Printer Driver Plug-in

Reference Guide

Preface

Welcome to the DDP Server Printer Driver Plug-in!

The Printer Driver Plug-in extends the Printer Driver of the DDP Server printing system. Together with the Printer Driver, it allows to construct a job ticket when a job is printed from an application.

The Printer Driver Plug-in is described in the following manuals:

• DDP Server User's Guide – describes the installation and configuration of printers and gives an overview of the DDP Server hardware and software.

The DDP Server User's Guide also describes the printing workflow in general.

• Printer Driver Plug-in Reference Guide – this manual

The Printer Driver Plug-in reference guide is stored in machine readable form (PDF format) on the DDP Server Documentation CD. You may print it for use with your DDP Server.

The following conventions are used in this manual:

- Dialogs and functions to be selected by the user are referenced in this style.
- Some user interface elements are denoted by a path. For example, RIP » Details » Communication settings refers to the dialog panel obtained by selecting the menu RIP, the menu item Details, and, in the resulting dialog, the panel Communication settings.

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Printer Driver Plug-in

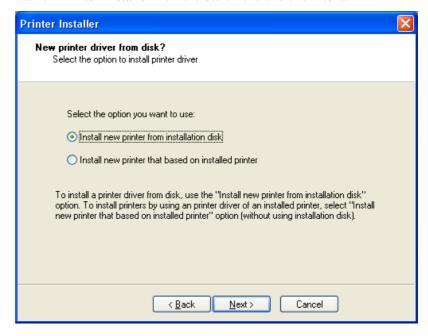
Installing the Printer Driver

Windows

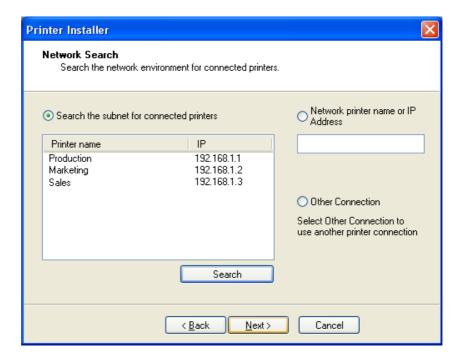
The DDP Server Printer Installer is an easy-to-use application to install Windows printers. It allows you to install several printers at a time, one for each queue defined on your DDP Server.

From the factory, the DDP Server has a Normal and a Hold queue. The administrator can add more custom queues.

Launch Printer Installer from the Start menu and click Next.



For the first installation of a DDP Server as a printer select the first option and click **Next**.



Printer Installer shows you a list of DDP Servers found in the current network segment.

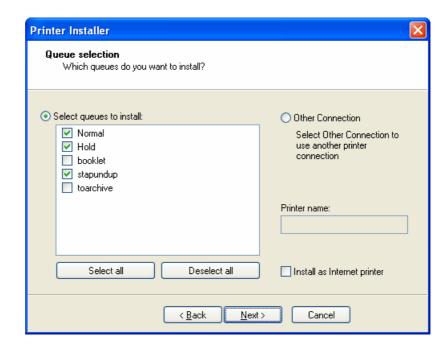
Choose one DDP Server for installation and click Next.

If the DDP Server is behind a gateway, you have to take one of the other options.

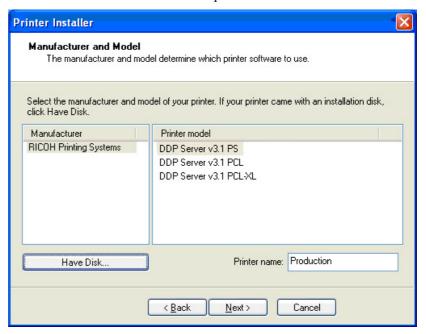
- Find a specific DDP Server by network name
- Find a specific DDP Server by IP address.
- Find a specific DDP Server queue by UNC, e.g. \\DDPServer\Normal.

Note: If your network uses DNS, the administrator should make sure that the network name assigned to the DDP Server matches the network name stored in the DNS.

If you have chosen one of the found DDP Servers for installation, Printer Installer shows you a list of queues defined on the DDP Server.



Check the boxes to select at least one queue for installation and click Next.



Printer Installer shows you a list of printer models to be installed. If no model is shown, click **Browse** to select an .inf file in the printer driver folder for your operating system. Select the folder corresponding to your operating system.

Select a printer model and click Next.

Note: During printer installation Windows may show a warning about a missing digital signature. You should continue the installation anyway.

Note: The Printer Installation may overwrite an existing older version of the AdobePS printer driver. In general this is recommended, as AdobePS printer drivers are designed for downward compatibility. You may want to check the driver versions in the versions file on the CD-ROM.

After the printer installation, the printer can be selected from the print dialog of your application.

Alternatively to the Printer Installer, you can install a printer using the **Add Printer** function which is available in the **Start menu** » **Settings** » **Printers** dialog. When prompted for a printer model description, select the printer driver folder installed with the DDP Server software, or the printer driver folder from the CD-ROM. The Add Printer function allows you to install a printer without rebooting your PC.

Installable Options

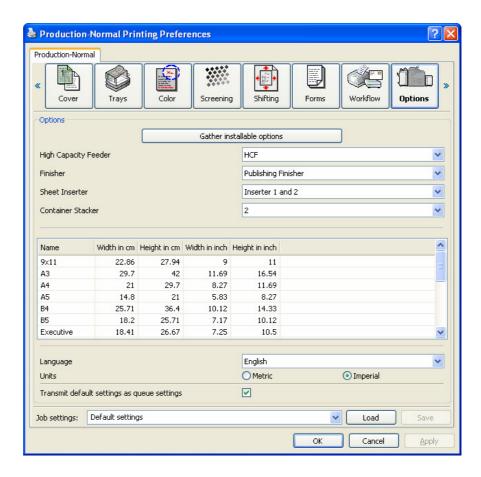
The installable options determine which optional accessories are available on your printer (e.g. Paper Source Unit). The installable options tailor the user interface of the printer driver on your PC and prevent the accidental selection of features which are not supported by the printer. To make the accessories available in the printer driver you must enable the corresponding installable options.

The installable options configuration dialog can be called from the printer driver Plug-in. In the panel **Option** you can add every available optional device by choosing from a list or activating a checkbox.

To configure the installable options,

- open the Start menu
- select Settings
- then select **Printers and Faxes**.
- then select **DDP Server**
- then select **Properties**.

The printer driver Plug-in will open. Click on the arrows at the right of the panel header bar to proceed to the **Options** panel:



Click **Gather installable options** to let the printer driver Plug-in auto-detect the installable options.

You may also change an option value manually. This can be used, e.g. to create jobs as PostScript files for a printer which is not currently connected to your PC and may have different options installed.

Click **OK** twice to confirm your changes.

After you have enabled the available installable options, the features corresponding to those options will be available in the printer driver.

Mac OS X 10.4 and 10.5

Installing the Printer Driver Software

The DDP Server client software is delivered on a hybrid Windows and Macintosh CD-ROM. Double-click the CD-ROM icon that was automatically created after insertion of the CD.

The Mac OS X printer driver comes as an installer package containing the software for all languages.

The printer driver software consists of a PPD which defines printer properties, a printer driver Plug-in which provides advanced printing functions under a graphical user interface, and a CUPS filter which injects PostScript code generated by the Plug-in.

- Double click the **DDP Server** package icon to install the DDP Server software.
 - The Welcome screen is shown.
- Click on **Continue** to go to the next screen.
- After confirming another info screen, the installation process will be completed.

The installer installs the software for Mac OS X version 10.4 or 10.5.

Installing a Printer under Mac OS X 10.4

After you have installed the DDP Server specific printer driver software, you can install a printer.

To install a printer under Mac OS X 10.4, select (from the Finder)

- Go » Utilities.
- In the Utilities folder, select the **Printer Setup Utility**
- After starting, the Printer Setup Utility shows the Printer List.
- Click **Add** to find and install a new printer.
- The resulting dialog shows the list of printers found in the network.

Installing a Printer under Mac OS X 10.5

To install a printer under Mac OS X 10.5, select (from the Finder)

- Go » Applications » System Preferences
- In System Preferences select **Print & Fax**
- In Print & Fax, the Printer List is shown.
- Click the + button to find and install a new printer.
- The resulting dialog shows the list of printers found in the network.

For Mac OS X 10.4 and 10.5 please note: Your printer must be available in the network for installation.

When you use AppleTalk, it is necessary to match the IP address segment specified with the Subnet Mask to the personal computer by the DDP server.

Mac OS X 10.4 and 10.5: Select a **protocol**, e.g. AppleTalk, from the first popup. If zones are enabled in your network, select an AppleTalk zone from the second popup.

Select the printer for your desired queue. (Do not install the printer for the direct queue for normal printing as the direct queue is intended mainly for font downloading.)

Select **Printer Model** = DDP Server, then select DDP Server as the PPD.

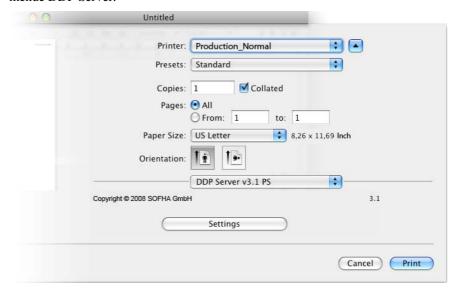
If the PPD is not found, select Printer Model = Other ..., then browse to / Library/Printers/PPDs/Contents/Resources/en.lproj/ and select SHPS_*1B.PPD

Click **Add** to make the printer available in your list of printers.

Installable Options Mac OS X 10.4 and 10.5

The installable options tailor the user interface of the printer driver on your Mac and prevent the accidental selection of features which are not supported by the printer. The installable options determine which optional accessories are available at your engine (e.g. High Capacity Feeder or Finisher). To make the accessories available in the printer driver you must enable the corresponding installable options.

To configure the installable options, open the print dialog of your document's application and select your Printer. Then select in the last (unlabeled) dropdownmenue DDP Server.



By clicking the Settings button, you access the printer driver Plug-in.

To access the installable options, click on the arrows right of the panel header bar to proceed to the panel **Options**.

To configure installable options, please see the Windows section for installable options.

Mac OS 9 (Version 2.2 only)

Installing the printer

Before you can install a printer, you must install the Adobe printer driver software. To install the Adobe printer driver software, launch the **AdobePS Installer**. Then follow the installation instructions.

The AdobePS Installer installs only the generic Adobe printer driver. The DDP Server specific printer driver software (PPD and plug-in) is installed by the **DDP Server Installer**. Before you can install a printer you must have installed both AdobePS and DDP Server.

To install a printer, open the **Chooser** and select **AdobePS**. If zones are enabled in your network, select the zone entered for your DDP Server. The list of found PostScript printers shows one printer for each queue defined on your DDP

Select a PostScript Printer:

Production_Booklet
Production_direct
Production_Hold
Production_LetterFinal
Production_LetterProof
Production_Normal
Production_StaPunDup

Setup...

