.

4 Click [Next] and follow the on-screen instructions until the [Setup] screen of the "Driver Installation Tool" is displayed.

5 Click [Custom].

The [Select Connection Method] screen is displayed.

6 Select [Local Printer], and click [Next].

The [Local Printer] screen is displayed.

7 Select a USB port that the printer is connected to from [Port] and the model from [Model], and click [Next].

The [Software License Agreement] screen is displayed.

> **NOTE:**
> - For printers added by this method, you cannot acquire the status of the printer or the status of documents the user has instructed to be printed, even if you use "Document Monitor".

8 Read through the license agreement carefully and if you have no objections to it, select [Yes], then click [Install].
Installation begins.

The graphic of the printer being added, and the address or model name of the printer being installed are displayed.

When setup completes, the [Setup Complete] screen is displayed.

9 Click [Properties].
The printer's [Properties] dialog box is displayed.

10 Select the [Configuration] tab, set the option settings, and click [OK] to close the [Properties] dialog box.
For details about option settings, see *Configuration Tab Settings on page 48*.

11 Click [Test Page].

The test print page is printed from the printer.

12 Click [Finish].

A confirmation message is displayed.

13 Click [Yes].

This completes the installation of the print driver.

■ Using [Add a printer] and Installing - Windows XP/Windows Server 2003

The section described the installation procedure for Windows XP and Windows Server 2003. In this section, Windows XP is used as an example.

NOTE:

- To cancel installation of the print driver during installation, click [Cancel] in the dialog box. You can also click [Back] to delete the settings in that dialog box and return to the previous dialog box.

1 Start Windows XP.

> **NOTE:**
>
> - Log in as an user of an Administrator group. Refer to the Windows XP documentation for details about the Administrator group.

2 On the [Start] menu, click [Printers and Faxes].

3 In the [Printers and Faxes] window, click [Add a printer].

> **NOTE:**
>
> - For Windows Server 2003, double-click the [Add Printer] icon.

4 Click [Next].

5 Select how the printer is connected to the computer and click [Next].

Select [Local printer attached to this computer] if the printer is connected directly to the computer or to the network in a TCP/IP(LPD) environment. Otherwise, select [A network printer, or a printer attached to another computer]. The following is an example of a Local printer.

> **NOTE:**
>
> - When you select [Local printer attached to this computer], deselect the [Automatically detect and install my Plug and Play printer] check box.
> - Specify the target printer in the [Specify a Printer] dialog box if you selected [A network printer, or a printer attached to another computer].

6 Select the port you are using and click [Next].

When the printer is connected in a TCP/IP(LPD) environment:

a Click [Create a new port].

b Select [Standard TCP/IP Port] in the [Type of port] list and click [Next].

c Click [Next].

d Enter the IP address of the printer in [Printer Name or IP Address], and click [Next].

e Click [Finish] in the dialog box that will be displayed.

When using a USB port:

When using a USB port, select [LPT1] here. When installation of the print driver completes, set the USB port.

See Using the USB Port on page 31 to configure the USB port.

The screen for selecting the model and the manufacturer of the printer is displayed.

7 Insert the PostScript Driver Library CD in the CD-ROM drive.

8 Click [Have Disk].

9 For 32-bit editions of Windows, enter the following path in the [Copy manufacturer's files from:] box and click [OK].
   • DocuPrint CM405 df: "Drive Name:\English\Win2K_Vista\DocuPrint_CM405df"
   • DocuPrint CP405 d: "Drive Name:\English\Win2K_Vista\DocuPrint_CP405d"

   For 64-bit editions of Windows, enter the following path in the [Copy manufacturer's files from:] box and click [OK].
   • DocuPrint CM405 df: "Drive Name:\English\WinX64\DocuPrint_CM405df"
   • DocuPrint CP405 d: "Drive Name:\English\WinX64\DocuPrint_CP405d"

   NOTE:
   • Click [Browse] to specify a folder on the CD-ROM.

10 Select your printer model from the [Printers] list and click [Next].

11 Enter the printer name, set whether you want to use it as the default printer, and click [Next].

12 Select [Do not share this printer] and click [Next].

   NOTE:
   • We recommend that you install the driver on each computer with the procedure appropriate to the Operating System.

13 Specify whether to print a test page, and click [Next].

14 After confirming the settings displayed, click [Finish].

   NOTE:
   • If the dialog box "Hardware Installation" appears, click [Continue Anyway] to continue the installation.
   Installation begins.

15 Confirm that the printer has been added in the [Printers and Faxes] window.

   This completes the installation of the print driver. Remove the CD-ROM from the drive.

After the installation is complete, all the optional accessories that are installed to the printer must be set up. Display the properties dialog box of the printer, select the [Configuration] tab, and display [Installable Options] to set up.

For information about how to display the [Configuration] tab, refer to *Display the Device Settings Tab and Configuration Tab on page 46*.

For information about how to configure the printer*, refer to *Windows Device Options and Print Driver Settings on page 46*.

Store your CD-ROM in a safe place.

■ Using [Add a printer] and Installing - Windows Vista/Windows Server 2008

This section describes the installation procedure for Windows Vista and Windows Server 2008. In this section, Windows Vista is used as an example.

NOTE:
• To cancel the installation of the print driver during installation, click [Cancel] in the dialog box. You can also click the [Returns to previous page] icon to delete the settings in that dialog box and return to the previous dialog box.

1 Start Windows Vista.

   NOTE:
   • Make sure that you are logged in as an Administrator.

2   On the [Start] menu, select [Control Panel].

3   Select [Printer] under [Hardware and Sound].

4   Select [Add a printer].

5   If the printer is connected directly to your computer or to the network in a TCP/IP (LPD) environment, select [Add a local printer]. Otherwise, select [Add a network, wireless or Bluetooth printer].

6   Select the port you are using, and click [Next].

When the printer is connected in a TCP/IP(LPD) environment:

a   Select [Create a new port].

b   Select [Standard TCP/IP Port] in the [Type of port] list, and click [Next].

c   Enter the IP address of the printer in [Hostname or IP address], and click [Next].

NOTE:

• If the [User Account Control] dialog box appears, click [Continue] to continue the installation.

d   When "Additional Port Information Required" is displayed, select the series name of the model being used with [Standard] of [Device Type] and click [Next].

When using a USB port:

When using a USB port, select [LPT1] here. When installation of the print driver completes, set the USB port.

See Using the USB Port on page 31 to configure the USB port.

The screen for selecting the model and the manufacturer of the printer is displayed.

7   Insert the PostScript Driver Library CD in the CD-ROM drive.

8   Click [Have Disk].

9   For 32-bit editions of Windows, enter the following path in the [Copy manufacturer's files from] box, and click [OK].

• DocuPrint CM405 df: "Drive Name:\English\Win2K_Vista\DocuPrint_CM405df"

• DocuPrint CP405 d: "Drive Name:\English\Win2K_Vista\DocuPrint_CP405d"

For 64-bit editions of Windows, enter the following path in the [Copy manufacturer's files from] box, and click [OK].

• DocuPrint CM405 df: "Drive Name:\English\WinX64\DocuPrint_CM405df"

• DocuPrint CP405 d: "Drive Name:\English\WinX64\DocuPrint_CP405d"

NOTE:

• Click [Browse] to specify a folder on the CD-ROM.

10   Select your printer model from the [Printers] list and click [Next].

11   Enter the printer name, set whether to use it as the default printer, and click [Next].

Installation begins.

NOTE:

• If the [User Account Control] dialog box appears, click [Continue] to continue the installation.If the message "Windows can't verify the publisher of this driver software" is displayed, click [Install this driver software anyway].

12   Select [Do not share this printer] and click [Next].

NOTE:

• We recommend that you install the driver on each computer with the procedure appropriate to the Operating System.

13 Click [Print a test page] if you want to check that the printer is successfuly installed, and click [Finish].

14 Confirm that the printer has been added in the [Printers] window.

This completes the installation of the print driver. Remove the CD-ROM from the drive.

After the installation is complete, all the optional accessories that are installed to the printer must be set up. Display the properties dialog box of the printer, select the [Configuration] tab, and display [Installable Options] to set up.

For information about how to display the [Configuration] tab, refer to *Display the Device Settings Tab and Configuration Tab on page 46*.

For information about how to configure the printer, refer to *Windows Device Options and Print Driver Settings on page 46*.

Store your CD-ROM in a safe place.

■ Using [Add a printer] and Installing - Windows 7/Windows Server 2008 R2

This section describes the installation procedure for Windows 7 and Windows Server 2008 R2. In this section, Windows 7 is used as an example.

NOTE:
- To cancel the installation of the print driver during installation, click [Cancel] in the dialog box. You can also click the [Returns to previous page] icon to delete the settings in that dialog box and return to the previous dialog box.

1 Start Windows 7.

   NOTE:
   - Make sure that you are logged on as an Administrator.

2 On the [Start] menu, select [Devices and Printers].

3 In the [Devices and Printers] window, select [Add a printer].

4 Select how the printer is connected to the computer.

   If the printer is connected directly to your computer or to the network in a TCP/IP (LPD) environment, select [Add a local printer].

5 Select the port you are using, and click [Next].

   When the printer is connected in a TCP/IP (LPD) environment:

   a Select [Create a new port].
   b Select [Standard TCP/IP Port] in the [Type of port] list, and click [Next].
   c Enter the IP address of the printer in [Hostname or IP address], and click [Next].
   d When [Additional port information required] is displayed, select the series name of the model being used with [Standard] of [Device Type] and click [Next].

   When using a USB port:

   When using a USB port, select [LPT1] here. When installation of the print driver completes, set the USB port.

   See Using the USB Port on page 31 to configure the USB port.

   The screen for selecting the model and the manufacturer of the printer is displayed.

6 Insert the PostScript Driver Library CD in the CD-ROM drive.

7 Click [Have Disk].

8 For 32-bit editions of Windows, enter the following path in the [Copy manufacture's files from] box, and click [OK].

 • DocuPrint CM405 df: "Drive Name:\English\Win2K_Vista\DocuPrint_CM405df"

 • DocuPrint CP405 d: "Drive Name:\English\Win2K_Vista\DocuPrint_CP405d"

For 64-bit editions of Windows, enter the following path in the [Copy manufacture's files from] box, and click [OK].

 • DocuPrint CM405 df: "Drive Name:\English\WinX64\DocuPrint_CM405df"

 • DocuPrint CP405 d: "Drive Name:\English\WinX64\DocuPrint_CP405d"

NOTE:

 • Click [Browse] to specify a folder on the CD-ROM.

9 Select your printer model from the [Printers] list, and click [Next].

10 Enter the printer name and click [Next].

Installation begins.

11 Select [Do not share this printer], and click [Next].

NOTE:

 • We recommend that you install the driver on each computer with the procedure appropriate to the Operating System.

12 Set whether to use the printer as the default printer if displayed, and click [Print a test page] if you want to check that the printer is successfully installed.

13 Click [Finish].

NOTE:

 • If the [User Account Control] dialog box appears, click [Yes] to continue the installation. If the message "Windows can't verify the publisher of this driver software" is displayed, click [Install this driver software anyway].

14 Confirm that the printer has been added in the [Devices and Printers] window.

This completes the installation of the print driver. Remove the CD-ROM from the drive.

After the installation is complete, all the optional accessories that are installed to the printer must be set up. Display the properties dialog box of the printer, select the [Configuration] tab, and display [Installable Options] to set up.

For information about how to display the [Configuration] tab, refer to *Display the Device Settings Tab and Configuration Tab on page 46*.

For information about how to configure the printer*,* refer to *Windows Device Options and Print Driver Settings on page 46*.

Store your CD-ROM in a safe place.

■ Using [Add a printer] and Installing - Windows 8/Windows Server 2012

This section describes the installation procedure for Windows 8 and Windows Server 2012. In this section, Windows 8 is used as an example.

NOTE:
- To cancel the installation of the print driver during installation, click [Cancel] in the dialog box. You can also click the [Returns to previous page] icon to delete the settings in that dialog box and return to the previous dialog box.

1 Start Windows 8.

   NOTE:
   - Make sure that you are logged on as an Administrator.

2 On the Windows desktop, right-click the bottom left corner of the screen, select [Control Panel], and [Hardware and Sound], and then [Devices and Printers].

3 In the [Devices and Printers] window, select [Add a printer].

4 If the printer is listed, select the printer.

   If the printer is not listed, select [The printer that I want isn't listed]. And the printer is connected directly to your computer or to the network in a TCP/IP (LPD) environment, select [Add a local printer or network printer with manual settings].

5 Select the port you are using, and click [Next].

   When the printer is connected in a TCP/IP (LPD) environment:

   a Select [Create a new port].
   b Select [Standard TCP/IP Port] in the [Type of port] list, and click [Next].
   c Enter the IP address of the printer in [Hostname or IP address], and click [Next].
   d When [Additional port information required] is displayed, select the series name of the model being used with [Standard] of [Device Type] and click [Next].

   When using a USB port:

   When using a USB port, select [LPT1] here. When installation of the print driver completes, set the USB port.

   See *Using the USB Port on page 31* to configure the USB port.

   The screen for selecting the model and the manufacturer of the printer is displayed.

6 Insert the PostScript Driver Library CD in the CD-ROM drive.

7 Click [Have Disk].

8 For 32-bit editions of Windows, enter the following path in the [Copy manufacture's files from] box, and click [OK].
   - DocuPrint CM405 df: "Drive Name:\English\Win2K_Vista\DocuPrint_CM405df"
   - DocuPrint CP405 d: "Drive Name:\English\Win2K_Vista\DocuPrint_CP405d"

   For 64-bit editions of Windows, enter the following path in the [Copy manufacture's files from] box, and click [OK].
   - DocuPrint CM405 df: "Drive Name:\English\WinX64\DocuPrint_CM405df"
   - DocuPrint CP405 d: "Drive Name:\English\WinX64\DocuPrint_CP405d"

   NOTE:
   - Click [Browse] to specify a folder on the CD-ROM.

9 Select your printer model from the [Printers] list, and click [Next].

10 Enter the printer name and click [Next].

   Installation begins.

11 Select [Do not share this printer], and click [Next].

NOTE:
- We recommend that you install the driver on each computer with the procedure appropriate to the Operating System.

12 Set whether to use the printer as the default printer if displayed, and click [Print a test page] if you want to check that the printer is successfully installed.

13 Click [Finish].

NOTE:
- If the [User Account Control] dialog box appears, click [Yes] to continue the installation. If the message "Windows can't verify the publisher of this driver software" is displayed, click [Install this driver software anyway].

14 Confirm that the printer has been added in the [Devices and Printers] window.

This completes the installation of the print driver. Remove the CD-ROM from the drive.

After the installation is complete, all the optional accessories that are installed to the printer must be set up. Display the properties dialog box of the printer, select the [Configuration] tab, and display [Installable Options] to set up.

For information about how to display the [Configuration] tab, refer to *Display the Device Settings Tab and Configuration Tab on page 46*.

For information about how to configure the printer, refer to *Windows Device Options and Print Driver Settings on page 46*.

Store your CD-ROM in a safe place.

How to Use Help

The following describes how to use Help.

This section describes how to refer to the Help in Windows 7.

Using Help in the Properties Dialog Box

1 From the [Start] menu, select [Devices and Printers].

2 Right-click the printer icon, and select [Printer properties].

The properties dialog box is displayed.

3 On the [Device Settings] or [Configuration] tab, click the setup buttons.

The setting dialog box is displayed.

4 Click [Help] that is located at the bottom right corner of each dialog box.

Help is displayed.

NOTE:

- Clicking [?] that is located at the upper right corner of the dialog box allows the item indicator to pop up next to the mouse pointer. While the indicator is displayed, click the item to view a detailed description. Help appears to display information about the item that you selected.
You can also display Help by right-clicking the item and select [What's This?].

Using Help in the Printing Preferences Dialog Box

1 From the [Start] menu, select [Devices and Printers].

2 Right-click the printer icon, and select [Printing preferences].

The printing preferences dialog box is displayed.

3 Click [Help] that is located at the bottom of the dialog box.

Help is displayed.

NOTE:

- To view detailed information for each item, right-click the item and select [What's This?]. Help appears to display information about the item that you selected.

Using the USB Port

This section explains how to use the OS standard USB port with computers on which Windows XP, Windows Server 2003, Windows Vista, Windows 7, Windows Server 2008, Windows Server 2008 R2, Windows 8 or Windows Server 2012 is installed, for printing.

NOTE:
- A printer added using the procedure below cannot be monitored on Document Monitor.
- For information about devices that connect to the USB port, refer to the manual that is contained in the Driver CD Kit.

■ For Windows XP, Windows Server 2003 / 2008 or Windows Vista

As an example, this section describes how to install the print driver for Windows XP.

1 Insert the USB cable into the USB interface connector of the printer.

2 Insert the other end of the USB cable into the USB interface connector of the computer.

3 Turn on the power to the printer.
The [Found New Hardware Wizard] dialog box is displayed.

4 Select [No, not this time], and click [Next].

5 Select [Install from a list or specific location (Advanced)], and click [Next].

6 Select [Search for the best driver in these locations].

7 Select [Search removable media (floppy, CD-ROM...)], and click [Next].

8 Click [Finish]. The print driver is installed.

9 From the [Start] menu, select [Printers and Faxes].
The [Printers and Faxes] window is displayed.

   NOTE:
   - For Windows Vista and Windows Server 2008, select [Control Panel] from the [Start] menu, and select [Hardware and Sound] > [Printers].

10 Select the icon of the printer that you installed, and select [Properties] from the [File] menu.
The [Properties] dialog box is displayed.

11 Check that the USB port for the printer in use is added correctly under [Print to the following port(s)] in the [Ports] tab.

12 Click [Print Test Page] in the [General] tab.
The dialog box appears to confirm whether or not the test print is completed successfully.

13 Check the print result, and if the test print is completed successfully, click [OK].

14 Configure settings on the [Configuration] tab for the print driver to recognize all the optional configurations that are installed in the printer.

15 Click [OK] in the [Properties] dialog box.

You have completed the settings to use the printer.

■ For Windows 7, Windows Server 2008 R2

As an example, this section describes how to install the print driver for Windows 7.

1 Insert the USB cable into the USB interface connector of the printer.

2 Insert the other end of the USB cable into the USB interface connector of the computer.
Displays the message indicating the driver is not installed correctly.

3 Select [Devices and Printers] from the [Start] menu for Windows 7.
The [Devices and Printers] window is displayed.

4 Right click the printer icon added to [Unspecified] in the [Devices and Printers] window and select [Properties].
The [Properties] dialog box is displayed.

> **NOTE:**
> • The printer icon with the "!" mark is added at [Printers and Faxes] depending on the driver software to install.

5 Click the [Hardware] tab and select the printer added from [Device Functions], click the [Properties] button.

6 Click the [General] tab on the [Properties] dialog box and click the [Change settings] button.

7 Click the [Driver] tab on the [Properties] dialog box and click the [Update Driver] button.
The [Update Driver Software] screen is displayed.

8 Select [Browse my computer for driver software].

9 Click the [Browse] button to select the driver software and click [Next].
Start the installation of the driver software, and the screen displays to indicate a successful installation.

> **NOTE:**
> • If the [Windows can't verify publisher of this driver software] screen is displayed, select the [Install this driver software anyway] and install the driver software.

10 Click the [Finish] button.
The printer icon is displayed at the [Printers and Faxes] on the [Devices and Printers] window, and you can use the printer.

> **NOTE:**
> • If the printer icon with the "!" is added at the [Printers and Faxes], "!" mark will disappear.

■ For Windows 8, Windows Server 2012

As an example, this section describes how to install the print driver for Windows 8.

1 Insert the USB cable into the USB interface connector of the printer.

2 Insert the other end of the USB cable into the USB interface connector of the computer.
Displays the message indicating the driver is not installed correctly.

3 On the Windows desktop, right-click the bottom left corner of the screen, select [Control Panel], and [Hardware and Sound], and then [Devices and Printers].
The [Devices and Printers] screen is displayed.

4 Right click the printer icon added to the [Devices and Printers] window and select [Properties].
The [Properties] dialog box is displayed.

> **NOTE:**
> • The printer icon with the "!" mark is added at [Printers] depending on the driver software to install.

5 Click the [Hardware] tab and select the printer added from [Device Functions], click the [Properties] button.

6 Click the [General] tab on the [Properties] dialog box and click the [Change settings] button.

7 Click the [Driver] tab on the [Properties] dialog box and click the [Update Driver] button.
The [Update Driver Software] screen is displayed.

8 Select [Browse my computer for driver software].

9 Click the [Browse] button to select the driver software and click [Next].
Start the installation of the driver software, and the screen displays to indicate a successful installation.

NOTE:
- If the [Windows can't verify publisher of this driver software] screen is displayed, select the [Install this driver software anyway] and install the driver software.

10 Click the [Finish] button.
The printer icon is displayed at the [Printers] on the [Devices and Printers] window, and you can use the printer.

NOTE:
- If the printer icon with the "!" is added at the [Printers], "!" mark will disappear.

Updating the Print Driver

This section explains the procedures to start "Driver Installation Tool" from the CD-ROM and update the print driver.

NOTE:
- To cancel the installation of the print driver during installation, click [Cancel] in the dialog box. You can also click [Back] to delete the settings in that dialog box and return to the previous dialog box.

1 Insert the PostScript Driver Library CD in the CD-ROM drive.

The [AutoPlay] dialog box is displayed.

2 Click [Run Launcher.exe].

> **NOTE:**
> - If the [User Account Control] dialog box appears, click [Yes] to continue the installation.
>   The [PostScript Printer Driver Version Check Tool] screen is displayed.

3 Click [Next] and follow the on-screen instructions until the [Setup] screen of the "Driver Installation Tool" is displayed.

4 Click [Print Driver Update].
The [Select printer for driver update] screen is displayed.

5 Select the printer for which to update the print driver from the list, then click [Next].
The [Software License Agreement] screen is displayed.

6 Read through the license agreement carefully and if you have no objections to it, select [Yes], then click [Install].
Installation begins.

The graphic of the printer being added, and the address or model name of the printer being installed are displayed.

When setup completes, the [Setup Complete] screen is displayed.

7 Click [Finish].

A confirmation message is displayed.

8 Click [Yes].

This completes the installation of the print driver.

9 When a message appears prompting you to restart your computer, click [Yes].

Installing of Print Drivers for Mac OS X Computers

Supplied CD-ROM

PostScript Driver Library CD provided with the printer contains the following contents.

Mac OS X computers require the following items to work with your printer. You can find them installed on the CD-ROM.

[DocuPrint_XXXX] folder in [MacOSX10.3.9-10.6] or [MacOSX10.7-] folder

Contains the PPD installation packages for Mac OS X 10.3.9, 10.4, 10.5, 10.7, and 10.8.

- The PPD & Plug-in file installer for Mac OS X 10.3.9, 10.4, 10.5, 10.7, and 10.8
- readme file

[DocuPrint_XXXX] folder in [MacPPD] folder

Contains the PPD files for the English version. Use when adding PPD files in applications, etc.

[MacScreenFont] folder in [Utility] folder

Contains 117 PostScript fonts and 19 TrueType fonts, which are standard for PostScript 3 printers. In addition, 28 PostScript fonts of the Central European (CE) character set are included.

[DocuPrint_XXXX] folder in [MacColorSync] folder

Contains ICC profile for Mac OS X use.

Readme file

Contains cautionary notes about inquiry windows and how to use the print driver. Ensure you read this before use.

■ Hardware/Software Requirements

The minimum system requirements for the Mac OS X print driver and the utility are described below.

• Computer System

- A Mac OS X computer running a supported version of Mac OS.

• Basic Software

- **For PPD & Plug-in Installer** - Mac OS X 10.3.9-10.8

Installing the Print Driver

This section explains the procedures for adding printers to Mac OS X.

Before starting, verify that the USB or Ethernet port has been selected to match your computing environment with the printer. For details, see the documentation that came with your printer.

■ Installation Procedure (Mac OSX 10.3.9-10.8)

Install the PostScript Printer Description (PPD) file.

1 Start Mac OS X.

2 Insert the PostScript Driver Library CD in the CD-ROM drive.

3 Double-click [FXOPS-PS].
The FXOPS-PS window appears.

4 Open [English] > [MacOSX10.3.9-10.6] or [MacOSX10.7-] (depending on the version of Mac OS X you are running) > [DocuPrint_XXXX] folders in this order.

5 Open the [readme] file from the folder displayed, and read the information related to the installer.

6 Double-click [mac103ps.dmg] (in the [MacOSX10.3.9-10.6] folder) or [mac107ps.dmg] (in the [MacOSX10.7-] folder).

7 Double-click the installer.

8 Click [Continue] on the confirmation message.

9 In the first screen of the installation program, click [Continue].
The license screen appears.

10 Read through the license agreement carefully and if you have no objections to it, click [Continue].

11 Click [Agree].
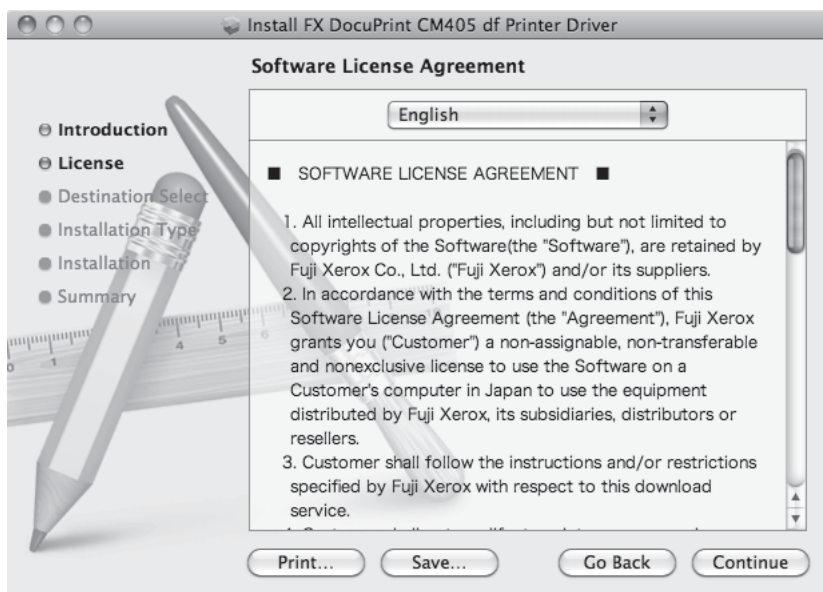
> To continue installing the software you must agree to the terms of the software license agreement.
>
> Click Agree to continue or click Disagree to cancel the installation and quit the Installer.
>
> (Read License)   (Disagree) (Agree)
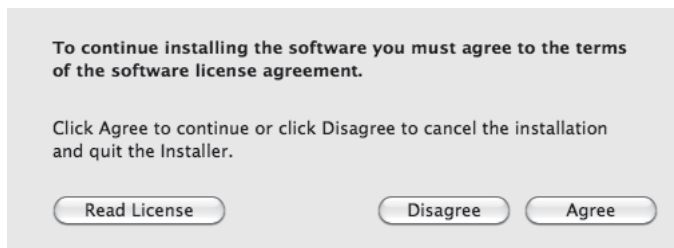
NOTE:
- When the screen to select the installation location appears, click [Continue].

12 Click [Install].

13 Enter an Administrator name and password, and click [OK] ([Install Software] for Mac OS X 10.7/10.8).

> Type your password to allow Installer to make changes.
>
> Name: Administrator
> Password: ••••
>
> ▷ Details
> (?)   (Cancel) (OK)

14 When a message appears telling you installation has completed, click [Close].

This completes the installation.

When using Mac OS X 10.3.9-10.4, proceed to *Adding a Printer (Mac OS X 10.3.9-10.4) on page 38*.
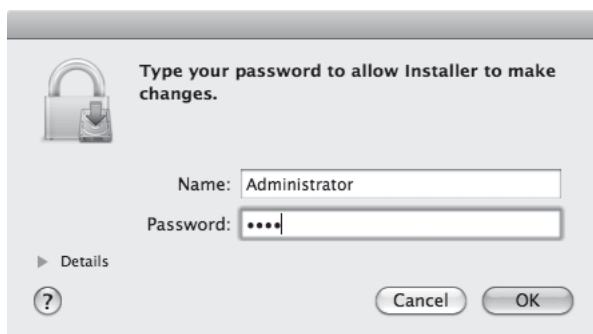
When using Mac OS X 10.5-10.8, proceed to *Adding a Printer (Mac OS X 10.5-10.8) on page 40*.

■ Adding a Printer (Mac OS X 10.3.9-10.4)

After the PPD file has been installed, set the PPD file for the print driver, and then add the printer.

The print driver controls the printer functions based on the information in the PPD file.

As an example, this section describes how to add a printer in a Mac OS X 10.3.9.

1 Start Mac OS X.

2 Check that the printer port is set to Enable.
- When using IP Printing

Set the LPD port to Enable.

NOTE:
- Printers on an IP network can be detected automatically. To enable the discovery function, enable Bonjour on the printer.
- When using USB

Set the USB port to Enable.

To enable the USB port, see the documentation that came with your printer. Depending on the model being used, specification of the print mode may be unnecessary.

3 Start [Printer Setup Utility].

NOTE:
- You can find [Printer Setup Utility] in the [Utilities] folder of the [Applications] folder.

The [Printer List] screen appears.

4 Click [Add].

5 Select the protocol used to connect the printer.

• When using IP Printing

1 Select [IP Printing] from the menu, select [LPD/LPR] from [Printer Type], and enter the printer's address in [Printer Address].
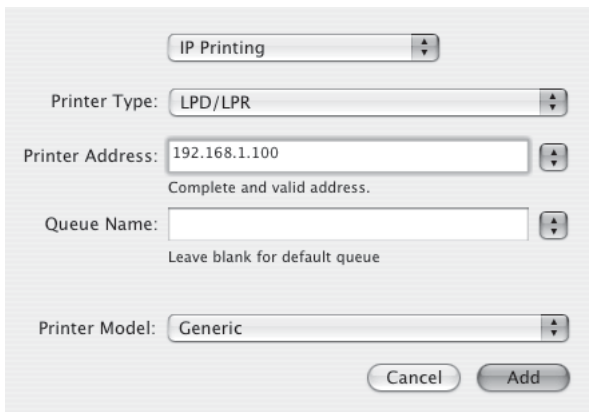
2 Select [FX] from [Printer Model], and select the printer to be used.