Setup...

Server – at least Normal and Hold. The printer names are made up from the network name of the DDP Server and the queue name.

Select a printer from the list of PostScript printers and click **Create**. This will create a desktop printer for the selected DDP Server queue.

AppleTalk

Active

Inactive

7.6.2

The printer installation automatically selects a PPD matching the DDP Server. If you are prompted for a PPD, you may not have installed the DDP Server specific printer driver software before. In this case, install the DDP Server software, then install the desktop printer.

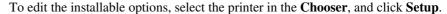
Note: Do not create a desktop printer for the Direct queue of the DDP Server. It should be used only for font downloading.

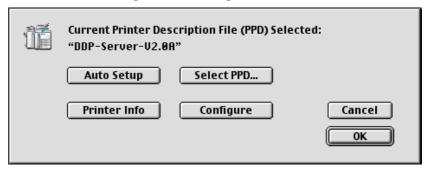
Installable Options Mac OS 9 (Version 2.2 only)

You may want to edit the printer's installable options. The installable options tailor the user interface of the printer driver on your Macintosh and prevent the selection of attributes which are not supported by the DDP Server. The installable options determine which optional accessories are available (high capacity feder, sheet feeder, finisher). To make the optional accessories available in the printer driver plugin you must enable the corresponding installable options.

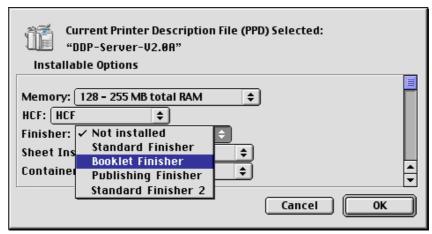
The installable options are determined automatically during printer installation.

To create jobs for a DDP Server with other options installed, e.g., in a masterclient configuration, you may also configure the installable options in the printer driver manually.





In the Setup dialog, click **Configure**. This allows you to change the installable options.



To auto-detect the installable options, click **Auto Setup** in the Setup dialog.

Installation under Mac OS X 10.2 and 10.3 (Version 2.2 only)

The printer driver plug-in can be used for printing in Mac OS 9 or in the Classic Environment of Mac OS X. To print from native Mac OS X applications, however, only the DDP Server PPD can be used.

To start the Classic Environment, select **System Preferences** » **Classic** » **Start**. In the **Classic** control panel, activate **Show Classic status in menu bar**. This shows an icon shaped like a "9" on the right side of the menu bar. To open the chooser, select **9** » **Apple Menu Items** » **Chooser**.

If the Classic Environment is running, you can install and configure a printer using the AdobePS driver and the DDP Server specific printer driver software as described above for Mac OS 9. This will allow you to print from applications running in the Classic Environment of Mac OS X and to use the printer driver plug-in.

You can recognize an application running in the Classic Environment by the Apple menu being shown by the rainbow colored Apple icon.

Mac OS X 10.2 has a system utility called **Print Center**, located in the Utilities folder of the Applications folder. With Mac OS X 10.3, its name changed to **Printer Setup Utility**. The following text uses the term **Printer Setup Utility** for both.

To install a printer in Mac OS X (10.2 or 10.3) native mode,

open Printer Setup Utility,

select Add printer.

In the Add Printer dialog, select Connection by AppleTalk,

select the AppleTalk zone and the printer.

Select Printer model » Other

In the Choose file dialog, choose the DDP Server PPD.

Click **OK** to confirm the PPD.

Click **Add** to install the printer.

This will allow you to print.

Printers installed using Printer Setup Utility do not work with the printer driver plug-in, you must select options from the PPD driven part of the driver.

To configure the installable options of a printer,

open Printer Setup Utility.

This shows you the list of installed printers.

Select Printer » Show info.

In the info dialog, select Installable options.

This allows you to change the installable options.

Using the DDP Server

Printing

After a document has been created in an application, it can be printed on a DDP Server. For transmission to the DDP Server, the document is converted to PostScript, a page description language with powerful features to represent text, graphics and image elements in print ready format, or to PCL, a simpler page description language (Windows only).

Most layout applications contain a document setup or page setup dialog where the size, orientation, and margins of the document pages can be determined.

Printing the document is initiated in the Print dialog, which calls the Printer Driver to generate a PostScript or PCL data stream, the job. The PostScript or PCL data stream represents the elements on the document pages. It is amended by detailed instructions for processing, the job ticket.

The job ticket is set up partly in the printer driver, partly in the DDP Server plugin for the driver. The job ticket contains information like page size and orientation, number of copies, tray selection, imposition and finishing modes, overlay and email notification.

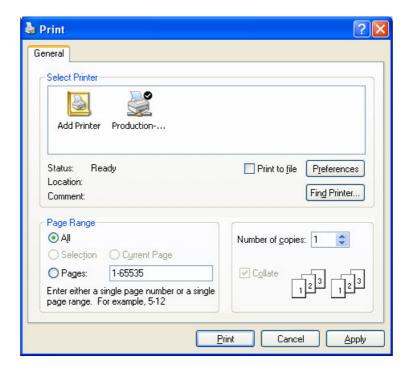
Once created, the job is sent to a queue on the DDP Server. A DDP Server contains at least two queues, the Normal queue for spooling and printing jobs, and the Hold queue where jobs can be stored for later retrieval. Additional queues with custom settings can be defined by the administrator. A queue on the DDP Server is represented by a printer on Windows or a desktop printer on Macintosh.

Windows

Before you can print a document, you must determine its size and orientation. Usually, the size and orientation of a newly created document are determined as A4 or Letter and portrait. You can change size and orientation, e.g. in MS Word, in the **Page Setup** dialog, in the **Paper Format** panel.

To print a document, select the Print dialog, usually by File » Print.

Printer Driver Plug-in Printing • 11



The **Print** dialog may look differently in different applications. Usually you can select at least the following options:

- The Windows printer which corresponds to the target queue on the DDP Server
- The range of pages to be printed
- The number of copies to be printed

Some applications like MS Word offer a Collate option. Do not check this option to get sorted sets of documents, as it will produce them in a more inefficient way.

To call the printer driver plug-in from the **Print** dialog, click on the **Properties** button.

The DDP Server Printer Driver Plug-in provides the following panels:

• Layout, Cover, Trays, Color, Screening, Image Shifting, Forms, Workflow, Options

Adobe PS generates PostScript code for your job. The PCL driver generates PCL code for your job. The printer driver plug-in inserts a job ticket. As a default, the job ticket is empty. If you select specific attributes, like booklet printing, they become part of the job ticket.

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Mac OS X

After a document has been created in an application, it can be printed on a printer.

Printing the document is initiated in the Print dialog, which calls the printer driver to generate a PostScript data stream, the job. The data stream represents the elements on the document pages. It is amended by detailed instructions for processing, the job ticket. The job ticket contains information like page size and orientation, number of copies, tray selection, imposition and finishing modes.

- To print a document, select **Print** from the **File** menu.
- In the print dialog please select your Printer and in the last (unlabeled) dropdown-menue DDP Server.

Note: Please do not use any other options (e.g. Layout, Paper Handling, Paper Feed, etc.) provided in this dialog, but **only** the one in the printer driver plug-in.

To call the printer driver plug-in from the **Print** dialog, click on the **Settings** button.

The **DDP Server** printer driver plug-in allows you to determine the following options:

- Basic provides the most frequently used functions.
- Layout this comprises imposition (e.g. booklet) and finishing options.
- Cover sheet select front and back cover sheets.
- Trays select trays for individual job pages.
- Color select color separation parameters.
- Screening this comprises raster frequency and angle.
- Image shifting this allows you to position a document on paper which is bigger than the document.
- Forms select forms for overlay printing.
- Workflow this comprises creation of forms and archive jobs, job delegation and splitting settings, and email notification.
- Options this allows you to configure installable options.

For more details about the printer driver plug-in, refer to the Printer Driver Plug-in Reference Guide.

From **PDF** scroll-down menu you can select the following options:

• Save as File – allows you to print your job to a file (as PDF or as PostScript) and let it be printed on a copier to which you are not connected now.

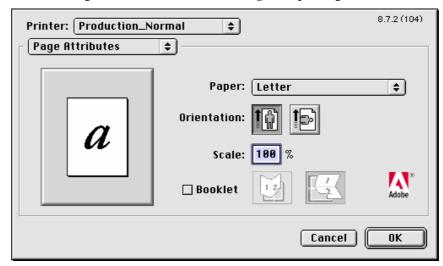
Note: When you print to a PostScript file, code for some features of the Plug-in will not be included in the job because the CUPS filter will not run.

Printer Driver Plug-in Printing • 13

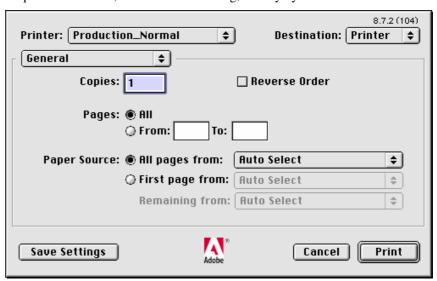
Mac OS 9 (Version 2.2 only)

Before you can print a document, you must determine its size and orientation. Usually, the size and orientation of a newly created document are determined as A4 or Letter and portrait.

You can change size and orientation in the **Page Setup** dialog.



To print a document, select the Print dialog, usually by File » Print.



In each panel of the Print dialog you can select the printer which corresponds to the target DDP Server.

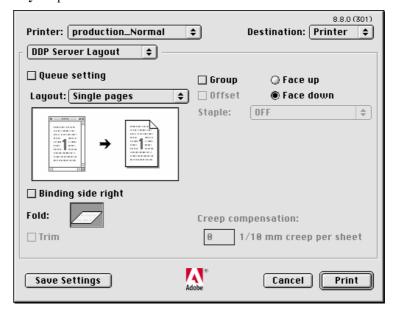
On opening, the **Print** dialog shows the **General** panel. Within this panel, you can select the following options:

- The range of pages to be printed
- The number of copies to be printed
- The tray to be used for printing.
 The two options for Autoselect have the following meaning:

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- Autoselect tray: No information about tray selection is included in the job ticket. Tray selection is determined by the queue executing the job.
- Autoselect: Auto tray selection is included in the job ticket.
 This may override the settings of the queue executing the job.
- Collate do not check this option as it will be ignored. By default, sorting is on. Check the Group option in the Layout panel if you want non-sorted prints.

To select more print options and change printer driver options specific to the DDP Server, click on **General** and select a different printer driver panel, e.g. the **Layout** panel.



The **DDP Server** panels available from the DDP Server printer driver plug-in are listed below.

- DDP Server Layout this comprises imposition (e.g. booklet) and finishing options.
- DDP Server Cover sheets select front and back cover sheets.
- DDP Server Trays select trays for individual job pages.
- DDP Server Color select color separation parameters
- DDP Server Screening this comprises raster frequency and angle.
- DDP Server Image shifting this allows you to position a document on paper which is bigger than the document.
- DDP Server Forms select forms for overlay printing.
- DDP Server Workflow this comprises creation of forms and archive jobs, auto print settings, job delegation and splitting settings, and email notification.