3 Click [Add].

• When using USB

NOTE:

• Normally, the printer connected using the USB port is added to [Printer List] automatically when you connect it. If the printer is not added automatically, add the printer manually following the procedure below.

1 Select [USB] from the menu.
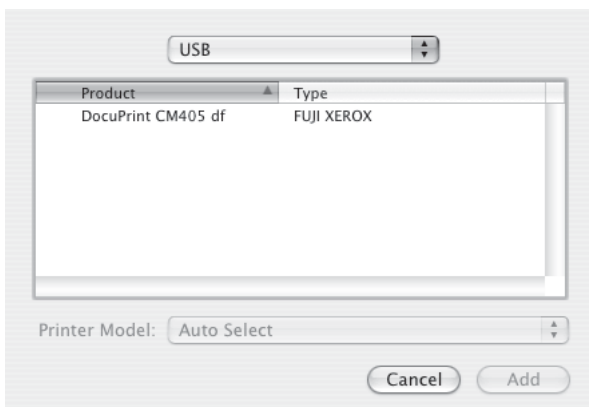
2 Select the printer you are using from the list.

3 Select [FX] from [Printer Model], and select the printer to be used.

4 Click [Add].

This completes the addition of a printer.

• When using Rendezvous

NOTE:
- When automatically detecting the printer on an IP network with Mac OS X v10.4.11, select [Bonjour].

1 Select [Rendezvous] from the menu.
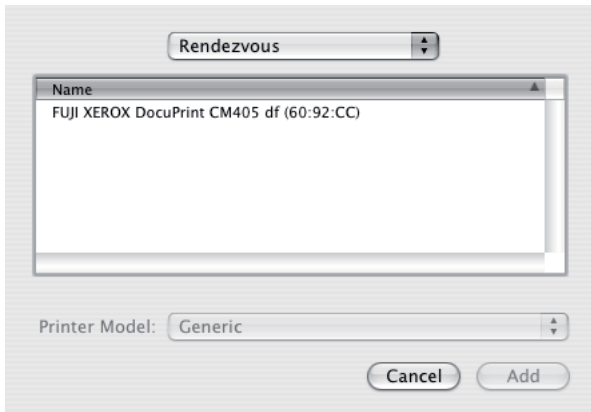
2 Select the printer you are using from the list.

3 Click [Add].

This completes the addition of a printer.

Printer options

Click the printer name on [Printer List] of [Printer Setup Utility], then select [Show Info].

Next, select [Installable Options], and select the options that have been installed on the printer. *Setting the Print Driver on page 44* for details about the options.

■ Adding a Printer (Mac OS X 10.5-10.8)

After the PPD file has been installed, set the PPD file for the print driver, and then add the printer.

The print driver controls the printer functions based on the information in the PPD file.

As an example, this section describes how to add a printer in a Mac OS X 10.6.

1 Start Mac OS X.

2 Make sure the printer port is set to Enable.
- When using IP Printing

  Set the LPD port to Enable.

  NOTE:
  - Printers on an IP network can be detected automatically. To enable the discovery function, enable Bonjour on the printer.
- When using USB

  Set the USB port to Enable.

  To enable the USB port, see the documentation that came with your printer. Depending on the model being used, specification of the print mode may be unnecessary.
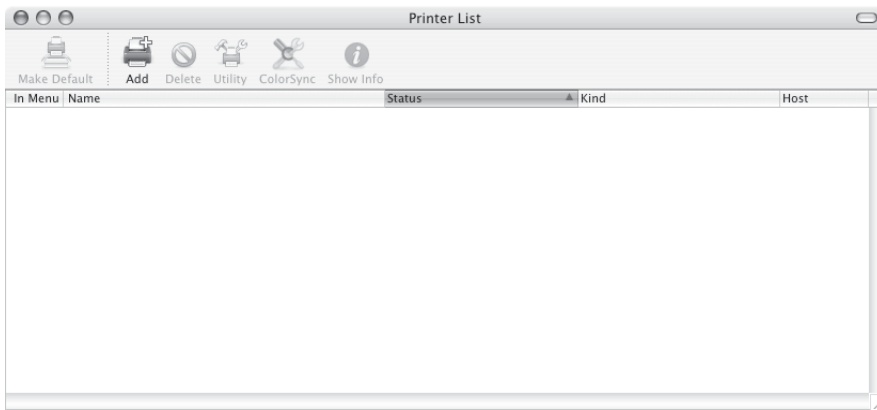
**3**   Start [System Preferences].

4   Click [Print & Fax].

5   Click [+].
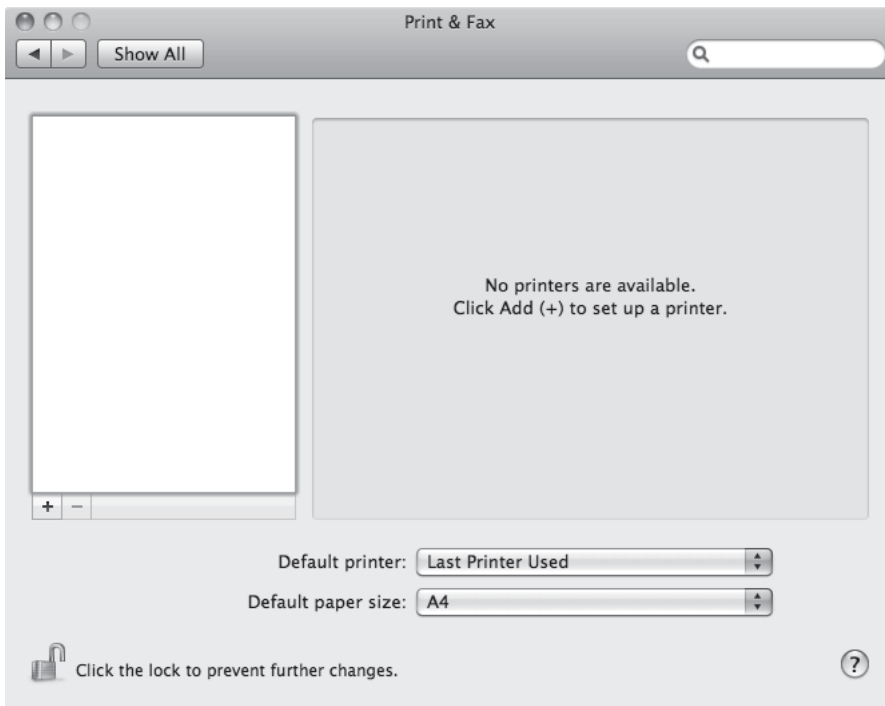
6   Select the protocol used to connect the printer.

• When using IP Printing

1 Select [IP] from the menu, and select [Line Printer Daemon - LPD] for [Protocol].
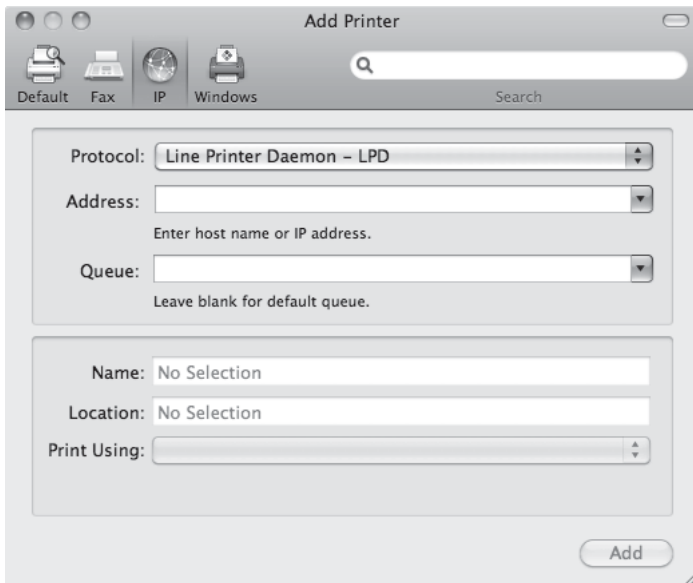
2 Enter the IP address for the printer being used in [Address].

3 Select [Select Printer Software] from the dropdown list of [Print Using].

4 Select the printer to be used.

5 Click [Add].

This completes the addition of a printer.

• When using USB or Bonjour

NOTE:
- Normally, the printer connected using the USB port is added to [Print & Fax] automatically when you connect it. If the printer is not added automatically, add the printer manually following the procedure below.

1 Select [Default] from the menu.

The following screen appears.
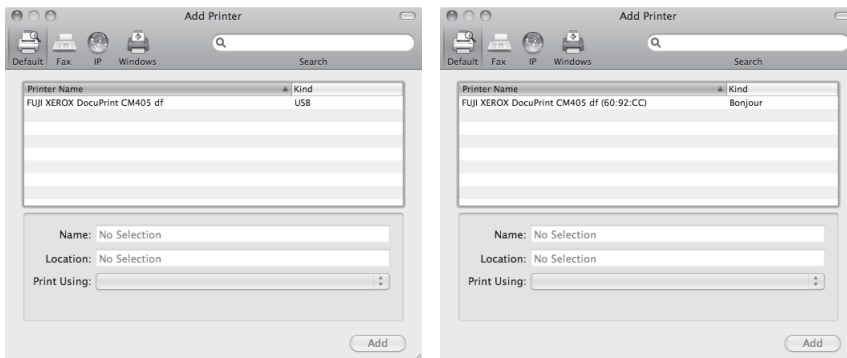
2 Select the printer to be used.

NOTE:
- Normally, the driver of the printer being searched is recognized automatically. If the driver is not recognized automatically, or you desire to select the driver manually, perform the following procedure a) to c); otherwise, proceed to step 3.

a Select [Select Printer Software] from the dropdown list of [Print Using].

A list of the drivers installed on the computer is displayed.
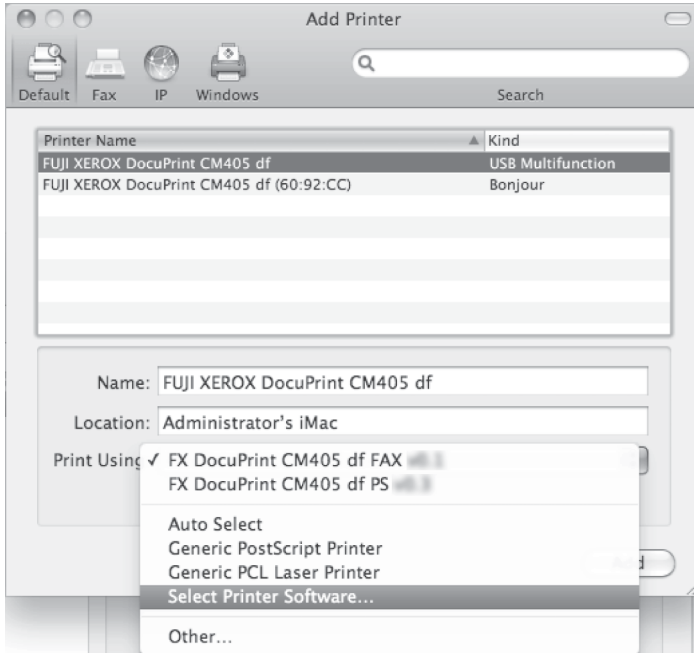
b Select the driver to install.

c Press the [Add] button.

The printer is added.

3 Click [Add].

This completes the addition of a printer.

Printer options

Click [Print & Fax] ([Print & Scan] for Mac OS X 10.7/10.8) in [System Preferences].

Next, select [Options & Supplies], and select the options that have been installed on the printer.

See *Setting the Print Driver on page 44* for details about the options.

Setting the Print Driver

When installing the print driver, the items unique to models are added to [Installable Options] of the print driver for Mac OS X 10.3.9-10.4, and to [Driver] of [Options & Supplies] for Mac OS X 10.5-10.8.

Printer options can be set in [Printer Setup Utility] for Mac OS X 10.3.9-10.4, in [Print & Fax] of [System Preferences] for Mac OS X 10.5-10.6, and in [Print & Scan] of [System Preferences] for Mac OS X 10.7-10.8.

See *Mac OS X Device Options and Print Driver Settings on page 69* for details about the items added.

4

Print Driver Settings

Setting Items per Model

This section explains the setting items per model added to the print driver, per OS.

■ Windows Device Options and Print Driver Settings

This section describes device options and print driver properties. For other items, refer to the Help.

- Device Settings Tab Settings
- Configuration Tab Settings
- Paper/Output Tab Settings
- Image Options Tab Settings
- Color Options Tab Settings
- Layout/Watermark Tab Settings
- Advanced Tab Settings

• Display the Device Settings Tab and Configuration Tab

- For Windows XP and Windows Server 2003

  From the [start] ([Start] for Windows Server 2003) menu, select [Printers and Faxes]. Select the icon of the printer and select [Properties] from the [File] menu.

- For Windows Vista and Windows Server 2008

  From the [Start] menu, select [Control Panel] > [Hardware and Sound] > [Printers]. Select the icon of the printer and select [Set printer properties] from the menu bar.

- For Windows 7 and Windows Server 2008 R2

  From the [Start] menu, select [Devices and Printers]. Right-click the printer icon and select [Printer properties].

- For Windows 8 and Windows Server 2012

  On the Windows desktop, right-click the bottom left corner of the screen, select [Control Panel], and [Hardware and Sound], and then [Devices and Printers]. Right click the printer icon and select [Printer properties].

• Display the Paper/Output Tab, Image Options Tab, Color Options Tab, Layout/Watermark Tab, and Advanced Tab

- For Windows XP and Windows Server 2003

  From the [start] ([Start] for Windows Server 2003) menu, select [Printers and Faxes]. Select the icon of the printer and select [Printing Preferences] from the [File] menu.

- For Windows Vista and Windows Server 2008

  From the [Start] menu, select [Control Panel] > [Hardware and Sound] > [Printers]. Select the icon of the printer and select [Select printing preferences].

- For Windows 7 and Windows Server 2008 R2

  From the [Start] menu, select [Devices and Printers]. Right-click the printer icon and select [Printing preferences].

- For Windows 8 and Windows Server 2012

  On the Windows desktop, right-click the bottom left corner of the screen, select [Control Panel], and [Hardware and Sound], and then [Devices and Printers]. Right click the printer icon and select [Printing preferences].

Device Settings Tab Settings

You can specify the printer settings that must be changed with the print driver in the [Device Settings] tab.
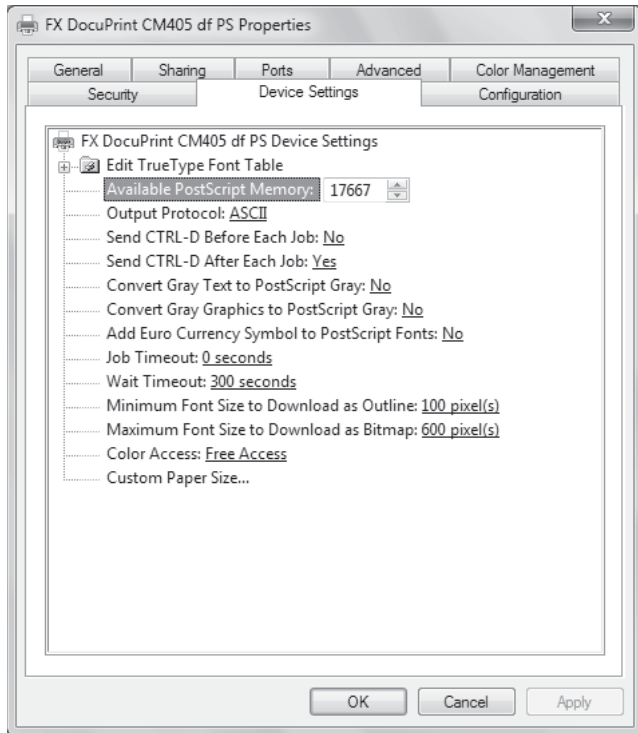
Configuration Tab Settings

This section describes the settings in the [Configuration] tab. * is the default setting.
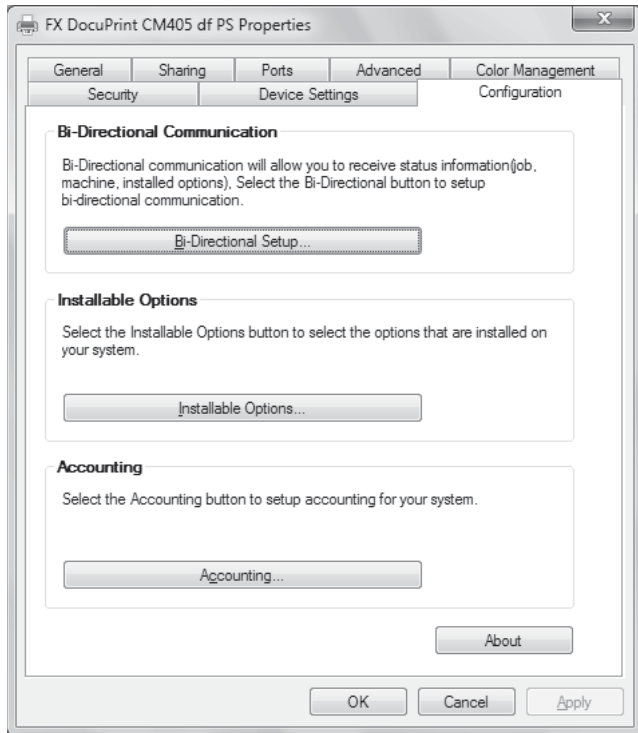
• Settings

Bi-Directional Setup button

The [Bi-Directional Setup] dialog box is displayed. You can setup bi-directional communication via a connected printer port.

Bi-Directional Setup dialog box

You can set whether to get information, such as installed options and tray settings from the printer automatically.

Get Information from Printer

When the printer is connected via a printer port that enables the communication between the printer and the computer, click [Get Information from Printer] to confirm the status of the option products of the printer. The status is shown in [Installable Options] of the [Configuration] tab.

NOTE:
· You can also set the options manually in the [Installable Options] dialog box.

Network Address

The printer address obtained by clicking [Get Information from Printer] is displayed if the printer is connected by TCP/IP.

Get Printer Information Automatically

Specify whether to get tray settings from the printer automatically when the print driver is opened.
- [On]
- [Off] *

Installable Options button

The [Installable Options] dialog box is displayed. You can set the options that are installed in the printer.

Installable Options dialog box

To print correctly, it is necessary to make the appropriate settings in this dialog box.

Select the items in [Items] and then select the settings from the drop-down list box of [Setting for].

NOTE:
- You can restore defaults by clicking [Defaults].

Hard Disk

Specify if the optional hard disk unit is installed in the printer.
- [Installed]
- [Not Installed] *

RAM Disk

Specify if the RAM disk is installed in the printer.
- [Installed]
- [Not Installed] *

NOTE:
- For the DocuPrint CM405 df, [Installed] is the default setting. For the DocuPrint CP405 d, select [Installed] when the optional 512MB memory is installed on the printer.

Memory Capacity

Specify the amount of printer memory.
- [256MB] *
- [512MB]
- [768MB]
- [1024MB]

NOTE:
- For the DocuPrint CM405 df, [256MB] is not available and [512MB] is the default setting.

Paper Tray Configuration

Specify the paper tray configuration of the printer.
- [1 Tray] *
- [2 Trays]

Accounting button

The [Accounting] dialog box is displayed. You can setup accounting for your printer.

Accounting dialog box

You can specify whether to enable accounting and set user authentication settings.

NOTE:
- You can restore defaults by clicking [Defaults].

Accounting System

Specify whether to enable accounting when printing.
- [None]
- [Standard Accounting or Auditron] *

Account Mode

Specify whether all users or only System Administrators to change authentication settings. If the user currently logged into Windows does not have authority to access printer settings, the settings cannot be changed.

When selecting [Administrator], account management operates in the mode set by the administrator, and the user cannot change this. The setting can differ, per printer icon.

When selecting [User], each user can change the account management settings. The setting can differ, per user.

- [Administrator]
- [User] *

NOTE:
- If the user currently logged into Windows does not have authority to access printer settings, the settings are grayed out and cannot be changed.

Prompt User for Entry when Submitting Job

Select this feature to display the [Enter User Details] dialog box each time you start printing. The user is then required to enter authentication information such as their User ID and Passcode.

- [Display Last Entered User Details]

  Check the box to store the user details entered on the setting screen of the [Enter User Details] dialog box, and display the details in the box as default next time. Authentication information of the user who set the previous time is registered for the printer icon, per user.

- [Mask User ID (***)]

  Check the box to specify whether a User ID is to be displayed or hidden when it is entered in the [Enter User Details] dialog box.

Always Use Default User Details

The values set in this feature are used as the authentication parameters such as the user name when printing.

- [Specify Job Owner Name]

  Select how to specify the User ID. The User ID is used when using the print job billing function.

  - [Use Login Name] *

    The Windows login name is used as the User ID. The Windows login name is displayed in [User ID], and the [User ID] text box cannot be edited.

  - [Enter owner name]

    Select to specify the User ID.

- [User ID]

  Enter an arbitrary User ID in [User ID]. Enter the User ID within 32 characters.

- [Passcode]

  Enter an arbitrary Passcode for the User ID. Enter the Passcode within 4 to 12 alphanumeric characters. It will be displayed as bullets (•).

Enter User Details dialog box

When [Prompt User for Entry when Submitting Job] is selected in the [Accounting] dialog box, and printing is instructed, the [Enter User Details] dialog box is displayed.

User ID

When using the authentication and billing functions with the printer, enter the User ID (job owner name) registered in the printer. Enter the User ID within 32 characters. It will be displayed as asterisks (*) when [Mask User ID (***)] is selected in the [Accounting] dialog box.

Passcode

Enter an arbitrary Passcode for the User ID. Enter the Passcode within 4 to 12 alphanumeric characters. It will be displayed as bullets (●).

NOTE:
- Set the minimum number of characters to be entered for the Passcode on the operator panel.

About button

The [About] dialog box is displayed. You can check the version of the print driver and copyright infromation.

About dialog box

Fuji Xerox Web Site button

Click this button to start the browser of the computer used and display the driver download service page on the Fuji Xerox Web Site. You can download the latest print drivers from this web site.

Paper/Output Tab Settings

This section describes the settings in the [Paper/Output] tab.
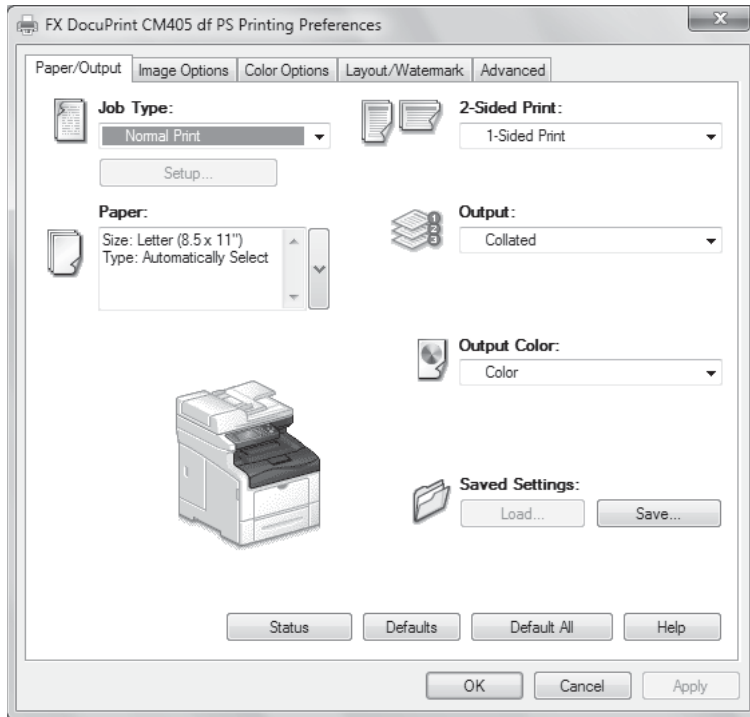
NOTE:
- You can restore defaults by clicking [Defaults].
- You can restore all items to their defaults by clicking [Default All].

• Settings

Job Type

Specify the job type.

NOTE:
- [Secure Print] and [Sample Set] are displayed only when [Hard Disk] or [RAM Disk] is set to [Installed] in the [Installable Options] dialog box. (For the DocuPrint CM405 df, [RAM Disk] is set to [Installed] by default.)
    - [Normal Print] *

      Select to print normally.

    - [Secure Print]

      Accumulates data specified to be printed within the printer, and outputs by the instruction from the printer when printing. Click [Setup], and set each item on the [Secure Print] dialog box displayed. See *Secure Print dialog box on page 52*.

    - [Sample Set]

      When printing multiple copies, you can print only one set initially to confirm the print result, and then the remaining sets are output by an instruction from a printer. Click [Setup], and set each item on the [Sample Set] dialog box displayed. See *Sample Set dialog box on page 53*.

Secure Print dialog box

User ID

Enter the User ID for Secure Print. Enter the User ID within 8 characters.

Secure Print Passcode

Enter the Passcode corresponding to the [User ID] for Secure Print. The Passcode can be entered up to 12 numeric characters. It will be displayed as bullets (•).

Job Name

Select the method to specify the job name to store in the printer. When selecting [Use Existing Name], the job name is obtained from the application that sends the print command, and cannot be entered. Specify the job name within 12 characters. When selecting [Enter Job Name], enter a name in [New Job Name].

- [Use Existing Name]
- [Enter Job Name] *

New Job Name

When selecting [Enter Job Name] for [Job Name], enter a job name to store in the printer. Enter the job name within 12 characters.

Sample Set dialog box

User ID

Enter the User ID for Sample Print. Enter the User ID within 8 characters.

Job Name

Select the method to specify the job name to store in the printer. When selecting [Use Existing Name], the job name is obtained from the application that sends the print command, and cannot be entered. Specify the job name within 12 characters. When selecting [Enter Job Name], enter a name in [New Job Name].

- [Use Existing Name]
- [Enter Job Name] *

New Job Name

When selecting [Enter Job Name] for [Job Name], enter a job name to store in the printer. Enter the job name within 12 characters.

Paper

Specify the paper size, paper type, and tray settings. Select each menu from the drop-down menu.

Size

Specify the paper size of the file to be printed.

Custom Paper Size dialog box

This is displayed when selecting [Custom] for [Size].

Create a New Form

Select this to create a new custom paper size.

Name

Enter a name of up to 31 characters for the new custom paper size.

Width

Set the width of the custom page. You can specify in 0.01 inch units when setting in inches, in 0.1mm units when setting in millimeters, and in 1point units when setting in points.

Length

Set the length of the custom page. You can specify in 0.01 inch units when setting in inches, in 0.1mm units when setting in millimeters, and in 1point units when setting in points.

Units

When setting the custom page, switch the units displayed for [Width] and [Length] between millimeters, inches, and points.

NOTE:

- When switching the unit display, allow for a slight margin of error.

Share it with Other Users

Select this to share the new custom paper size with other users or print drivers.

Save button

Click this button to save the new custom paper size.

Delete button

Select a custom paper size you want to delete from the list and click this button to delete the custom paper size.

Type

Specify the type of paper to be printed.

- [Automatically Select] *
- [Plain]
- [Lightweight Cardstock]
- [Heavyweight Cardstock]
- [Hole Punched]
- [Letterhead]
- [Labels]
- [Lightweight Glossy Cardstock]
- [Heavyweight Glossy Cardstock]
- [Envelope]
- [Colored]
- [Other Type]

Select By Tray

Select the paper tray to use for printing.

- [Auto Paper Select] *
- [Tray1]
- [Tray2]
- [Bypass Tray]

NOTE:

- The paper tray displayed may differ depending on the paper trays installed.

Advanced Paper Selection

Selecting this displays the [Advanced Paper Selection] dialog box. You can set the detailed paper settings.

Advanced Paper Selection dialog box

You can specify not only the paper size, paper type and tray settings, but also the scale options and feeding orientation of the bypass tray in this dialog box.

NOTE:
- You can restore defaults by clicking [Defaults].

Paper Tray

Select the paper tray to use for printing. This feature is the same as [Select By Tray] in the [Paper] drop-down menu.

Original Document Size

Specify the paper size of the file to be printed. This feature is the same as [Size] in the [Paper] drop-down menu.

Scale Options

Specify whether to print a file by reducing/enlarging to the different size by selecting [Output Paper Size].
- [No Scaling] *
- [Automatically Scale]

Output Paper Size

Specify the paper size of the output. This feature is available when [Scale Options] is set to [Automatically Scale].

Paper Type

Specify the type of paper to be printed.This feature is the same as [Type] in the [Paper] drop-down menu.

Bypass Feed Orientation

Specify the orientation for loading paper when using the bypass tray for printing. This is set to [Portrait] when loading by aligning the short edge of the paper in the bypass tray, and [Landscape] when loading by aligning the long edge of the paper. If the orientation is restricted according to the paper size, this setting is invalid, and the paper is printed in the orientation in which it is set. This feature is available when [Paper Tray] is set to [Bypass Tray], and the paper size is set to a custom paper size whose width and length are between 127.0 mm and 215.9 mm.
- [Portrait] *
- [Landscape]

2-Sided Print

Specify whether to print on both sides of the paper. For duplex printing, documents can be flipped either on the short edge or the long edge. Select according to the edge to be bound. The documents are printed with the topward orientation of the front and rear images unified in respect to the short edge of the documents when selecting [2-Sided Print, Flip on Short Edge] or the long edge of the documents when selecting [2-Sided Print].
- [1-Sided Print] *
- [2-Sided Print]
- [2-Sided Print, Flip on Short Edge]

Output

Specify the output method. Select [Collated] to print multiple sets of a document with multiple pages in sets. Select [Uncollated] to print multiple sets of a document with multiple pages by page. This feature is available when [Hard Disk] is set to [Installed] or [Memory Capacity] is set to other than [512MB] (for the DocuPrint CM405 df) or [256MB] (for the DocuPrint CP405 d) on the [Installable Options] dialog box of the [Configuration] tab, or [EMF Spooling] is set to [Enabled] on the [Advanced] tab.
- [Collated] *
- [Uncollated]

Output Color

Specify the color mode. Select [Color] or [Black and White]. When selecting [Black and White], even pages in which color is used are printed in black and white. The result of a setting change is reflected on the image at the left. You can also click this image and change the setting.

- [Color] *
- [Black and White]

Saved Settings

Register each setting value of the print driver in advance, and you easily can set the print driver.

Load

When selecting this, the [Load Job Setting] dialog box is displayed, and you can load and reuse the pre-registered settings.

Save

When selecting this, the [Save Settings As] dialog box is displayed, and you can save settings.