For more details about the printer driver plug-in, refer to the Printer Driver Plug-in Reference Guide.

Printer Driver Plug-in Printing • 15

General

Queue Settings

On the DDP Server you always print to a queue. Queues may be hold queues or print queues. Print queues may have their own settings. If your job contains no settings, the queue settings are applied. Queue settings may also be set to override job settings. E.g. a queue may be configured to apply a specific finishing combination or a form, regardless of what the job requests.

By default, all settings matching the default are transmitted as queue settings. To transmit all settings, uncheck **Transmit default settings as queue settings** in the **Options** panel.

Consistency checks

Some attributes allow you to choose values which do not match the current selection. However, if you do, some other attribute will be updated to obtain a valid combination. E.g. in the Layout panel, if you choose 1. corner stapling, and 2. booklet large, then stapling will be adapted to center stapling. This is to exclude invalid combinations of attributes.

Saving and restoring printer settings

In general, settings will be stored by the application for the selected printer while the application is running. I.e. if you print in booklet mode to a specific printer, then the next print to this printer will also be in booklet mode unless you change the setting.

You can also save and restore settings to and from named entries. This function is available in each panel.

To save the current settings, select a list entry from the list at the bottom of the Plug-in and click **Save**.

To restore saved settings, select a list entry from the list at the lower left of the Plug-in and click **Load**.

To rename a list entry, click on the entry, overwrite its name, and click Return.

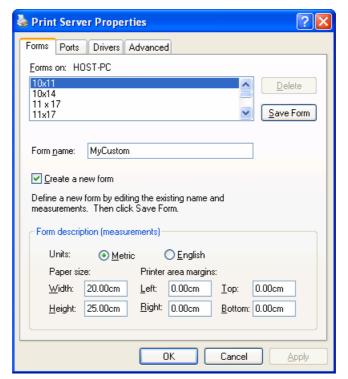
16 • General Printer Driver Plug-in

Custom page sizes

Under Windows, custom page sizes can be determined by defining forms within the Printers and Faxes dialog. Under Windows, they are named forms.

To define a form:

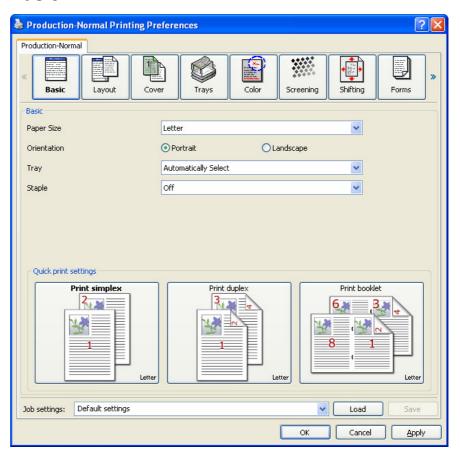
- Open Start menu,
- Select Settings » Printers and Faxes
 This shows the Printers and Faxes dialog.
- Make sure no printer is selected.
- Select **File** » **Server Properties**This shows the Properties of Print Server dialog.
- In the Forms panel, check **Create a new form**.
- Enter the name and the size of the form and click **Save Form**.



- Define more forms or click **OK** to finish the creation of forms.
- The created forms will be available like standard page sizes for each printer (provided they fit the limits for custom page size on the respective printer).
- In your application, select **File** » **Page Setup**, then select a form and enter the orientation.

Windows and Mac OS X

Basic



The Basic panel provides the most frequently used functions. Often, you don't need more than the functions adjustable here. You can set the following functions:

Paper Size – shows the page size of your document. In some applications (not MS Word), you can change the document page size here. A variety of standard page sizes is available. For custom page sizes, see

Custom page sizes.

Orientation – shows the orientation of your document. In some applications (not MS Word), you can change the document orientation here.

Tray – selects the tray from which the paper for printing is drawn.

Staple – selects the staple mode:

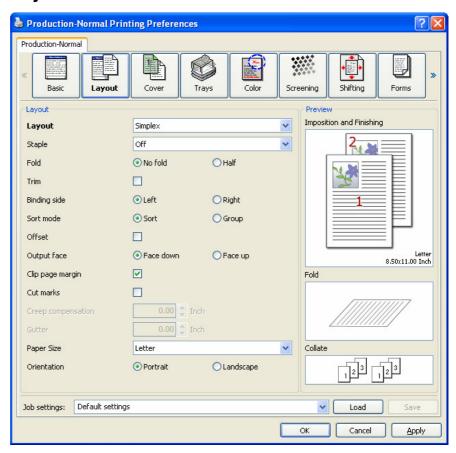
Off, corner, long edge, short egde, side, top, center

Quick print settings: By clicking one of the displayed buttons, you directly set following print settings, and the dialog is closed:

- Print simplex the document is output as single-sided paper
- Print duplex the document is output as double-sided paper.
- Print booklet the document is printed as booklet.

If the current settings match the settings of one of the buttons, the button is highlighted.

Layout



The Layout panel allows you to define how document pages are mapped on printed sheets and to select finishing options. You can set the following attributes:

- 1. **Layout** defines how document pages are mapped on printed sheets.
 - **Simplex** one document page is one printed sheet.
 - **Duplex long edge/short edge/side/top** document pages are rendered for printing on both sides of a sheet.

Long edge/short edge/side/top tells how the paper must be turned for reading: along the long edge, the short edge, the side, or the top.

Duplex side prints as for a book, duplex top prints as for a wall calendar.

With portrait pages, duplex long edge is as the same as duplex side, duplex short edge is the same as duplex top. With landscape pages it is just the other way round: duplex long edge is as the same as duplex top, duplex short edge is the same as duplex side.

• **Mixplex** – the job is printed with mixed simplex and duplex pages.

Note: Mixplex can be entered as a job attribute only by Doc-XPLORER or ProfiWEB, not by this printer driver.

Switching between simplex and duplex within a job is supported by some 3rd party printer drivers. For this case, Mixplex prepares the DDP Server to accept a switch to duplex even if the job starts with a simplex page.

- **Booklet** (small) document pages are arranged on the sheets to produce a center folded and saddle stitched booklet. The sheet size is equal to the document page size. Document pages are reduced to half page size. Booklet small works only with document sizes A3, A4, B4, resulting in A4, A5, B5 booklets.
- **Booklet** (large) document pages are arranged on the sheets to produce a center folded and saddle stitched booklet. The sheet size is double the document page size. Document pages are printed in original size. Booklet large works only with document sizes A4, A5, B5, Letter, resulting in folded booklets of the same size and paper sizes A3, A4, B4, Ledger (Tabloid).
- **2** in **1** duplex 2 document pages are arranged side by side on each sheet. I.e. the front of sheet 1 contains pages 1+2, the back of sheet 1 contains pages 3+4. Printing is duplex.
- **2 in 1 copy duplex** 2 copies of a document page are arranged side by side on each sheet. I.e. the front of sheet 1 contains 2 copies of page 1, the back of sheet 1 contains 2 copies of page 2. The resulting paper pile can be center cut to obtain twice the number of copies. Printing is duplex.
- **2 in 1** 2 document pages are arranged side by side on each sheet. I.e. sheet 1 contains pages 1+2, sheet 2 contains pages 3+4. Printing is simplex.

For all 2 in 1 options, the sheet size is double the document page size. Document pages are printed in original size. The sheet size must be an available paper size, e.g. A3 for A4 documents, or Ledger for Letter documents.

• **2 in 1 copy** – 2 copies of a document page are arranged side by side on each sheet. I.e. sheet 1 contains 2 copies of page 1, sheet 2 contains 2 copies of page 2. The resulting paper pile can be center cut to obtain twice the number of copies. Printing is simplex.

2 in 1 copy can be used, e.g. to print A5 documents on A4 paper and double the number of copies.

Normally booklet is combined with half folding and center stapling. This implies that the paper in the tray must be short edge fed. Long edge fed paper will not work.

If you select **Booklet** (small or large), then, in general, you should check **Trim** as well.

Note for Macintosh users: Please do not use the **Booklet** option in the **Page Setup** dialog, but only the one in the printer driver plug-in.

- 2. **Staple** selects the staple mode:
 - Off, corner, long edge, short egde, side, top, center

The meaning of long edge/short edge/side/top is similar to their meaning with duplex, see above.

- 3. **Fold** selects the folding mode:
 - None, Half (center) (depending on the finisher capabilities)

Folding requires that the paper is short edge fed.

- 4. **Trim** selects if booklets are trimmed (cut) to align the edges of their outer and inner pages after folding. See creep compensation.
- 5. **Binding side** selects if booklets should rendered with the binding side on the right, and if finishing options (stapling) should be applied to the right side. Both settings are for output of documents in Asian languages.

For stapling, **Binding side right** has no effect with top stapling, it affects only side, long edge, and short edge stapling.

- 6. **Sort mode** selects if documents are output sorted or grouped:
 - Sort (unchecked): 3 copies of a 3 page document are output as 1-2-3, 1-2-3, 1-2-3.
 - Group (checked): 3 copies of a 3 page document are output as 1-1-1, 2-2-2, 3-3-3.

Do not use the **Collate** option of the main printer driver dialog to select sort/group as its output may be more inefficient.

- 7. **Offset** selects if copies are offset in the output tray for easy separation.
- 8. **Output face** selects if copies are output face up.

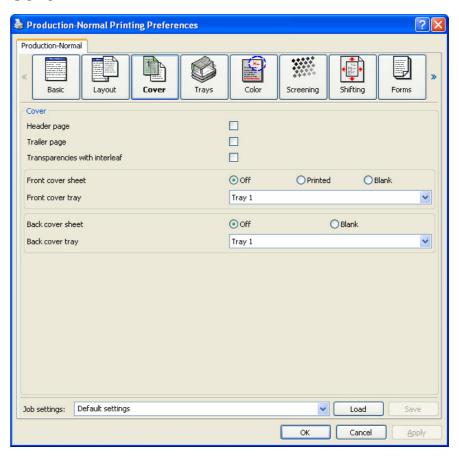
Face up cannot be combined with stapling or folding.

- 9. **Clip page margin** selects if page are printed edge to edge or clipped by a 96 dots (about 4 mm) margin. Edge to edge printing (clip page margin = off) is not supported with PCL.
- 10. **Cut marks** selects if cut marks are printed around the document. This option works only if you select a tray explicitly and print on paper which is bigger than the document (e.g., B4 on A3 or Executive on Letter).
- 11. **Gutter** determines a fixed margin to be applied between the two document pages of an imposition which are printed on the same side of a sheet.
- 12. **Creep compensation** compensates for creep, i.e. the effect that outer pages of a booklet do not line up with the inner pages when they are folded. To align bitmaps on the pages, the bitmaps of outer pages are moved outwards on the sheet.
- 13. **Paper Size** shows the pager size of your document. In some applications (not MS Word), you can change the document page size here. A variety of standard page sizes is available. For custom page sizes, see

Custom page sizes.