Status

This starts the browser of the computer used, connects to CentreWare Internet Services, and displays the status of the printer. To use CentreWare Internet Services, Internet service must be started at the printer.

NOTE:

- When connecting by other than TCP/IP, this function is not available.

Image Options Tab Settings

This section describes the settings in the [Image Options] tab.
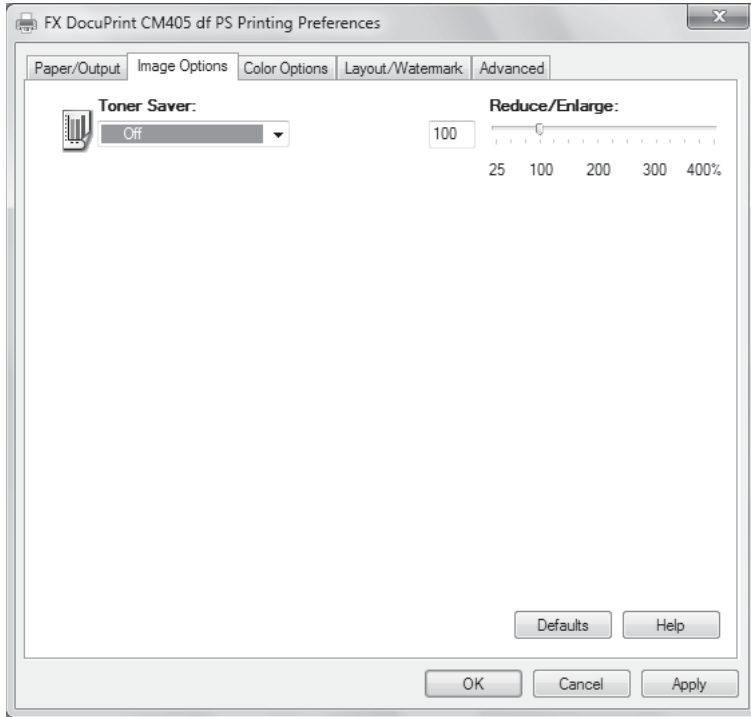
NOTE:
- You can restore defaults by clicking [Defaults].

• Settings

Toner Saver

You can select whether to use the Toner Saver feature. If the value other than [Off] is selected, less toner will be used for printing and the output will appear in lighter density. Use this feature to print draft documents that do not require high quality.

- [Off] *
- [On(Light)]
- [On(Lighter)]
- [On(Lightest)]

Reduce/Enlarge

You can specify the magnification for printing. The magnification can be specified in the range of 25% to 400% in increments of 1%.

Specify a value using the slider or by entering on the keyboard.

Color Options Tab Settings

This section describes the settings in the [Color Options] tab.
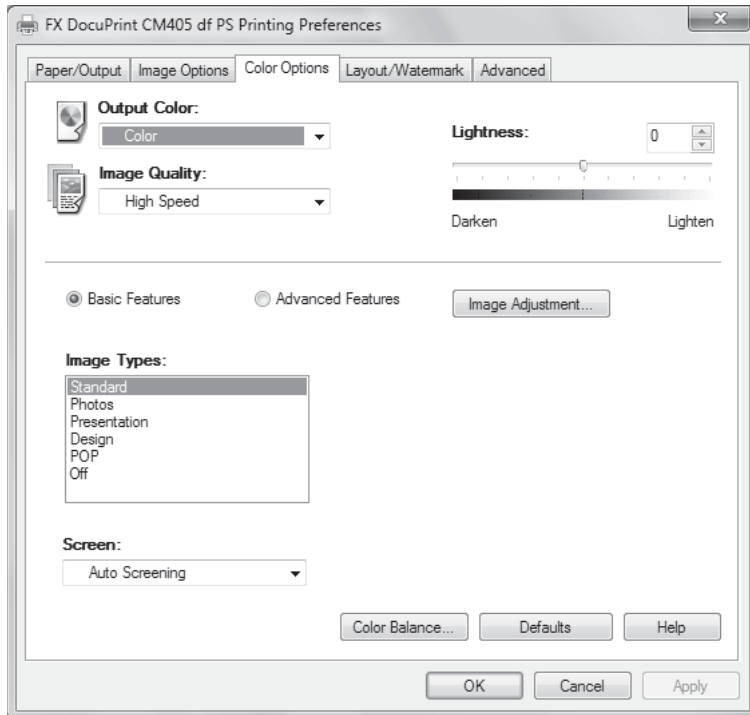
NOTE:

- You can restore defaults by clicking [Defaults].

• Settings

Output Color

Specify the color mode. Select [Color] or [Black and White]. When selecting [Black and White], even pages in which color is used are printed in black and white. The result of a setting change is reflected on the image at the left. You can also click this image and change the setting.

- [Color] *
- [Black and White]

Image Quality

Specify image quality for printing. Select [High Speed] to print quickly irrespective of the image quality. Select [High Quality] to print fine lines, etc. Select [High Resolution] to print in high resolution.

- [High Speed] *
- [High Quality]
- [High Resolution]

Lightness

Specify the lightness of colors printed throughout the document. You can adjust in 11 levels within the range of [-5] to [5].

Basic Features

This feature automatically sets the color correction of RGB images according to the object printed. However, this is not available when [Output Color] is set to [Black and White]. [Basic Features] is selected automatically as default.

Advanced Features

You can set the color adjustment of RGB images of documents. However, this is not available when [Output Color] is set to [Black and White]. [Basic Features] is selected automatically as default.

Image Adjustment button

The [Image Adjustment] dialog box is displayed. Set [RGB Color Correction], [Source RGB Profile], [RGB Gamma Correction], and [RGB Color Temperature].

Image Adjustment dialog box

You can set the vividness of RGB images. When selecting [Basic Features], you can set the details for only [RGB Gamma Correction].

RGB Color Correction

Set the color correction method for RGB images in documents. You can set this item only when [Advanced Features] is selected.

- [Perceptual] *

    This prioritizes gradation when correcting color. This corrects color while maintaining balance among photographs and graphics.

- [Saturation]

    This prioritizes saturation when correcting color. This corrects the vividness toward graphics.

- [Relative Colorimetric]

    This harmonizes colors for the color domain that can be reproduced, and corrects colors of a different color domain that cannot be reproduced by the printer to the closest possible color.

- [Absolute Colorimetric]

    This mode does not adjust the white of paper with the white of data entered. Depending on the RGB temperature color setting, even white sections may be printed with color.

NOTE:

- After closing the dialog box, the values specified here are shown in [RGB Color Correction] displayed on the [Color Options] tab.

Source RGB Profile

Specify the RGB entry profile. This specification is combined with the RGB color correction setting for outputting documents. You can set this item only when [Advanced Features] is selected.

- [sRGB] *
- [Adobe RGB (1998)]
- [Custom1] - [Custom5]

RGB Gamma Correction

Use the RGB gamma correction function and you can adjust the brightness of RGB images in documents. Select to suit the display used. Setting the value larger prints darker. The default setting is [2.2].

- [1.0]
- [1.4]
- [1.8]
- [2.2] *
- [2.6]

RGB Color Temperature

Select the color temperature on the display so as to print with the color closest to the color displayed on the monitor. You can set this item only when [Advanced Features] is selected.

- [5000K (D50)]
- [6500K (D65)] *
- [9300K]

Image Types

You can specify a printing mode to match the characteristics of the document to be printed.This feature is available when [Basic Features] is selected.

- [Standard] *

    Suitable for printing documents containing a mixture of text, graphs and photographs.

- [Photos]

    Suitable for printing photographs taken with digital cameras.

- [Presentation]

    Vividly prints application palette colors. This mode is suitable for printing presentation materials using color graphics.

- [Design]

    Reproduces the impression of a monitor graphic image on paper. This mode is suitable for printing web pages or DTP data.

- [POP]

    Faithfully reproduces the color. This mode is suitable for printing bright color documents such as POP or fliers.

- [Off]

    To deselect image type, select [Off].

Screen

Adjust the image quality to suit the settings.

- [Auto Screening] *

    The screen is set automatically.

- [Fineness]

    This prioritizes the reproduction of characters and lines.

- [Standard]

    This more beautifully reproduces documents containing photographs, etc.

- [Gradation]

    This prioritizes the reproduction of diagrams and graphs.

Color Balance button

The [Color Balance] dialog box is displayed. You can adjust the density of colors.

Color Balance dialog box

When selecting the [Adjust Color Balance] check box, you can finely adjust the toner density for CMYK (cyan / magenta / yellow / black). Select the color to be adjusted from [Target Color], and adjust it with the keyboard or the up and down buttons below the [Highlights], [Midtones], and [Shadows] graphs. For each color, you can adjust high density, middle density, and low density each in seven levels from -3 to +3.

NOTE:

- When selecting [Black and White] for [Output Color], you can adjust only black.

Layout/Watermark Tab Settings

This section describes the settings in the [Layout/Watermark] tab.
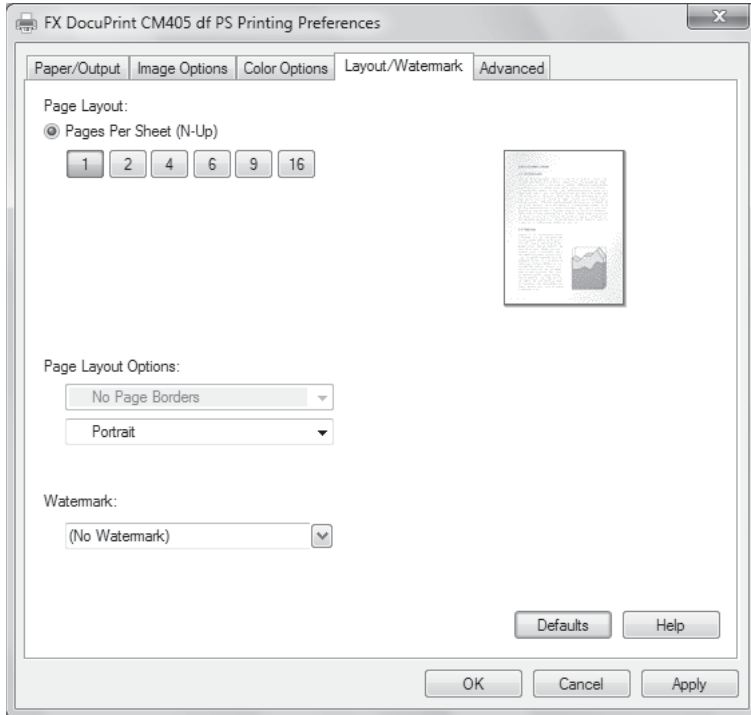
NOTE:

- You can restore defaults by clicking [Defaults].

• Settings

Page Layout

Pages Per Sheet (N-Up)

The printer consecutively accumulates and prints 2, 4, 6, 9, or 16 pages of documents on one sheet of paper.

- [1] *
- [2]
- [4]
- [6]
- [9]
- [16]

Page Layout Options

On the upper combo box, specify whether to add a border around every page of the original document when printing in N-Up layout. This feature is available only when [2] or more is selected for [Pages Per Sheet (N-Up)].

- [No Page Borders] *
- [Draw Page Borders]

On the lower combo box, specify the orientation of the document.

- [Portrait] *
- [Landscape]

Watermark

Select a watermark you want to overlay on your job. You can select pre-registered watermarks or register and edit a custom watermark.

- [(No Watermark)] *

    Does not overlay a watermark.

- [Confidential]

- [Circulate]

- [Reference]

- [Urgent]

- [Copy Prohibited]

- [Handle With Care]

    The six items above are standard watermarks pre-registered in the print driver.

    NOTE:
    - When you register for a new watermark, the new watermark is displayed under the standard watermarks in the order of registration.

- [Options]

    When any watermark is selected, the following submenus to set a watermark printing method are available.

    - [Print in Foreground]

        Prints watermarks over the document image.

    - [Print in Background]

        Prints watermarks behind the document image.

    - [Blend with Job] *

        Prints transparent watermarks leaving the document image visible.

    - [Print on All Pages] *

        Prints watermarks on all pages.

    - [Print on Page1 Only]

        Prints watermarks on only the first page of the file.

- [New]

    Select this to display the [Watermark Editor] dialog box, and register a new watermark.

- [Edit]

    Select a watermark to edit and select this to dislplay the [Watermark Editor] dialog box, and change the settings.

- [Delete]

    Select a watermark to delete and select this to delete the watermark.

Watermark Editor dialog box

You can specify the details of a new watermark to be registered or watermarks already registered.

Advanced Tab Settings

This section describes the settings in the [Advanced] tab. Select the items on the [Advanced] tab, and change the settings in the menu displayed at the right side. Click [+] to display the content, and click [-] to close the menu. * is the default setting.

Refer to the descriptions under each item name about how to set the document options.
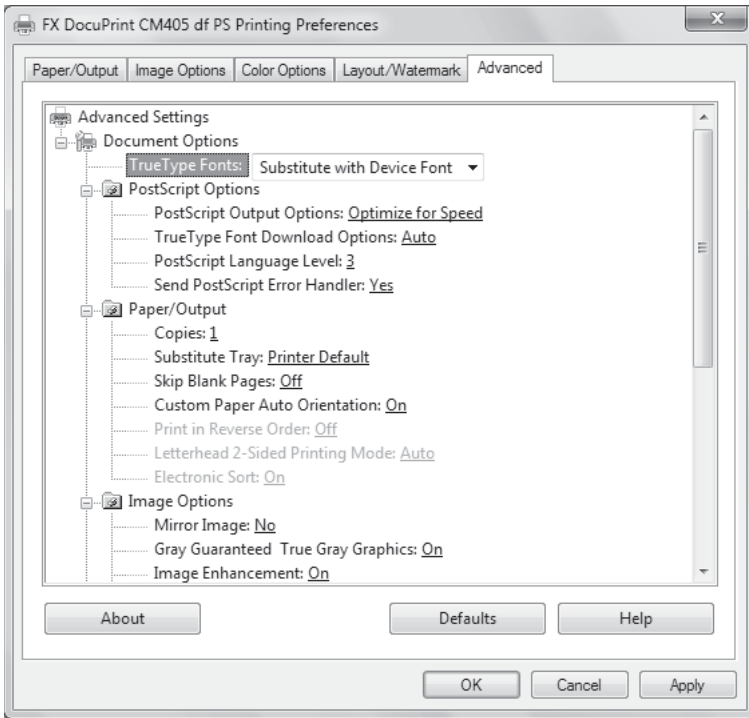
• Settings

Document Options

TrueType Fonts

Specify the printing method for TrueType fonts.

- [Substitute with Device Font] *

  Replaces the TrueType fonts used in a document with the fonts installed on the printer and prints.

- [Download as Softfont]

  Downloads the TrueType fonts used in a document to the printer and prints.

PostScript Options

PostScript Output Options

Specify an output format for the PostScript files. Normally, select [Optimize for Speed].

- [Optimize for Speed] *
- [Optimize for Portability]
- [EPS (Encapsulated PostScript)]
- [Archive Format]

TrueType Font Download Options

Specify how to download TrueType fonts to the printer.

- [Auto] *

  An appropriate download method is automatically determined by the print driver.

- [Outline]

  Converts to the PostScript outline font and downloads it to the printer. Suitable for printing larger texts.This option is also useful for reducing the size of a print job when the same fonts frequently appear in various sizes in a document.

- [Bitmap]

  Downloads in a bitmap format. Suitable for printing smaller size texts.

- [Native TrueType]

  Downloads the TrueType fonts as they are. Faithfully reproduces the fonts in the document.This option is also useful for outputting a PostScript print job as a file and printing it from another PostScript printer.

PostScript Language Level

Specify the PostScript language level. The larger the value, the higher the language level and the more functionality the print driver provides.

- [1]

  This is the minimum value.

- [2]

- [3] *

  This is the maximum value.

Send PostScript Error Handler

Specify whether to send a message to the printer when any error relating PostScript occurs. When [Yes] is selected, if any error is detected for a print job, the printer prints a message.

- [Yes] *
- [No]

Paper/Output

Copies

Specify the number of copies to be printed.

Substitute Tray

- [Printer Default] *

  Uses the printer settings. Confirm the settings on the operator panel of the printer.

- [Display Message]

  Displays paper supply messages on the operator panel. Printing is impossible until paper is supplied.

- [Feed from Bypass Tray]

  Prints by feeding paper loaded in the bypass tray.

- [Use Closest Size (Reduce to Fit)]

  Selects the closest paper size and automatically adjusts the image size as necessary.

- [Use Closest Size (100%)]

  Selects the closest paper size, and prints the image at its original size.

- [Use Larger Size (Reduce to Fit)]

  Selects a paper size larger than the image, and automatically adjusts the image size as necessary.

- [Use Larger Size (100%)]

  Selects a paper size larger than the image, and prints the image at its original size.

Skip Blank Pages

Specify whether to skip blank pages when printing documents that contain blank pages.

- [Off] *
- [On]

Custom Paper Auto Orientation

Specify whether to correct the orientation when printing on paper custom-set by the user. When printing on paper custom-set by the user, and the orientation of the print result is rotated 90 degrees in respect to the custom-set paper, set this feature to [On].

- [Off]
- [On] *

Print in Reverse Order

Specify whether to print documents in reverse order. This feature is available when [EMF Spooling] is set to [Enabled] on the [Advanced] tab.

- [Off] *
- [On]

Letterhead 2-Sided Printing Mode

Set whether or not to enable the letterhead 2-sided printing mode when the paper type is set to [Letterhead] or [Hole Punched] on the [Paper/Output] tab.

- [Auto] *
- [Enable]
- [Disable]

Electronic Sort

Set whether to enable electronic sorting. When [On], the print job is collated by the printer. When [Off], the print job is collated by the host (the print driver).

This feature is available when [Hard Disk] is set to [Installed] or [Memory Capacity] is set to other than [512MB] (for the DocuPrint CM405 df) or [256MB] (for the DocuPrint CP405 d) on the [Installable Options] dialog box of the [Configuration] tab, and [EMF Spooling] is set to [Enabled] on the [Advanced] tab.

- [Off]
- [On] *

Image Options

Mirror Image

Specify whether to print mirror-reversed images.

- [Yes]
- [No] *

Gray Guaranteed True Gray Graphics

Specify whether to print color in black only. Select [On] to print tint in black only. However, this is not applied to the image. Select [Off] not to print color in black only.

- [Off]
- [On] *

Image Enhancement

Specify whether to use the Image Enhancement function. When selecting [On], the edges of the printed image are smoothed. However, when printing images (bitmaps) composed of rough mesh dots, halftones may not be reproduced smoothly. In this case, set this feature to [Off]. Printing speed is identical for [On] and [Off].

- [Off]
- [On] *

Resolustion

Specify the resolution to be notified to a system or application from the print driver. When the print driver notifies the system or application of the printer resolution, if the value of the notified resolution is high, an error may occur depending on the application. In this case, you can solve the error by changing the resolution to be notified of.

Select [600dpi] when notifying 1200 dpi causes problems such as the rendering coordinates are miscalculated or the fine lines are not rendered.

[1200dpi] is available when [Image Quality] is set to [High Resolution] on the [Color Options] tab.

- [600dpi] *
- [1200dpi]

Modify Dash / Dot Lines of Output

Set this feature to [On] if dash or dotted lines are printed as solid lines.

- [Off] *
- [On]

NOTE:

- Depending on the application, this may not function effectively. Lines printed as solid lines until now may be printed as dash or dotted lines.

Color

Specify whether to print PostScript print jobs generated by the print driver in color or black and white.

- [Black and White]
- [Color] *

ICM Method

Specify whether to perform ICM processing when printing a color document.

- [ICM Disabled] *

  Disables ICM processing.

- [ICM Handled by Host System]

  Enables the computer to calculate the consistency of the color of print data before it is sent to the printer.

- [ICM Handled by Printer]

  Enables the printer to calculate the consistency of the color of print data. In this case, the color allocation rule is created in the computer and downloaded to the printer. Based on this rule, the printer calibrates the document color. This option is available when PostScript Language Level is 2 or higher.

- [ICM Handled by Printer using printer calibration]

  Select this if an allocation rule is already downloaded to the printer that calculates the consistency of the color of print data. In this case, a color allocation rule is not newly created in the computer.

NOTE:

- The items in [Output Color] on the [Paper/Output] tab and the items on the [Color Options] tab cannot be specified when items other than [ICM Disabled] are specified.

ICM Intent

Specify the type or objective of images to be printed when using ICM processing.

- [Graphics]

  Select this when printing graphs and other documents in vivid colors.

- [Pictures] *

  Select this when printing documents such as photographs or pictures in mixed colors.

- [Proof]

  Select this if the printer has specific inks used in a document and you wish to exactly match the ink colors between the two.

- [Match]

  Select this to preview the color settings from other machines.

Invalidate Color Profile

Specify whether to apply or disable a color profile if the color profile is set by the application or the print driver.

- [Off] *
- [On]

Halftone Screen Lock

Specify whether to enable the halftone settings on the printer. Selecting [On] prioritizes the printer's halftone settings over the settings specified by an application.

- [Off]
- [On] *

Highspeed for monochrome documents

Specify whether to raise the printing speed for monochrome pages when printing mixed color and monochrome documents when [Color] is selected for [Output Color].

- [Off] *

  Makes monochrome and color pages print at the same speed.

- [On]

  Makes monochrome pages print faster than color pages.

NOTE:
- When [On] is selected, the overall print speed for whole documents might be slower than when [Off] is selected due to the time required for the printer to switch print speed.

Trapping

Specify whether to prevent the white color from running in spaces between black and colored areas due to the thinning of the toner colors.

- [Off] *
- [On]

Layout

Image Rotation 180 Degrees

Specify the rotation of the prints by 180 degrees. When selecting [2] or more for [Pages Per Sheet (N-Up)] on the [Layout/Watermark] tab, the printer rotates and prints each page.

- [No Rotation] *
- [Landscape]
- [Portrait]
- [Portrait and Landscape (For envelopes)]

Others

EMF Spooling

Specify whether to use the EMF (enhanced metafile) format for temporary storing print data (spooling). When [Disabled] is selected, the RAW format created by the print driver is used.

- [Enabled]
- [Disabled] *

Use Document Monitor

Specify whether to enable Document Monitor to confirm the print jobs.

- [Off]
- [On] *

NOTE:
- This feature is displayed if Document Monitor is installed on the computer.

About

About dialog box

Fuji Xerox Web Site button

Click this button to start the browser of the computer used and display the driver download service page on the Fuji Xerox Web Site. You can download the latest print drivers from this web site.

Help

Help

Click this button to display the Help window for the print driver.

■ Mac OS X Device Options and Print Driver Settings

This section describes printer specific settings for print driver properties. For other items, refer to the Help.

Although the setting procedure differs for Mac OS X 10.3.9-10.4 and Mac OS X 10.5-10.8, the setting items are common.

Device Options Settings

• Mac OS X 10.3.9-10.4

To print correctly, it is necessary to make the appropriate settings described in this section.

1 Select the printer with [Printer List] of [Printer Setup Utility], then click [Show Info].

The [Printer Info] dialog box appears.

2 Select [Installable Options], then select the options installed on the printer.
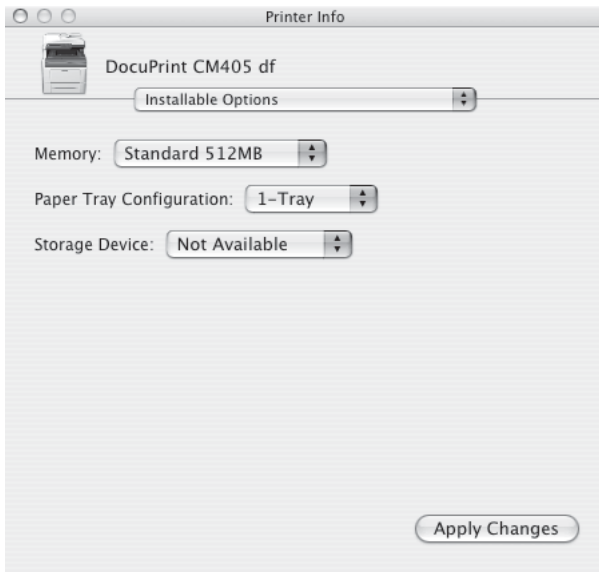
NOTE:
- Although you can set the options, processing will not be executed correctly if functions related to the options are set incorrectly with the settings of other functions.

• Mac OS X 10.5-10.8

To print correctly, it is necessary to make the appropriate settings described in this section.

1 Select the printer with [Print & Fax] ([Print & Scan] for Mac OS X 10.7/10.8) of [System Preferences], then click [Options & Supplies].

The dialog box appears.

2 Select [Driver], then select the options installed on the printer.
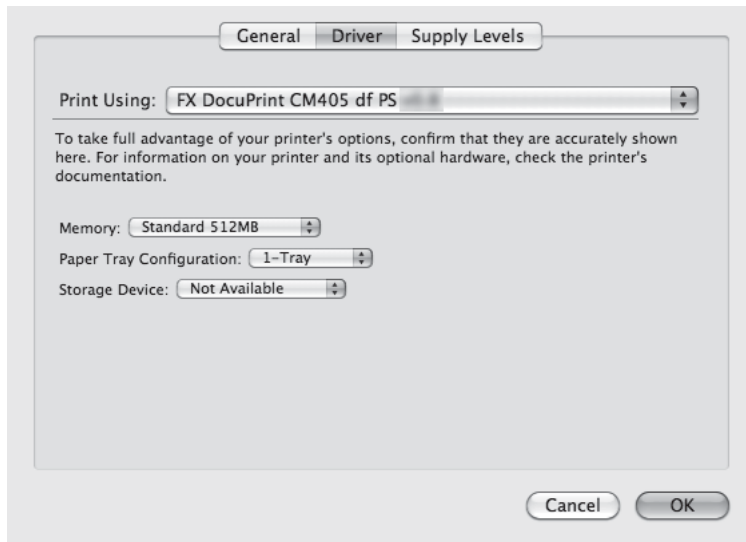
General | Driver | Supply Levels

Print Using: FX DocuPrint CM405 df PS

To take full advantage of your printer's options, confirm that they are accurately shown here. For information on your printer and its optional hardware, check the printer's documentation.

Memory: Standard 512MB

Paper Tray Configuration: 1-Tray

Storage Device: Not Available

Cancel   OK

NOTE:
- Although you can set the options, processing will not be executed correctly if functions related to the options are set incorrectly with the settings of other functions.

• Settings

This explains the items to be set with [Driver] of [Options & Supplies]. * is the default setting.

NOTE:
- For Mac OS X 10.3.9/10.4, set in [Installable Options].

Memory

Specify the amount of printer memory.
- [Standard 256MB] *
- [512MB]
- [768MB]
- [1024MB]

NOTE:
- For the DocuPrint CM405 df, [Standard 256MB] is not available and [Standard 512MB] is the default setting.

Paper Tray Configuration

Sets the paper tray configuration of the printer.
- [1-Tray] *
- [2-Tray]

Storage Device

Select the storage device to utilize. Select [Hard Disk] or [RAM Disk] to print a Sample Print or Secure Print Job.
- [Not Available] *
- [Hard Disk]
- [RAM Disk]

Printer Features Settings

This section describes the settings that relate specifically to the print driver.

1 On the [File] menu of the application, click [Print].

The print dialog box appears.

2 Make sure that your printer is selected for [Printer].

3 Select [Printer Features].
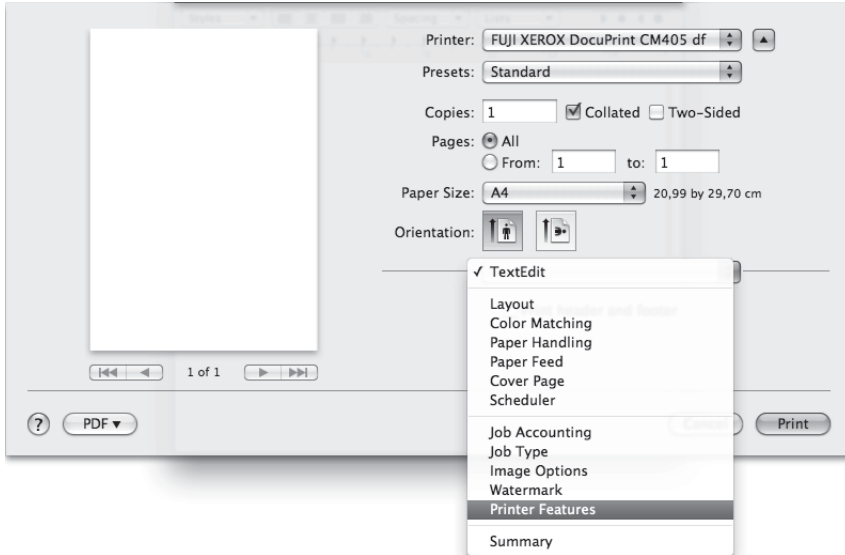
4 Specify the functions that you want to set.
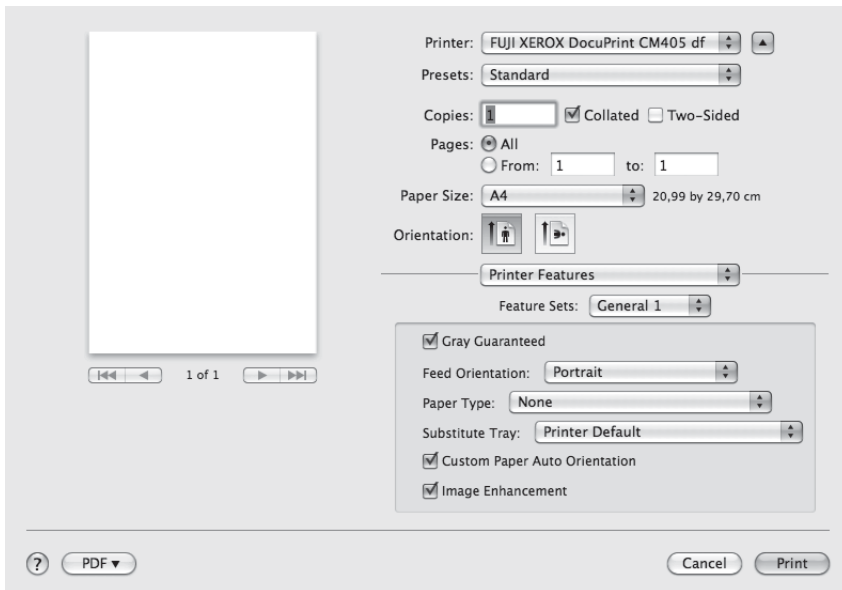
• Settings

This describes the settings in [Printer Features]. * is the default setting.