14. **Orientaion** – shows the orientation of your document. In some applications (not MS Word), you can change the document orientation here.

Cover



The Cover panel allows you to select the inclusion of front and back cover sheets, or to select the creation of transparencies.

Header Page selects if a header page is printed for the job. The header page contains the owner and job name and serves as job separator and job identification. The header page is printed from the same tray as the first page of the job. Finishing (stapling) and multiple copies are not applied to the header page. The header page is output to the same tray as the job.

Trailer Page selects if a trailer page is printed for the job. The trailer page contains info about owner, job name, print time, and print results.

Transparencies with Interleaf selects the creation of transparencies. For each page, two sheets are output: the transparency and the separation sheet. Transparencies are always drawn from the manual tray. Separation sheets are drawn from the tray selected as paper source for the job. Transparencies and separation sheets must have the same size and orientation. Transparencies should be selected only if the page layout selected in the Layout panel is simplex.

Front cover sheet selects the insertion of a front cover sheet from the selected tray. The tray may be a normal input tray or a sheet feeder (an optional accessory of the printer). The sheet feeder allows preprinted paper to be included in a job without feeding the paper through the printer and exposing it to the printer heat.

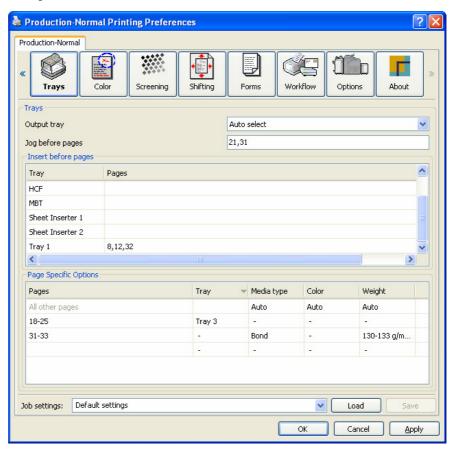
If **Printed** isselected, the first page of the job is printed on the front cover sheet. Otherwise the cover sheet is left blank, and the first page is printed on a sheet selected for the job. Duplex printing is also applied to the cover sheet, i.e., with duplex enabled, the first two pages are printed on the cover sheet.

Back cover sheet selects the insertion of a back cover sheet, similarly to front cover sheet. Printing on the back cover sheet is not possible, however.

Cover sheets may also be applied to booklets. A front cover sheet will be applied as outermost sheet (the booklet cover). A back cover sheet will be applied as innermost sheet. The innermost sheet can be, e.g., a return postcard.

Note: Front cover sheet and insert before page 1 (see section Trays) cannot be selected together. Only one sheet can be inserted before page 1.

Trays



The Trays panel allows you to select input trays for each page of the job individually. It can be used to print chapter separation sheets on special paper, or to print a whole chapter on special paper. The trays panel also allows to select an output tray for the job.

The **input tray** to be used for the job as a whole is selected by **Tray** in the Basic panel. This selection can be augmented by the selection in the Trays panel.

In the Trays panel, input trays can be selected per job and per page. Additionally sheets can be inserted before each page.

A tray can be selected in the following ways:

• by auto selection – this instructs the DDP Server to select a tray matching the document size. Non-empty trays, larger trays (HCF) and trays with long edge fed paper are preferred.

The printer driver offers two similar looking entries for auto select. The first means "no setting" (same as "queue setting"), the second means auto select as described above.

Auto selection is available only for print pages, not for insert pages.

- by explicit selection this selects the given tray.
- by media type, color, and weight this determines selection of a tray which is configured to contain the given paper.

Auto tray selection together with a selection of media type, color, or weight means that the paper specification is used as an additional selection criterion.

Explicit tray selection together with a selection of media type, color, or weight means that the specified tray <u>must</u> contain the specified paper. If it doesn't, the job will be rejected.

To let the job wait and request the specified paper at the DDP184 panel, configure the DDP Server's **RIP Details** for **Autoselect tray** = In the printer, and choose auto tray selection together with your selection of media type, color, and weight.

Media types Type1 to Type 16 and media colors Color1 to Color16 refer to the custom types and colors which can be configured at the DDP184 panel.

Explicit tray selection can be used to print documents which are smaller or bigger than the paper. If the document size does not match, the document is rotated to the proper orientation and centered on the paper.

In any case, the document orientation (portrait or landscape) is automatically matched to the paper orientation by rotating the document if necessary.

Page numbers entered under **Page specific options** » **Pages** specify that the given pages shall be drawn from the tray selected in the same row. E.g. the above screenshot requests pages 18 to 25 and 37 to 39 to be drawn from tray 3, and pages 31 to 33 to be drawn from a tray containing Bond paper with a weight of 130-133 g/m² (35 lb bond).

Pages must be entered as a comma separated list of individual page numbers, or of page ranges where the lower and upper bounds are separated by a dash. Pages count from 1 and refer to the pages included in the job. If your document contains Roman numbering, or if you print only one chapter of a book, the page numbering in the job may deviate from the page numbering in your document.

If duplex printing is selected, each individual page and each start of a page range are forced on a new sheet. E.g., if the job shall be printed duplex on tray 1, and page 18-25 on tray 3, then pages 1-17 will be printed from tray 1, page 17 will have an empty back page, and pages 18-25 will be printed starting on a new sheet from tray 3.

While you enter page numbers which overlap with page numbers entered previously, the overlapping numbers are marked red to alert you. When the cursor leaves the current line, the overlapping numbers will be deleted from your previous selection.

Page numbers entered under **Insert before pages** » **Pages** specify that an empty sheet shall be inserted before the selected pages. If duplex printing is requested, the selected page is forced on a new sheet if necessary. E.g., if the job shall be printed duplex, and a page inserted before page 8, then page 7 will have an empty back page, and page 8 will be on a new sheet, after the inserted sheet.

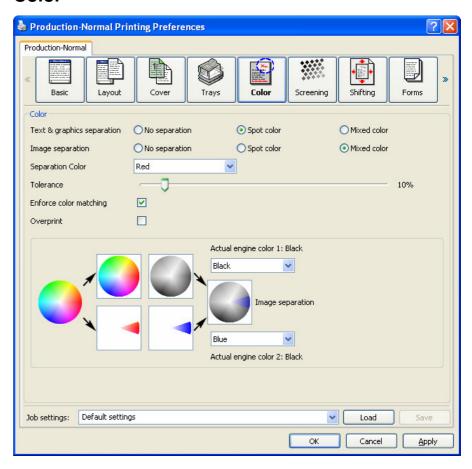
If you select a page tray for a document printed in booklet mode, the tray selection is applied only to the first document page on each sheet. E.g., for a 12 page document printed in booklet mode on 3 sheets, page specific tray selections are applied for pages 1, 3, and 5 only; all other page specific tray selections are ignored.

Note for Macintosh users: Do not use the "Print first page from" feature in the General panel of the printer driver, but use the **Print pages** feature in this panel.

Options available for the **Output tray** depend on the finishing equipment of the engine as shown or selected in the **Installable Options** panel, and on the finishing options selected in the **Layout** panel.

Jog before pages determines that paper is offset in the output tray before each specified page. E.g. to offset pages 21-30 against the rest of a job, (e.g. to easily remove a selected chapter from the paper stack) enter page numbers 21,31.

Color



The color panel allows you to control color separation. Color separation is available, when the 2 engines have different colors installed (black, MICR, or a proper color).

The DDP Server supports spot color separation and mixing color separation.

Spot color separation allows you to print, e.g., logos, graphics elements, or text elements in a proper color which is installed in addition to black.

With spot color separation, each element of the document (character, graphic shape, image pixel) is mapped on either one of the colors, but not both. E.g. with separation color = red and engine toner = black / red,

- a graduated tint from white to black prints as a white to black tint,
- a graduated tint from white to red prints as a white to red tint.

Mixing color separation allows you to print, e.g. full color images and get a printout which approximates the image's impression with the 2 available colors.

With mixing color separation, each element of the document (character, graphic shape, image pixel) is mapped on a mixture of both colors whose color value is closest to the given color value. E.g. with separation color = red and engine toner = black / red,

- a graduated tint from white to red prints as a white to red tint,
- a graduated tint from black to red prints as a black to white tint, overlayed with a white to red tint,
- a graduated tint from blue to red prints (depending on attribute settings) as a gray to white tint, overlayed with a white to red tint.

The color panel allows you to set the following attributes:

- 1. Text/graphics separation mode selects if no separation, spot color separation, or mixing color separation is applied for text and graphical objects.
- 2. Image separation mode selects if no separation, spot color separation, or mixing color separation is applied for images.
 - Mixing color separation is not supported with PCL (for any objects).
- 3. Separation color indicates which color is used for separation.
- 4. Print colors indicates which colors are expected to be present on the engines. For "No separation", one color is shown, for spot separation, two colors are shown.

The color graphics in the lower half indicate how the color separation is performed: From left to right, they show: document colors, separated document colors, separated engine colors, composite output.

According to the capabilities of the DDP184, the following print colors are supported:

- Engine 1: black or MICR
- Engine 2: black, red, warm red, green, blue, reflex blue, cyan

If print color 1 is black, then the elements in the separation color are mapped on the the proper color on engine 2. If print color 1 is MICR, then the elements in the separation color are mapped on MICR.

To print elements in your document using MICR, design these elements in some color, e.g. red. Then select red as separation color and configure the engine with print color 1 = MICR.

To print your document monochrome, but in color, select no separation and a non black print color.

If you choose a proper color as separation color, this color is separated against all other colors, including black. If you choose black as separation color, black is separated versus all other colors.

Separation color black is not supported with PCL.

For true spot color printing, e.g., to print only orange shades, use this color as separation color. To highlight all color cells in a spreadsheet irrespective of their actual color, use black as separation color.

When the printer driver plug-in is opened, it determines the actual engine colors. You may, however, prepare jobs for printing with a different color. To do so, select a different color as print color. In this case, the actual engine color is shown as a reminder.

5. Tolerance – selects how many color values near the separation color shall be mapped on the separation color.

If the separation color is a proper color, tolerance means the maximal hue (color tone) deviation under which other colors are included. E.g. if your separation color is red and you want yellow elements to be printed red, select tolerance = 50%.

If the separation color is black, tolerance means the maximal color saturation under which non-black values are printed black. E.g. a tolerance value of 50% prints all color elements with saturation up to 50% as black and all element with a higher color saturation in color.

In general, a small, but non-zero separation border is recommended because of rounding errors produced by printer drivers in some operating systems.

Tolerance is not supported with PCL.

6. Enforce color matching – selects if print colors must match engine colors exactly when a job is printed.

By default (enforce color matching = on), colors must match when the job is printed. If colors do not match, the respective job will fail to print and get a corresponding error message in its job log. You may resubmit the job afterwards with "enforce color matching" off to print it anyway.

If "enforce color matching" is off, then a proper color or black matches another proper color or black, e.g. both black or blue are accepted instead of red.

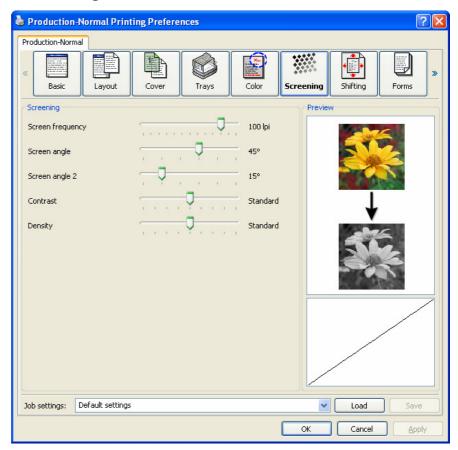
In any case, only MICR is accepted for MICR.

7. Overprint – selects that objects lying on top of others are rendered with overprinting, i.e. without erasing the lower object. This technique can be used to avoid blank areas at adjacent edges of overlapping objects.

Overprinting is not supported with (bitmap) images. I.e. an image as the top object causes the same printout with or without overprinting.

Overprinting is not supported with objects defined in a CIE based color space. Such objects are usually created with color management enabled. To avoid creation of such objects, disable color management in your application and in your Windows printer.

Screening

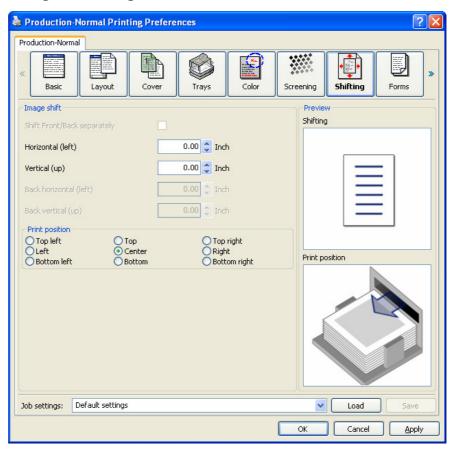


The **Screening** panel allows you to control the screen (raster) settings. Screen settings are applied to all elements on the page (text, graphics, and images).

You can set the following attributes:

- 1. **Screen frequency** sets the screen frequency. The frequency is measured in lpi (lines per inch). Higher values yield a finer raster, but allow less grey levels to be distinguished.
- 2. **Screen angle** 1/2 sets the screen angles for black and color. In general it is good to print monochrome pages and black objects at an angle of 45°, and color objects at 15° or 75°. With pure spot color printing, both angles may be 45°.
- 3. **Contrast** increases or decreases the contrast in the result page.
- 4. **Density** increases or decreases the density in the result page.

Image Shifting



The Image Shifting panel allows you to position a document on the paper if you print on paper which is bigger than the document, e.g., B4 on A3. To print on bigger paper, you must select a tray explicitly.

You can set the following attributes:

- 1. **Shift Front/Back separately** allows you to enter separate shifting values for front and back or let the front values apply also to the back. Front = back means that printed images moves in the same direction on both sides of the paper, i.e., if you hold the paper against the light, the images will match.
- 2. **Horizontal (left), vertical (up)** specify horizontal or vertical shifting on the image on the paper.

Shifting is always specified relative to the paper while it goes through the printer, not relative to the document.

Horizontal shift moves bitmaps in the paper feeding direction (positive: to the left of the printer). Vertical shift moves bitmaps across the feeding direction (positive: to the back of the printer).

Note: Horizontal shift is applied at the moment of printing. I.e. if you print face down, turn the paper up to see the correct shifting direction.

3. **Back horizontal (left), back vertical (up)** – specify horizontal or vertical shifting on the back side image on the paper.

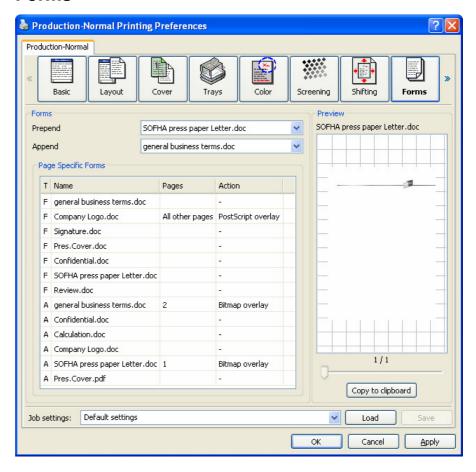
To shift front and back differently, enable duplex printing in the Layout panel and select **Shift Front/Back separately**.

To shift in the same direction when you hold the paper against the light, enter horizontal shift with opposite sign and vertical shift with the same sign.

4. **Print position** – allows to align the document with one side or one corner of the paper. Directions have the same meaning as for shifting. I.e. top left means that the image is shifted in feeding direction and to the back of the printer.

This option works only if you select a tray explicitly and print a document on paper with a different size (e.g., B4 on A3 or Executive on Letter).

Forms



The **Forms** panel allows you to overlay document pages with forms and to prepend or append another job to a document.

Forms overlay can be used to simulate the effect of preprinted paper, e.g., to add your company letterhead to a letter. Prepending can be used, e.g., to add a cover page in front of your document. Appending can be used, e.g., to add terms and conditions at the end of your document.

To be available for overlay, a job must have been printed as a form (see next section, workflow panel). A form is a one page PostScript job which can be executed during the interpretation of the main job (PS overlay) or merged with the bitmaps of the main job (bitmap overlay).

To be available for prepending or appending, a job must have been printed to the archive before (see next section, workflow panel). An archive job consists of rendered bitmaps which can be merged or concatenated with the bitmaps of the main job.

To prepend a job to the current job, select it behind **Prepend**.

To append a job to the current job, select it behind **Append**.

To select jobs for overlay, perform the following steps:

- Select a job in the list of Page specific forms. The jobs are marked with F or A for form or archive.
 The preview of the job or its first page will be shown in the window on the
- For an overlay on a subset of pages, enter the range of pages (e.g., 2,5-7,9).
 No pages entered means all pages.

3. Select **PS Overlay** to apply the selected form as PostScript overlay. For each selected page, the PS code of the form will be executed before the PS code of the job page.

Select **Bitmap Overlay** to apply the selected archive job as bitmap overlay. For each selected page, the bitmap of the corresponding archive job page will be merged with the bitmap of the job page.

Additionally you can perform the following operation:

 Click Copy to clipboard to copy a screen resolution bitmap of the page in the preview window to the clipboard. You can paste it as a background image into your document to obtain a merged preview of the document with the form.

Position the overlay preview at the top left corner and scale it to 100%. Then position your document content. Before printing, remove the preview. Do not print with the preview, as it has only screen resolution.

Note: The size and orientation of an overlay must match the size and orientation of your document. No scaling will be done when applying the overlay.

Note: PS overlay is not supported for PCL.

Note: Do not use a color job as a bitmap overlay for a b/w job as the result is not defined.

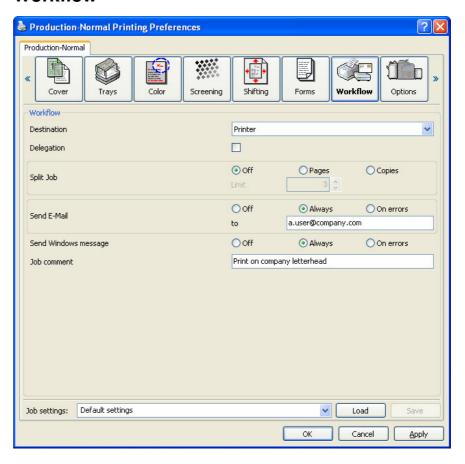
Note: Some applications, like MS Powerpoint and Adobe Acrobat draw document pages such that a DDP Server PS overlay remains invisible. For such applications, only bitmap overlay should be used.

Note: When a job is printed to the archive, prepending and appending will be performed during printing to the archive. To prepend or append to an existing archive job use the job merging function in the DocXPLORER.

Note: If the DDP Server is used as a shared printer on a network server (and not directly), the printer driver plug-in may not be able to show forms and archive jobs. In this case, you may select the application of forms and archive jobs within the **Job Details** dialogs of DocXPLORER or ProfiWEB.

To create a form, select "Destination = Form" in the **Workflow** panel. To create an archive job, select "Destination = Archive" in the **Workflow** panel.

Workflow



The Workflow panel allows you to control the cluster printing workflow.

You can set the following attributes:

- 1. **Destination** controls special handling for the job:
 - Printer the job will be normally printed.
 - Archive the job will be rendered but not printed. The rendered bitmap is stored in the DDP Server's archive queue. From the archive queue it can be reprinted later. Archive jobs can also be merged.
 - Form the job will be stored as a form. Forms are available in the DDP Server's forms queue and can be applied for PS overlay from the forms panel of the printer driver plug-in.
 - Note: Destination = form is not supported for PCL.
 - Archive and Printer the job will be rendered to the archive, and then printed.
- Delegation controls whether the job is a candidate for delegation in the context of load balancing. Load balancing is a means to share printing load among several DDP Servers. If delegation is off, the job will not be delegated.
 - Delegation itself is configured on the DDP Server. For more details, see the DocXPLORER Reference Guide.
- 3. **Split job** tells the DDP Server to split the job into smaller packets. Job splitting is useful mainly together with load balancing. Splitting a job into several packets and delegating the packets to different DDP Servers yields a

more even distribution of the overall load, and allows to shorten the time until the individual job is completely executed.

Jobs can be split by pages or by copies:

- **Pages**: Page splitting is achieved by dividing a print job into subsets by pages, e.g. page 1-100 and 101-200 of a 200 page job.
- **Copies**: Copy splitting is achieved by duplicating a print job with reduced copy count, e.g. duplicating a 500 copies job into 2 jobs with 250 copies each.
- **Limit**: Together with the splitting mode, a splitting limit must be entered, which defines the maximum packet size.

Copy splitting packets will be sized (approximately) equally. E.g. with copy splitting limit = 100, a 210 copies job will be split into 3 packets of 70 copies. Page splitting packets will be sized to the limit, except the last packet which is sized to the rest.

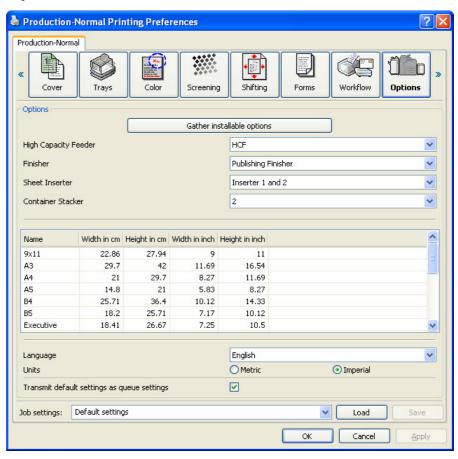
Page splitting can also be used to divide a booklet into portions which can be handled by the finisher. E.g. to print a 200 page document as booklet, select page splitting with a limit of 80 pages. This will create three booklets which fit into the booklet printing limit of 80 pages (= 20 sheets).