Feature Sets

Switches between [General 1] and [General 2] of [Printer Features].

- [General 1] *
- [General 2]

NOTE:

- For Mac OS X 10.3.9/10.4, [Set 1] and [Set 2] appear in place of [General 1] and [General 2] for [Printer Features]. The default setting is [Set 1].

Gray Guaranteed

Specify whether to print color in black only.

Feed Orientation

Specify the orientation for loading paper when using the bypass tray for printing. This is set to [Portrait] when loading by aligning the short edge of the paper in the the bypass tray. If the orientation is restricted according to the paper size, this setting is invalid, and the paper is printed in the orientation in which it is set.

- [Landscape]
- [Landscape (Rotated)]
- [Portrait] *
- [Portrait (Rotated)]

Paper Type

Specify the type of paper to be printed.

- [None] *
- [Plain]
- [Lightweight Cardstock]
- [Hole Punched]
- [Heavyweight Cardstock]
- [Letterhead]
- [Labels]
- [Colored]
- [Other Type]
- [Lightweight Glossy Cardstock]
- [Heavyweight Glossy Cardstock]
- [Envelope]

Substitute Tray

When selecting [Auto Select] for [Paper Feed], specify the operation when the size of the paper to be printed is not loaded in the printer.

- [Printer Default] *

    Uses the printer settings. Confirm the settings on the operator panel of the printer.

- [Display Message]

    Displays paper supply messages on the operator panel. Printing is impossible until paper is supplied.

- [Use Closest Size (Reduce to Fit)]

    Selects the closest paper size and automatically adjusts the image size as necessary.

- [Use Closest Size (100%)]

    Selects the closest paper size, and prints the image at its original size.

- [Use Larger Size (Reduce to Fit)]

    Selects a paper size larger than the image, and automatically adjusts the image size as necessary.

- [Use Larger Size (100%)]

    Selects a paper size larger than the image, and prints the image at its original size.

- [Feed from Bypass Tray]

    Prints by feeding paper loaded in the bypass tray.

Custom Paper Auto Orientation

Specify whether to correct the orientation when printing on paper custom-set by the user. When printing on paper custom-set by the user, and the orientation of the print result is rotated 90 degrees in respect to the custom-set paper, enable this feature.

Image Enhancement

Specify whether to use the Image Enhancement function. When selecting the check box, the edges of the printed image are smoothed. However, when printing images (bitmaps) composed of rough mesh dots, halftones may not be reproduced smoothly. In this case, clear the check box. Enabling or disabling this feature does not affect print speed.

Draft Mode

You can select whether to use the Toner Saver feature. If the value other than [Off] is selected, less toner will be used for printing and the output will appear in lighter density. Use this feature to print draft documents that do not require high quality.

- [Off] *
- [On(Light)]
- [On(Lighter)]
- [On(Lightest)]

Skip Blank Pages

Specify whether to skip blank pages when printing documents that contain blank pages.

Halftone Screen Lock

Sets halftone screens. Selecting the check box prioritizes the halftone settings on the printer over the settings specified by an application.

High speed for monochrome documents

Increases the print speed of monochrome pages when printing both color and monochrome pages. Selecting the check box prints monochrome pages faster than color pages. Clearing the check box prints both color and monochrome pages at the same speed.

Trapping

Sets whether or not to enable trapping.

Letterhead Duplex Mode

Sets whether or not to enable the letterhead duplex mode.

- [Auto] *
- [Off]
- [On]

Job Type Settings

This describes the settings in [Job Type].
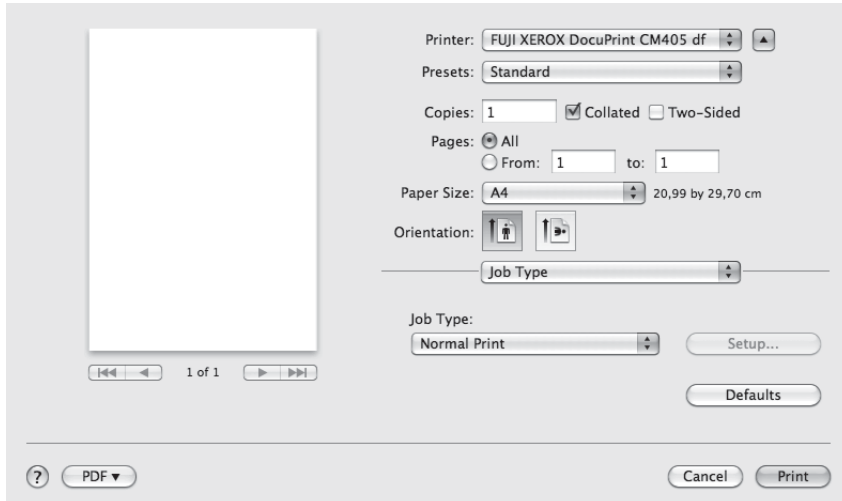
NOTE:
• You can restore defaults by clicking [Defaults].

• Settings

Job Type

Specify the job type.

NOTE:
• For the DocuPrint CP405 d, [Secure Print] and [Sample Set] are available only when [Hard Disk] or [RAM Disk] is selected for [Storage Device] in the device options.

   • [Normal Print] *

   Select to print normally.

   • [Secure Print]

   Accumulates data specified to be printed within the printer, and outputs by an instruction from the printer. Click [Setup], and set each item on the [Setup] dialog box displayed.

   • [Sample Set]

   When printing multiple copies, you can print only one set initially to confirm the print result, and then the remaining sets are output by an instruction from a printer. Click [Setup], and set each item on the [Setup] dialog box displayed.

Setup dialog box

User ID

Enter the User ID for Secure Print and Sample Print. Enter the User ID within 8 characters.

Secure Print Passcode

Enter the Passcode corresponding to the [User ID] for Secure Print. The Passcode can be entered up to 12 numeric characters. It will be displayed as bullets (•). This item is displayed only when [Secure Print] is selected for [Job Type].

Job Name

Select the method to specify the document name to store in the printer. When selecting [Use Existing Name], the document name is obtained from the application that sends the print command, and cannot be entered. Document names that exceed 12 characters are truncated. When selecting [Enter Job Name], enter a name in [New Job Name].

- [Use Existing Name]
- [Enter Job Name] *

New Job Name

When selecting [Enter Job Name] for [Job Name], enter a document name to store in the printer. Enter the document name within 12 characters.

Job Accounting Settings

This describes the settings in [Job Accounting].
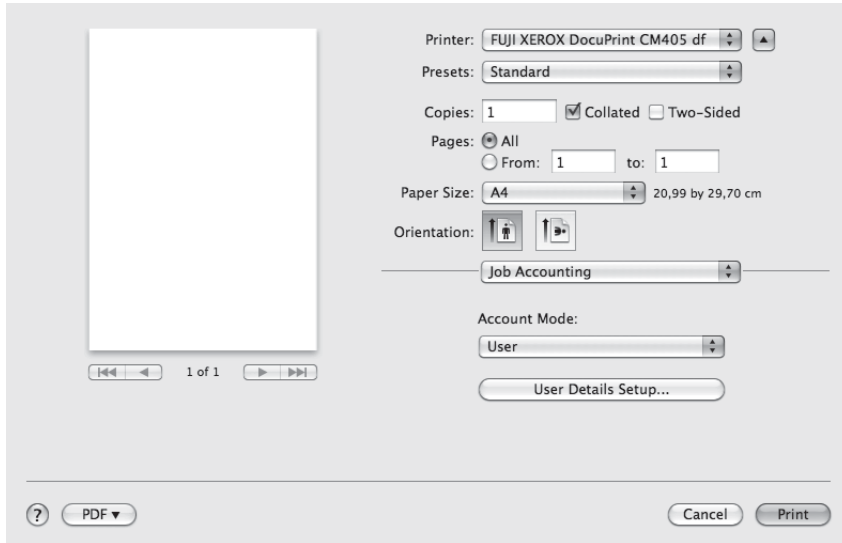
• Settings

Account Mode

Specify whether all users or only System Administrators to change authentication related settings. If the user currently logged into Mac OS X does not have authority to access printer settings, the settings cannot be changed. When selecting [Administrator], account management operates in the mode set by the administrator, and the user cannot change this. The setting can differ, per printer icon. When selecting [User], each user can change the account management settings. The setting can differ, per user.

- • [Administrator]
- • [User] *

User Details Setup

When selecting [User Details Setup], the [User Details Setup] dialog box is displayed. Set each item for executing user authentication when printing.

NOTE:
- • If the user currently logged into Mac OS X does not have authority to access printer settings, the settings are grayed out and cannot be changed.
- • You can restore defaults by clicking [Defaults].

Always Use Default User Details

The values set in this feature are used as the authentication parameters such as the user name when printing.

- • [Specify Job Owner Name]

  Select how to specify the User ID (job owner name). The User ID is used when using the print job billing function.

  - • [Use Login Name] *

    Your Mac OS X login ID is used as the User ID. Your Mac OS X login ID is displayed in [User ID], and the [User ID] text box cannot be edited.

  - • [Enter Owner Name]

    Select to specify the User ID.

- • [User ID]

  Enter an arbitrary User ID in [User ID]. Enter the User ID within 32 characters.

- • [Passcode]

  Enter an arbitrary Passcode for the User ID. Enter the Passcode within 4 to 12 alphanumeric characters. It will be displayed as bullets (•).

Prompt User for Entry when Submitting Job

Select this feature to display the [Enter User Details] dialog box each time you start printing. The user is then required to enter authentication information such as their User ID and Passcode.

Image Options Settings

This describes the settings in [Image Options].
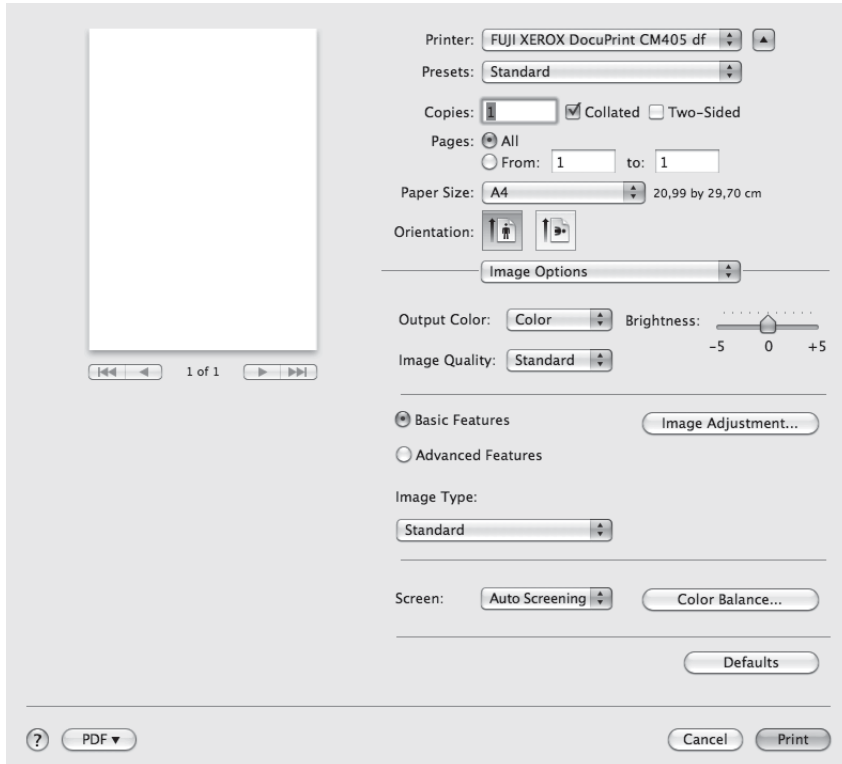
NOTE:
- You can restore defaults by clicking [Defaults].

• Settings

Output Color

Specify the color mode. When selecting [Black and White], even pages for which color is used are printed in black and white.

- [Color] *
- [Black and White]

Image Quality

Specify image quality for printing. Select [Standard] to print quickly irrespective of the image quality. Select [High Quality] to print fine lines, etc. Select [High Resolution] to print in high resolution.

- [Standard] *
- [High Quality]
- [High Resolution]

Brightness

Specify the brightness of colors printed throughout the document. You can adjust in 11 levels within the range of [-5] to [+5].

Basic Features

This feature automatically sets the color correction of RGB images according to the object printed. However, this is not available when [Output Color] is set to [Black and White].

Advanced Features

You can set the color adjustment of RGB images of documents. However, this is not available when [Output Color] is set to [Black and White].

Image Adjustment button

The [Image Adjustment] dialog box is displayed. Set [RGB Color Correction], [Source RGB Profile], [RGB Gamma Correction], [RGB Color Temperature], and [Invalidate Color Profile].

Image Adjustment dialog box

You can set the vividness of RGB images. When selecting [Basic Features], you can set the details for only [RGB Gamma Correction] and [Invalidate Color Profile].

RGB Color Correction

Set the color correction method for RGB images in documents.

- [Perceptual] *

  This prioritizes gradation when correcting color. This corrects color while maintaining balance among photographs and graphics.

- [Saturation]

  This prioritizes saturation when correcting color. This corrects the vividness toward graphics.

- [Relative Colorimetric]

  This harmonizes colors for the color domain that can be reproduced, and corrects colors of a different color domain that cannot be reproduced by the printer to the closest possible color.

- [Absolute Colorimetric]

  This mode does not adjust the white of paper with the white of data entered. Depending on the RGB temperature color setting, even white sections may be printed with color.

Source RGB Profile

Specify the RGB entry profile. This specification is combined with the RGB color correction setting for outputting documents.

- [sRGB] *
- [Adobe RGB (1998)]

RGB Gamma Correction

Use the RGB gamma correction function and you can adjust the brightness of RGB images in documents. Select to suit the display used. Setting the value larger prints darker. The default setting is [1.8].

- [1.0]
- [1.4]
- [1.8] *
- [2.2]
- [2.6]
- [Off]

RGB Color Temperature

Select the color temperature on the display so as to print with the color closest to the color displayed on the monitor.

- [5000K (D50)]
- [6500K (D65)] *
- [9300K]

Invalidate Color Profile

Selecting the check box invalidates the color profile embedded in a print job.

Image Type

You can specify a printing mode to match the characteristics of the document to be printed. This feature is available when [Basic Features] is selected.

- [Standard] *

    Suitable for printing documents containing a mixture of text, graphs and photographs.

- [Photos]

    Suitable for printing photographs taken with digital cameras.

- [Presentation]

    Vividly prints application palette colors. This mode is suitable for printing presentation materials using color graphics.

- [Design]

    Reproduces the impression of a monitor graphic image on paper. This mode is suitable for printing web pages or DTP data.

- [POP]

    Faithfully reproduces the color. This mode is suitable for printing bright color documents such as POP or fliers.

- [Off]

    To deselect image type, select [Off].

Screen

Adjust the image quality to suit the settings.

- [Auto Screening] *

    The screen is set automatically.

- [Fineness]

    This prioritizes the reproduction of characters and lines.

- [Standard]

    This more beautifully reproduces documents containing photographs, etc.

- [Gradation]

    This prioritizes the reproduction of diagrams and graphs.

Color Balance button

The [Color Balance] dialog box is displayed. You can adjust the density of colors.