4. **Send E-mail** – instructs the DDP Server to send an email to the specified address after completion of your job. **Always / On error** lets you restrict the email notification.

Sending email requires that the DDP Server is configured appropriately. This is described in **RIP Details – Communication** in the ProfiWeb Reference Guide and the DocXPLORER Reference Guide.

- 5. **Send Windows message** instructs the RIP to send a Windows message using NET SEND to the specified client PC after completion of your job. Always / On error lets you restrict the message notification.
 - Sending a Windows message requires that the Messenger service of Windows is running on the client PC.
- 6. **Job Comment** allows you to add a comment to the job ticket of the job. It can be inspected under **Job Details** on the DDP Server.

Options



The Options panel shows the installed optional accessories of the connected DDP Server and allows you to configure them.

The installable options determine which functions are offered in the panels of the printer driver plug-in. For example, booklet mode will be offered only if a finisher with booklet maker is installed.

The Options panel offers the following functions:

Gather installable options lets the printer driver plug-in auto-detect the installable options. Select an option to change its value manually.

High Capacity Feeder, Finisher, Sheet Inserter, Container Stacker: You may change the setting for each option manually, e.g., select a finisher with booklet maker. This will let the plug-in behave as if a DDP Server with the specified option were connected. In this way you can create jobs for other DDP Servers which have the given options.

Paper sizes: The list of available (standard and custom) paper sizes is shown.

Language: Changes the language of the printer driver plug-in.

Note: Some UI items are not changed. E.g. the names of paper sizes can be changed only by installing the printer driver with a PPD in the corresponding language. Some Buttons are provided by the operating system and are not changed.

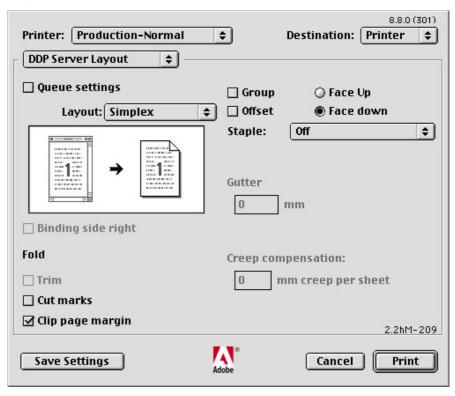
If the corresponding language is not installed on the computer, inscriptions and markings may not be displayed correctly.

Units: switches the units, e.g. for Gutter in the Layout panel, between mm and inch.

Transmit default settings as queue settings. Settings matching the default are transmitted as queue settings. See Queue Settings.

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Layout



The Layout panel allows you to define how document pages are mapped on printed sheets and to select finishing options. You can set the following attributes:

- 1. **Layout** defines how document pages are mapped on printed sheets.
 - **Simplex** one document page is one printed sheet.
 - **Duplex long edge/short edge/side/top** document pages are rendered for printing on both sides of a sheet.

Long edge/short edge/side/top tells how the paper must be turned for reading: along the long edge, the short edge, the side, or the top.

Duplex side prints as for a book, duplex top prints as for a wall calendar.

With portrait pages, duplex long edge is as the same as duplex side, duplex short edge is the same as duplex top. With landscape pages it is just the other way round: duplex long edge is as the same as duplex top, duplex short edge is the same as duplex side.

- **Booklet** (small) document pages are arranged on the sheets to produce a center folded and saddle stitched booklet. The sheet size is equal to the document page size. Document pages are reduced to half page size. Booklet small works only with document sizes A3, A4, B4, resulting in A4, A5, B5 booklets.
- **Booklet (large)** document pages are arranged on the sheets to produce a center folded and saddle stitched booklet. The sheet size is double the document page size. Document pages are printed in original size. Booklet large works only with document sizes A4,

- A5, B5, Letter, resulting in folded booklets of the same size and paper sizes A3, A4, B4, Ledger (Tabloid).
- **2** in **1** 2 document pages are arranged side by side on each sheet. I.e. sheet 1 contains pages 1+2, sheet 2 contains pages 3+4. Printing is simplex.

For all 2 in 1 options, the sheet size is double the document page size. Document pages are printed in original size. The sheet size must be an available paper size, e.g. A3 for A4 documents, or Ledger for Letter documents.

- **2 in 1 duplex** 2 document pages are arranged side by side on each sheet. I.e. the front of sheet 1 contains pages 1+2, the back of sheet 1 contains pages 3+4. Printing is duplex.
- **2 in 1 copy duplex** 2 copies of a document page are arranged side by side on each sheet. I.e. the front of sheet 1 contains 2 copies of page 1, the back of sheet 1 contains 2 copies of page 2. The resulting paper pile can be center cut to obtain twice the number of copies. Printing is duplex.
- **2 in 1 copy** 2 copies of a document page are arranged side by side on each sheet. I.e. sheet 1 contains 2 copies of page 1, sheet 2 contains 2 copies of page 2. The resulting paper pile can be center cut to obtain twice the number of copies. Printing is simplex.
 - 2 in 1 copy can be used, e.g. to print A5 documents on A4 paper and double the number of copies.

Normally booklet is combined with half folding and center stapling. This implies that the paper in the tray must be short edge fed. Long edge fed paper will not work.

If you select **Booklet** (small or large), then, in general, you should check **Trim** as well.

- 2. **Staple** selects the staple mode:
 - Off, long edge, short egde, side, top, corner, center

The meaning of long edge/short edge/side/top is similar to their meaning with duplex, see above.

- 3. **Fold** selects the folding mode:
 - None, Half (center) (depending on the finisher capabilities)

Folding requires that the paper is short edge fed.

- 4. **Trim** selects if booklets are trimmed (cut) to align the edges of their outer and inner pages after folding. See creep compensation.
- 5. **Binding side** selects if booklets should rendered with the binding side on the right, and if finishing options (stapling) should be applied to the right side. Both settings are for output of documents in Asian languages.

For stapling, **Binding side right** has no effect with top stapling, it affects only side, long edge, and short edge stapling.

- 6. **Offset** selects if copies are offset in the output tray for easy separation.
- 7. **Output face** selects if copies are output face up.

Face up cannot be combined with stapling or folding.

8. **Clip page margin** – selects if page are printed edge to edge or clipped by a 96 dots (about 4 mm) margin. Edge to edge printing (clip page margin = off) is not supported with PCL.

- 9. **Cut marks** selects if cut marks are printed around the document. This option works only if you select a tray explicitly and print on paper which is bigger than the document (e.g., B4 on A3 or Executive on Letter).
- 10. **Gutter** determines a fixed margin to be applied between the two document pages of an imposition which are printed on the same side of a sheet.
- 11. **Creep compensation** compensates for creep, i.e. the effect that outer pages of a booklet do not line up with the inner pages when they are folded. To align bitmaps on the pages, the bitmaps of outer pages are moved outwards on the sheet.

Cover



The Cover panel allows you to select the inclusion of front and back cover sheets, or to select the creation of transparencies.

Header Page selects if a header page is printed for the job. The header page contains the owner and job name and serves as job separator and job identification. The header page is printed from the same tray as the first page of the job. Finishing (stapling) and multiple copies are not applied to the header page. The header page is output to the same tray as the job.

Trailer Page selects if a trailer page is printed for the job. The trailer page contains info about owner, job name, print time, and print results.

Transparencies with Interleaf selects the creation of transparencies. For each page, two sheets are output: the transparency and the separation sheet. Transparencies are always drawn from the manual tray. Separation sheets are drawn from the tray selected as paper source for the job. Transparencies and separation sheets must have the same size and orientation. Transparencies should be selected only if the page layout selected in the Layout panel is simplex.

Front cover sheet selects the insertion of a front cover sheet from the selected tray. The tray may be a normal input tray or a sheet feeder (an optional accessory of the printer). The sheet feeder allows preprinted paper to be included in a job without feeding the paper through the printer and exposing it to the printer heat.

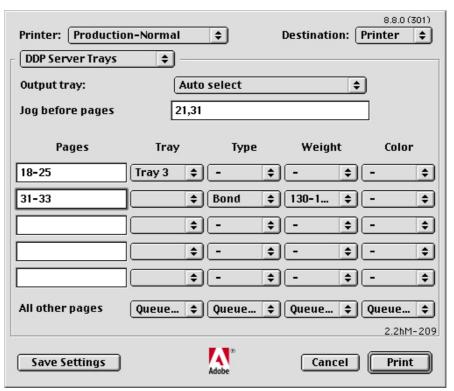
If **Print** is selected, the first page of the job is printed on the front cover sheet. Otherwise the cover sheet is left blank, and the first page is printed on a sheet selected for the job. Duplex printing is also applied to the cover sheet, i.e., with duplex enabled, the first two pages are printed on the cover sheet.

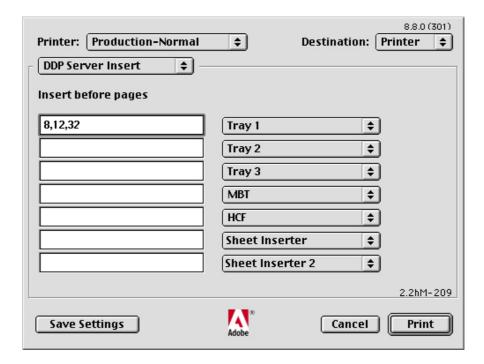
Back cover sheet selects the insertion of a back cover sheet, similarly to front cover sheet. Printing on the back cover sheet is not possible, however.

Cover sheets may also be applied to booklets. A front cover sheet will be applied as outermost sheet (the booklet cover). A back cover sheet will be applied as innermost sheet. The innermost sheet can be, e.g., a return postcard.

Note: Front cover sheet and insert before page 1 (see section Trays) cannot be selected together. Only one sheet can be inserted before page 1.

Trays and Insert





The Trays panel allows you to select input trays for each page of the job individually. It can be used to print chapter separation sheets on special paper, or to print a whole chapter on special paper. The trays panel also allows to select an output tray for the job.

The **input tray** to be used for the job as a whole is selected by **Tray** in the Basic panel . This selection can be augmented by the selection in the Trays panel.

In the Trays panel, input trays can be selected per job and per page. Additionally sheets can be inserted before each page.

A tray can be selected in the following ways:

by auto selection – this instructs the DDP Server to select a tray
matching the document size. Non-empty trays, larger trays (HCF)
and trays with long edge fed paper are preferred.

The printer driver offers two similar looking entries for auto select. The first means "no setting" (same as "queue setting"), the second means auto select as described above.

Auto selection is available only for print pages, not for insert pages.

- by explicit selection this selects the given tray.
- by media type, color, and weight this determines selection of a tray which is configured to contain the given paper.

Auto tray selection together with a selection of media type, color, or weight means that the paper specification is used as an additional selection criterion.

Explicit tray selection together with a selection of media type, color, or weight means that the specified tray <u>must</u> contain the specified paper. If it doesn't, the job will be rejected.

To let the job wait and request the specified paper at the DDP184 panel, configure the DDP Server's **RIP Details** for **Autoselect tray** = In the printer, and choose auto tray selection together with your selection of media type, color, and weight.

Media types Type 1 to Type 16 and media colors Color 1 to Color 16 refer to the custom types and colors which can be configured at the DDP 184 panel.

Explicit tray selection can be used to print documents which are smaller or bigger than the paper. If the document size does not match, the document is rotated to the proper orientation and centered on the paper.

In any case, the document orientation (portrait or landscape) is automatically matched to the paper orientation by rotating the document if necessary.

Page numbers entered under **Page specific options** » **Pages** specify that the given pages shall be drawn from the tray selected in the same row. E.g. the above screenshot requests pages 18 to 25 and 37 to 39 to be drawn from tray 3, and pages 31 to 33 to be drawn from a tray containing Bond paper with a weight of 130-133 g/m² (35 lb bond).

Pages must be entered as a comma separated list of individual page numbers, or of page ranges where the lower and upper bounds are separated by a dash. Pages count from 1 and refer to the pages included in the job. If your document contains Roman numbering, or if you print only one chapter of a book, the page numbering in the job may deviate from the page numbering in your document.

If duplex printing is selected, each individual page and each start of a page range are forced on a new sheet. E.g., if the job shall be printed duplex on tray 1, and page 18-25 on tray 3, then pages 1-17 will be printed from tray 1, page 17 will have an empty back page, and pages 18-25 will be printed starting on a new sheet from tray 3.

While you enter page numbers which overlap with page numbers entered previously, the overlapping numbers are marked red to alert you. When the cursor leaves the current line, the overlapping numbers will be deleted from your previous selection.

Page numbers entered under **Insert before pages** » **Pages** specify that an empty sheet shall be inserted before the selected pages. If duplex printing is requested,

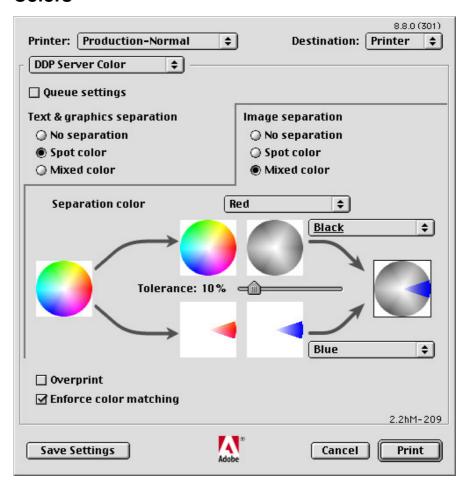
the selected page is forced on a new sheet if necessary. E.g., if the job shall be printed duplex, and a page inserted before page 8, then page 7 will have an empty back page, and page 8 will be on a new sheet, after the inserted sheet.

If you select a page tray for a document printed in booklet mode, the tray selection is applied only to the first document page on each sheet. E.g., for a 12 page document printed in booklet mode on 3 sheets, page specific tray selections are applied for pages 1, 3, and 5 only; all other page specific tray selections are ignored.

Options available for the **Output tray** depend on the finishing equipment of the engine as shown or selected in the **Installable Options** panel, and on the finishing options selected in the **Layout** panel.

Jog before pages determines that paper is offset in the output tray before each specified page. E.g. to offset pages 21-30 against the rest of a job, (e.g. to easily remove a selected chapter from the paper stack) enter page numbers 21,31.

Colors



The color panel allows you to control color separation. Color separation is available, when the 2 engines have different colors installed (black, MICR, or a proper color).

The DDP Server supports spot color separation and mixing color separation.

Spot color separation allows you to print, e.g., logos, graphics elements, or text elements in a proper color which is installed in addition to black.

With spot color separation, each element of the document (character, graphic shape, image pixel) is mapped on either one of the colors, but not both. E.g. with separation color = red and engine toner = black / red,

- a graduated tint from white to black prints as a white to black tint,
- a graduated tint from white to red prints as a white to red tint.

Mixing color separation allows you to print, e.g. full color images and get a printout which approximates the image's impression with the 2 available colors.

With mixing color separation, each element of the document (character, graphic shape, image pixel) is mapped on a mixture of both colors whose color value is closest to the given color value. E.g. with separation color = red and engine toner = black / red,

- a graduated tint from white to red prints as a white to red tint,
- a graduated tint from black to red prints as a black to white tint, overlayed with a white to red tint,

• a graduated tint from blue to red prints (depending on attribute settings) as a gray to white tint, overlayed with a white to red tint.

The color panel allows you to set the following attributes:

- 1. Text/graphics separation mode selects if no separation, spot color separation, or mixing color separation is applied for text and graphical objects.
- 2. Image separation mode selects if no separation, spot color separation, or mixing color separation is applied for images.
 - Mixing color separation is not supported with PCL (for any objects).
- 3. Separation color indicates which color is used for separation.
- 4. Print colors indicates which colors are expected to be present on the engines. For "No separation", one color is shown, for spot separation, two colors are shown.

The color graphics in the lower half indicate how the color separation is performed: From left to right, they show: document colors, separated document colors, separated engine colors, composite output.

According to the capabilities of the DDP184, the following print colors are supported:

- Engine 1: black or MICR
- Engine 2: black, red, warm red, green, blue, reflex blue, cyan

If print color 1 is black, then the elements in the separation color are mapped on the the proper color on engine 2. If print color 1 is MICR, then the elements in the separation color are mapped on MICR.

To print elements in your document using MICR, design these elements in some color, e.g. red. Then select red as separation color and configure the engine with print color 1 = MICR.

To print your document monochrome, but in color, select no separation and a non black print color.

If you choose a proper color as separation color, this color is separated against all other colors, including black. If you choose black as separation color, black is separated versus all other colors.

Separation color black is not supported with PCL.

For true spot color printing, e.g., to print only orange shades, use this color as separation color. To highlight all color cells in a spreadsheet irrespective of their actual color, use black as separation color.

When the printer driver plug-in is opened, it determines the actual engine colors. You may, however, prepare jobs for printing with a different color. To do so, select a different color as print color. In this case, the actual engine color is shown as a reminder.

5. Tolerance – selects how many color values near the separation color shall be mapped on the separation color.

If the separation color is a proper color, tolerance means the maximal hue (color tone) deviation under which other colors are included. E.g. if your separation color is red and you want yellow elements to be printed red, select tolerance = 50%.

If the separation color is black, tolerance means the maximal color saturation under which non-black values are printed black. E.g. a tolerance value of 50% prints all color elements with saturation up to 50% as black and all element with a higher color saturation in color.

In general, a small, but non-zero separation border is recommended because of rounding errors produced by printer drivers in some operating systems.

Tolerance is not supported with PCL.

6. Enforce color matching – selects if print colors must match engine colors exactly when a job is printed.

By default (enforce color matching = on), colors must match when the job is printed. If colors do not match, the respective job will fail to print and get a corresponding error message in its job log. You may resubmit the job afterwards with "enforce color matching" off to print it anyway.

If "enforce color matching" is off, then a proper color or black matches another proper color or black, e.g. both black or blue are accepted instead of red.

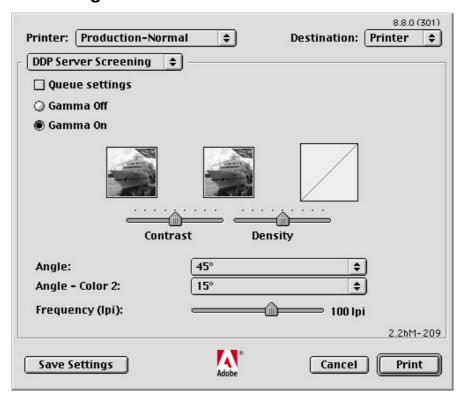
In any case, only MICR is accepted for MICR.

7. Overprint – selects that objects lying on top of others are rendered with overprinting, i.e. without erasing the lower object. This technique can be used to avoid blank areas at adjacent edges of overlapping objects.

Overprinting is not supported with (bitmap) images. I.e. an image as the top object causes the same printout with or without overprinting.

Such objects are usually created with color management enabled. To avoid creation of such objects, disable color management in your application.

Screening



The **Screening** panel allows you to control the screen (raster) settings. Screen settings are applied to all elements on the page (text, graphics, and images).

You can set the following attributes:

- 1. **Frequency** sets the screen frequency. The frequency is measured in lpi (lines per inch). Higher values yield a finer raster, but allow less grey levels to be distinguished.
- 2. **Angle** 1/2 sets the screen angles for black and color. In general it is good to print monochrome pages and black objects at an angle of 45°, and color objects at 15° or 75°. With pure spot color printing, both angles may be 45°.
- 3. **Contrast** increases or decreases the contrast in the result page.
- 4. **Density** increases or decreases the density in the result page.

Shifting



The Image Shifting panel allows you to position a document on the paper if you print on paper which is bigger than the document, e.g., B4 on A3. To print on bigger paper, you must select a tray explicitly.

You can set the following attributes:

- 1. **Shift Front/Back separately** allows you to enter separate shifting values for front and back or let the front values apply also to the back. Front = back means that printed images moves in the same direction on both sides of the paper, i.e., if you hold the paper against the light, the images will match.
- 2. **Horizontal (left), vertical (up)** specify horizontal or vertical shifting on the image on the paper.

Shifting is always specified relative to the paper while it goes through the printer, not relative to the document.

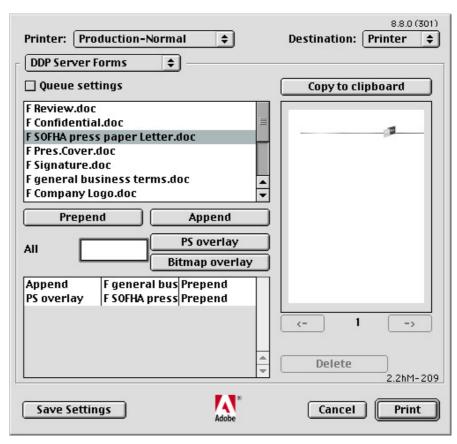
Horizontal shift moves bitmaps in the paper feeding direction (positive: to the left of the printer). Vertical shift moves bitmaps across the feeding direction (positive: to the back of the printer).

Note: Horizontal shift is applied at the moment of printing. I.e. if you print face down, turn the paper up to see the correct shifting direction.

3. **Print position** – allows to align the document with one side or one corner of the paper. Directions have the same meaning as for shifting. I.e. top left means that the image is shifted in feeding direction and to the back of the printer.

This option works only if you select a tray explicitly and print a document on paper with a different size (e.g., B4 on A3 or Executive on Letter).

Forms



The **Forms** panel allows you to overlay document pages with forms and to prepend or append another job to a document.

Forms overlay can be used to simulate the effect of preprinted paper, e.g., to add your company letterhead to a letter. Prepending can be used, e.g., to add a cover page in front of your document. Appending can be used, e.g., to add terms and conditions at the end of your document.