Color Balance dialog box

When selecting the [Adjust Color Balance] check box, you can finely adjust the toner density for CMYK (cyan / magenta / yellow / black). Select the color to be adjusted from [Target Color], and adjust it with the keyboard or the up and down buttons below the [Highlights], [Midtones], and [Shadows] graphs. For each color, you can adjust high density, middle density, and low density each in seven levels from -3 to +3.

NOTE:

- When selecting [Black and White] for [Output Color], you can adjust only black.

Watermark Settings

This describes the settings in [Watermark].
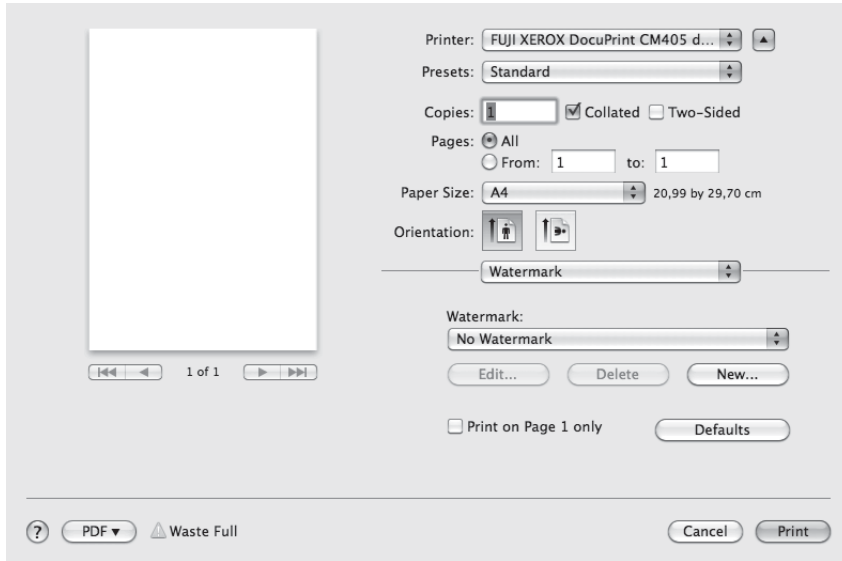
NOTE:

- You can restore defaults by clicking [Defaults].

• Settings

Watermark

By default, only [No Watermark] is available. When you register a watermark, the watermark is added to this list.

Click [New] to register a new watermark. The [Watermark] dialog box is displayed and you can specify the detailed settings.

[Edit] and [Delete] become active when any watermark is registered. To edit a watermark, select the watermark from the list and click [Edit]. The [Watermark] dialog box is displayed and you can edit the settings. To delete a watermark, select the watermark from the list and click [Delete].

Watermark dialog box

You can specify the details of a new watermark to be registered or watermarks already registered.

Print on Page 1 only

Specify whether to print a watermark on the first page of the document only.

5

Barcode Settings

About Barcode Settings

This section explains about the types of compatible barcodes, designated character sets for barcode characters, sizes of printed barcodes, etc.

NOTE:
- This guide assumes that the operator has a basic knowledge of barcodes.

■ Font Types and Character Sets

The table below lists compatible barcode types.

For the character set used to specify each barcode character, see *Character Set Tables on page 85.*

See *Barcode Sizes on page 91* for details about the size of printed barcodes.

Barcode type	PostScript font name	Refer to the following table
JAN	HitachiITHINJANH8-RG	JAN Character Set Table (page 85)
Code 39	HitachiIT-C39H8	Code 39 Character Set Table (page 85)
NW7	HitachiITHINNW7H8-RG	NW7 Character Set Table (page 86)
Code 128	HitachiITHINC128H8-RG	Code 128 Character Set Table (page 86)
ITF (without bearer bar)	HitachiITHINITFH8-RG	ITF (Interleaved 2 of 5) Character Set Table (page 89)
ITF (with bearer bar)	HitachiITHINITFB-RG	
Customer Barcode	HitachiITHINPOSTBC-RG	Customer Barcode Character Set Table (page 90)

Font type	PostScript font name
OCR B LetterPress M	OCRBLetM

NOTE:
- The printed barcode's readability depends largely on factors such as the quality of paper used and performance of the barcode reader.
  Before using this product, we recommend you thoroughly test it under the conditions in which it will be used.

■ Sample Program and Output Results

A program that prints a sample of each type of barcode and a PDF showing the output results are provided. Use these as a reference when printing barcodes.

• Location of the sample program and the output results PDF

Located in the [English] > [Manual] > [Barcode_Sample] folder on the PostScript Driver Library CD.

• Name of sample program name

sample.ps

• Name of output results PDF

sample.pdf

Character Set Tables

This section describes the character sets used when specifying barcode characters for each barcode type.

■ JAN Character Set Table

The table below lists the character sets used when printing JAN barcode characters.

Character	Character set					
	Left side odd parity		Left side even parity		Right side even parity	
	HEX notation	ASCII notation	HEX notation	ASCII notation	HEX notation	ASCII notation
0	30	0	41	A	4B	K
1	31	1	42	B	4C	L
2	32	2	43	C	4D	M
3	33	3	44	D	4E	N
4	34	4	45	E	4F	O
5	35	5	46	F	50	P
6	36	6	47	G	51	Q
7	37	7	48	H	52	R
8	38	8	49	I	53	S
9	39	9	4A	J	54	T
Left side guard bar	22	"				
Right side guard bar	23	#				
Center bar	21	!				

■ Code 39 Character Set Table

The table below lists the character sets used when printing Code 39 barcode characters.

Character	Character set		Character	Character set		Character	Character set	
	HEX notation	ASCII notation		HEX notation	ASCII notation		HEX notation	ASCII notation
$	24	$	8	38	8	M	4D	M
%	25	%	9	39	9	N	4E	N
*	2A	*	(SP)	20	SP	O	4F	O
+	2B	+	A	41	A	P	50	P
-	2D	-	B	42	B	Q	51	Q
.	2E	.	C	43	C	R	52	R
/	2F	/	D	44	D	S	53	S
0	30	0	E	45	E	T	54	T
1	31	1	F	46	F	U	55	U
2	32	2	G	47	G	V	56	V
3	33	3	H	48	H	W	57	W
4	34	4	I	49	I	X	58	X
5	35	5	J	4A	J	Y	59	Y
6	36	6	K	4B	K	Z	5A	Z
7	37	7	L	4C	L	(SP)	40	@

■ NW7 Character Set Table

The table below lists the character sets used when printing NW7 barcode characters.

Character	Character set		Character	Character set		Character	Character set	
	HEX notation	ASCII notation		HEX notation	ASCII notation		HEX notation	ASCII notation
$	24	$	0	30	0	A	41	A
+	2B	+	1	31	1	B	42	B
-	2D	-	2	32	2	C	43	C
.	2E	.	3	33	3	D	44	D
/	2F	/	4	34	4	A	61	a
			5	35	5	B	62	b
			6	36	6	C	63	c
			7	37	7	D	64	d
			8	38	8			
			9	39	9			
			:	3A	:			

■ Code 128 Character Set Table

The table below lists the character sets used when printing Code 128 barcode characters.

Value	Character			Character set	
	CODE A	CODE B	CODE C	HEX notation	ASCII notation
0	SP	SP	00	20	SP
1	!	!	01	21	!
2	"	"	02	22	"
3	#	#	03	23	#
4	$	$	04	24	$
5	%	%	05	25	%
6	&	&	06	26	&
7	'	'	07	27	'
8	(	(	08	28	(
9	)	)	09	29	)
10	*	*	10	2A	*
11	+	+	11	2B	+
12	,	,	12	2C	,
13	-	-	13	2D	-
14	.	.	14	2E	.
15	/	/	15	2F	/
16	0	0	16	30	0
17	1	1	17	31	1
18	2	2	18	32	2
19	3	3	19	33	3
20	4	4	20	34	4
21	5	5	21	35	5
22	6	6	22	36	6
23	7	7	23	37	7
24	8	8	24	38	8

Value	Character			Character set	
	CODE A	CODE B	CODE C	HEX notation	ASCII notation
25	9	9	25	39	9
26	:	:	26	3A	:
27	;	;	27	3B	;
28	<	<	28	3C	<
29	=	=	29	3D	=
30	>	>	30	3E	>
31	?	?	31	3F	?
32	@	@	32	40	@
33	A	A	33	41	A
34	B	B	34	42	B
35	C	C	35	43	C
36	D	D	36	44	D
37	E	E	37	45	E
38	F	F	38	46	F
39	G	G	39	47	G
40	H	H	40	48	H
41	I	I	41	49	I
42	J	J	42	4A	J
43	K	K	43	4B	K
44	L	L	44	4C	L
45	M	M	45	4D	M
46	N	N	46	4E	N
47	O	O	47	4F	O
48	P	P	48	50	P
49	Q	Q	49	51	Q
50	R	R	50	52	R
51	S	S	51	53	S
52	T	T	52	54	T
53	U	U	53	55	U
54	V	V	54	56	V
55	W	W	55	57	W
56	X	X	56	58	X
57	Y	Y	57	59	Y
58	Z	Z	58	5A	Z
59	[	[	59	5B	[
60	\	\	60	5C	\
61	]	]	61	5D	]
62	^	^	62	5E	^
63	_	_	63	5F	_
64	NUL	`	64	60	`
65	SOH	a	65	61	a
66	STX	b	66	62	b
67	ETX	c	67	63	c
68	EOT	d	68	64	d
69	ENQ	e	69	65	e
70	ACK	f	70	66	f
71	BEL	g	71	67	g

Value	Character			Character set	
	CODE A	CODE B	CODE C	HEX notation	ASCII notation
72	BS	h	72	68	h
73	HT	I	73	69	I
74	LF	j	74	6A	j
75	VT	k	75	6B	k
76	FF	l	76	6C	l
77	CR	m	77	6D	m
78	SO	n	78	6E	n
79	SI	o	79	6F	o
80	DLE	p	80	70	p
81	DC1	q	81	71	q
82	DC2	r	82	72	r
83	DC3	s	83	73	s
84	DC4	t	84	74	t
85	NAK	u	85	75	u
86	SYN	v	86	76	v
87	ETB	w	87	77	w
88	CAN	x	88	78	x
89	EM	y	89	79	y
90	SUB	z	90	7A	z
91	ESC	{	91	7B	{
92	FS			92	7C		
93	GS	}	93	7D	}
94	RS	~	94	7E	~
95	US	DEL	95	7F	DEL
96	FNC 3	FNC 3	96	A1	
97	FNC 2	FNC 2	97	A2	
98	SHIFT	SHIFT	98	A3	
99	CODE C	CODE C	99	A4	
100	CODE B	FNC 4	CODE B	A5	
101	FNC 4	CODE A	CODE A	A6	
102	FNC 1	FNC 1	FNC 1	A7	
103	START(CODE A)			A8	
104	START(CODE B)			A9	
105	START(CODE C)			AA	
106	STOP			AB	

■ ITF (Interleaved 2 of 5) Character Set Table

The table below lists the character sets used when printing ITF barcode characters.

Character	Character set		Character	Character set		Character	Character set	
	HEX notation	ASCII notation		HEX notation	ASCII notation		HEX notation	ASCII notation
00	21	!	30	3F	?	60	5D	]
01	22	"	31	40	@	61	5E	^
02	23	#	32	41	A	62	5F	_
03	24	$	33	42	B	63	60	`
04	25	%	34	43	C	64	61	a
05	26	&	35	44	D	65	62	b
06	27	'	36	45	E	66	63	c
07	28	(	37	46	F	67	64	d
08	29	)	38	47	G	68	65	E
09	2A	*	39	48	H	69	66	F
10	2B	+	40	49	I	70	67	G
11	2C	,	41	4A	J	71	68	H
12	2D	-	42	4B	K	72	69	I
13	2E	.	43	4C	L	73	6A	J
14	2F	/	44	4D	M	74	6B	K
15	30	0	45	4E	N	75	6C	L
16	31	1	46	4F	O	76	6D	M
17	32	2	47	50	P	77	6E	N
18	33	3	48	51	Q	78	6F	O
19	34	4	49	52	R	79	70	P
20	35	5	50	53	S	80	71	Q
21	36	6	51	54	T	81	72	R
22	37	7	52	55	U	82	73	S
23	38	8	53	56	V	83	74	T
24	39	9	54	57	W	84	75	U
25	3A	:	55	58	X	85	76	V
26	3B	;	56	59	Y	86	77	W
27	3C	<	57	5A	Z	87	78	X
28	3D	=	58	5B	[	88	79	Y
29	3E	>	59	5C	\	89	7A	Z
90	7B	{	94	A1	DEL	98	A5	
91	7C			95	A2		99	A6	
92	7D	}	96	A3		START	A7	
93	7E	~	97	A4		STOP	A8	

With ITF, one character set specifies the pair of a character denoted by a bar and a character denoted by a space.
However, the START character and the STOP character are specified by one character set.
Example:
To print the pair of characters of the bar representing "3" and the space representing "7", specify "46" (HEX notation).
To print the pair of characters of the bar representing "7" and the space representing "3", specify "6A" (HEX notation).

■ Customer Barcode Character Set Table

The table below lists the character sets used when printing customer barcode characters.

Character	Character set		Character	Character set	
	HEX notation	ASCII notation		HEX notation	ASCII notation
START	3C	<	CC1	61	a
STOP	3E	>	CC2	62	b
-	2D	-	CC3	63	c
0	30	0	CC4	64	d
1	31	1	CC5	65	e
2	32	2	CC6	65	f
3	33	3	CC7	67	g
4	34	4	CC8	68	h
5	35	5			
6	36	6			
7	37	7			
8	38	8			
9	39	9			

Barcode Sizes

The table below lists formulae for figuring the approximate dimensions of printed barcodes.

The dimensions of the barcode printed may vary, even when using the same program, depending on conditions such as the characteristics and resolution of the printer used, paper quality, etc. The dimensions derived from the formulae in this table are not guaranteed to be the actual dimensions of the printed barcodes. Use this table as a reference when estimating the size of printed barcodes.

Barcodes type	Formulae	
	Width	**Height**
JAN (standard)	P × 0.502	P × 0.352
	Side margins not included.	Indicates the height of the guard bar.
JAN (short version)	P × 0.354	P × 0.352
	Side margins not included.	Indicates the height of the guard bar.
Code 39	P × (C + 2) × 0.106	P × 0.352
	Intercharacter gap of the left and right sides not included. "C" includes the checkdigit.	
NW7	P × (C1 × 0.132 + C2 × 0.148 − 0.026)	P × 0.352
	Intercharacter gap of the left and right sides not included. "C1" and "C2" include the checkdigit.	
Code 128	P × (C × 0.081 + 0.096)	P × 0.352
	Formula for CODE C.	
ITF (without bearer bar)	P × ((C/2 × 0.175) +0.093)	P × 0.352
	Quiet zone not included. "C" includes the checkdigit.	
ITF (with bearer bar)	P × ((C/2 × 0.137) + 0.323)	P × 0.352
	Bearer bar and quiet zone included. "C" includes the checkdigit.	Bearer bar included.
Customer Barcode	P × 7.297	P × 0.342
	Spaces before the black bar of START code and after the black bar of the STOP code are not included.	Indicates the height of the long bar.

P: Font size (point)
C: Number of characters
C1: Number of characters (0,1,2,3,4,5,6,7,8,9,-,$)
C2: Number of characters (:,/,.,+,A,B,C,D)

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P

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S

W