To be available for overlay, a job must have been printed as a form (see next section, workflow panel). A form is a one page PostScript job which can be executed during the interpretation of the main job (PS overlay) or merged with the bitmaps of the main job (bitmap overlay).

To be available for prepending or appending, a job must have been printed to the archive before (see next section, workflow panel). An archive job consists of rendered bitmaps which can be merged or concatenated with the bitmaps of the main job.

To prepend a job to the current job, select it behind **Prepend**.

To append a job to the current job, select it behind **Append**.

To select jobs for overlay, perform the following steps:

- Select a job in the list of Page specific forms. The jobs are marked with F or A for form or archive.
 The preview of the job or its first page will be shown in the window on the right.
- 2. For an overlay on a subset of pages, enter the range of pages (e.g., 2,5-7,9). No pages entered means all pages.

3. Select **PS Overlay** to apply the selected form as PostScript overlay. For each selected page, the PS code of the form will be executed before the PS code of the job page.

Select **Bitmap Overlay** to apply the selected archive job as bitmap overlay. For each selected page, the bitmap of the corresponding archive job page will be merged with the bitmap of the job page.

4. Additionally you can perform the following operation:

Click Copy to clipboard to copy a screen resolution bitmap of the page in the preview window to the clipboard. You can paste it as a background image into your document to obtain a merged preview of the document with the form.

Position the overlay preview at the top left corner and scale it to 100%. Then position your document content. Before printing, remove the preview. Do not print with the preview, as it has only screen resolution.

Note: The size and orientation of an overlay must match the size and orientation of your document. No scaling will be done when applying the overlay.

Note: PS overlay is not supported for PCL.

Note: Do not use a color job as a bitmap overlay for a b/w job as the result is not defined.

Note: Some applications, like MS Powerpoint and Adobe Acrobat draw document pages such that a DDP Server PS overlay remains invisible. For such applications, only bitmap overlay should be used.

Note: When a job is printed to the archive, prepending and appending will be performed during printing to the archive. To prepend or append to an existing archive job use the job merging function in the DocXPLORER.

To create a form, select "Destination = Form" in the **Workflow** panel. To create an archive job, select "Destination = Archive" in the **Workflow** panel.

Workflow



The Workflow panel allows you to control the cluster printing workflow.

You can set the following attributes:

- 1. **Destination** controls special handling for the job:
 - Printer the job will be normally printed.
 - Archive the job will be rendered but not printed. The rendered bitmap is stored in the DDP Server's archive queue. From the archive queue it can be reprinted later. Archive jobs can also be merged.
 - Form the job will be stored as a form. Forms are available in the DDP Server's forms queue and can be applied for PS overlay from the forms panel of the printer driver plug-in.
 - Note: Destination = form is not supported for PCL.
 - Archive and Printer the job will be rendered to the archive, and then printed.
- Delegation controls whether the job is a candidate for delegation in the context of load balancing. Load balancing is a means to share printing load among several DDP Servers. If delegation is off, the job will not be delegated.
 - Delegation itself is configured on the DDP Server. For more details, see the DocXPLORER Reference Guide.
- 3. **Split job** tells the DDP Server to split the job into smaller packets. Job splitting is useful mainly together with load balancing. Splitting a job into several packets and delegating the packets to different DDP Servers yields a

more even distribution of the overall load, and allows to shorten the time until the individual job is completely executed.

Jobs can be split by pages or by copies:

- **Pages**: Page splitting is achieved by dividing a print job into subsets by pages, e.g. page 1-100 and 101-200 of a 200 page job.
- **Copies**: Copy splitting is achieved by duplicating a print job with reduced copy count, e.g. duplicating a 500 copies job into 2 jobs with 250 copies each.
- **Limit**: Together with the splitting mode, a splitting limit must be entered, which defines the maximum packet size.

Copy splitting packets will be sized (approximately) equally. E.g. with copy splitting limit = 100, a 210 copies job will be split into 3 packets of 70 copies. Page splitting packets will be sized to the limit, except the last packet which is sized to the rest.

Page splitting can also be used to divide a booklet into portions which can be handled by the finisher. E.g. to print a 200 page document as booklet, select page splitting with a limit of 80 pages. This will create three booklets which fit into the booklet printing limit of 80 pages (= 20 sheets).

4. **Send E-mail** – instructs the DDP Server to send an email to the specified address after completion of your job. **Always / On error** lets you restrict the email notification.

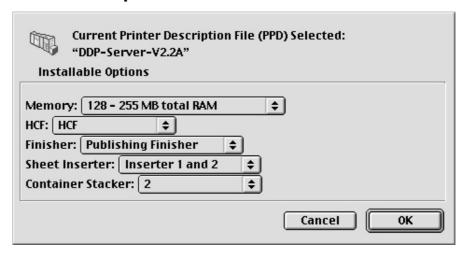
Sending email requires that the DDP Server is configured appropriately. This is described in **RIP Details – Communication** in the ProfiWeb Reference Guide and the DocXPLORER Reference Guide.

5. **Send Windows message** – instructs the RIP to send a Windows message using NET SEND to the specified client PC after completion of your job. Always / On error lets you restrict the message notification.

Sending a Windows message requires that the Messenger service of Windows is running on the client PC.

Job Comment allows you to add a comment to the job ticket of the job. It can be inspected under **Job Details** on the DDP Server.

Installable Options



To access the Installable Options, open Chooser » select AdobePS » select the DDP Server » click Setup » select Configure. The Configure window allows you to select and configure the optional accessories of the connected DDP Server.

The installable options determine which functions are offered in the panels of the printer driver plug-in. For example, booklet mode will be offered only if a finisher with booklet maker is installed.

The Options panel offers the following functions:

High Capacity Feeder, Finisher, Sheet Inserter, Container Stacker: You may change the setting for each option manually, e.g., select a finisher with booklet maker. This will let the plug-in behave as if a DDP Server with the specified option were connected. In this way you can create jobs for other DDP Servers which have the given options.

Glossary

Term/Abbreviation Explanation

Active jobs A virtual queue showing the jobs which are currently interpreted or output.

Administrator User with special rights to configure a DDP Server. See user.

Archive queue A virtual queue of jobs rasterized for later feedback, merging, and printing.

Bitmap Image data produced by the RIP for output on the printer, and for preview of

forms and archive jobs.

Cluster Printing s. load balancing.

Copy splitting Dividing a print job into subsets by reducing its copy count, e.g. duplicating

a 500 copies job into 2 jobs with 250 copies each.

Delegation Sending a job to another DDP Server for execution. Delegation aims at

reaching a balanced load between all DDP Servers involved. Delegated jobs

are tracked such that their history can be displayed at the master.

DHCP Dynamic Host Configuration Protocol. A network protocol used for

assigning IP numbers to network devices (server, workstation, printer).

DNS See domain name server.

DocuFLOW s. SOFHA DocuFLOW

Document page s. page

DocXPLORER Monitoring and control application for DDP Server. DocXPLORER allows

to manage a network of RIPs together with the queues and jobs on them.

Domain name server A network device mapping network names on IP addresses. A domain name

server can also refer to a mail server by providing its MX record.

Dots per inch – measuring unit for printer resolution.

Electronic stationery s. form

EtherTalk A network protocol used in Macintosh environments for printing and file

sharing.

Failed job A job whose execution raised an error, e.g. paper jam or paper tray

mismatch. Failed jobs may be recovered from the Finished queue.

Finished jobs A virtual queue showing jobs which have finished execution. Job details are

still available for all jobs in this queue. The Finished jobs queue shows only printed or failed jobs. Forms and archive jobs are shown in the Forms or

Archive queue, respectively.

Finishing Post printing operations, e.g. stapling, punching, folding.

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Term/Abbreviation Explanation

Form A one page job which can be used to simulate preprinted paper (electronic

stationery). Printing a document with a form results in printing the document pages over the form pages. Final prints may select a tray with offset printed

paper instead of the form.

Gateway s. router

HCF High capacity feeder.

Hold queue A queue with jobs stored for later submission to a print queue.

Imposition Instructions on how the pages of a job are laid out on the printed sheets, e.g.

duplex or booklet.

IP number A unique number used to identify a network device (e.g. server, workstation,

printer) in a network. An IP number consists of 4 integers between 0 and 255 (eight bits), e.g. 128.3.3.21. IP numbers may be valid world wide or

only in the local network.

Job Document in print ready format plus job ticket.

Job setting Job ticket attributes defined in a job. Job settings may be set in the printer

driver and edited in the job details dialog of the DocXPLORER. Job settings

may be overridden by queue settings.

Job splitting s. page splitting, copy splitting

Job ticket Instructions for printer specific handling of a job, e.g. for imposition, forms

inclusion, or owner notification.

Load Balancing Using two or more DDP Servers to share print load among several printers.

Sharing is achieved by delegation, page splitting and copy splitting.

MICR Magnetic ink character recognition (technology). The term is also used for

magnetic toner.

Name server. See domain name server.

NetBIOS A network protocol used in Windows environments for printing and file

sharing.

Netmask A 4 number tuple (like an IP number) specifying a subnet for searches and

broadcasts. E.g. the netmask 255.255.0.0 specifies the first 16 bit of an IP

number as subnet address.

Owner The person or user account who submitted the job.

Page 1. document page (in the application)

2. printed page (on paper)

In duplex printing, two pages are printed on (both surfaces of) one sheet. In booklet printing, two document pages are mapped on one printed page, and

4 document pages make up one sheet.

Page splitting Dividing a print job into packets by pages, e.g. page 1-10 and 11-20 of a 20

page job. Finishing options like booklet layout or staple mode apply to each

packet individually.

PCL Printer command language. A page description language used for HP

printers. PCL5e supports black and white printing, PCL5c supports color

printing.

PDF Portable document format. PDF differs from PostScript by being less device

dependent, page independent and easily to view on many platforms.

PostScript Page description language (PDL) with a rich feature set for mapping text,

graphics and images on raster devices like printers and film recorders.

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Term/Abbreviation Explanation

PPD PostScript Printer Description. A file on the workstation which specifies

printer capabilities and how the printer driver can map them on printer

commands.

Print page s. page, print pages (number of)

Print pages (number of) Number of document pages times number of copies.

Print queue A queue with jobs waiting for execution.

ProfiRIP Printer controller of DDP Server.

Purge Deleting old jobs to recover database and job space. Purging may be applied

to job sources if they are still available, to accounting records, and to job

tickets.

Queue A container for jobs. DDP Server provides print queues and hold queues.

The administrator may define any number of print and hold queues.

On the user's workstation, queues may be visible as MS Windows printers,

or as Macintosh desktop printers.

Queue settingJob ticket attributes defined in a queue. They may be defined to take priority

over job settings, i.e. the attributes of jobs executed in the queue.

Raster image processor. A device for turning instructions in a page

description language (PDL) into bitmaps suitable for output on a digital

printer. E.g. ProfiRIP

Router A network device connecting a subnet to other networks.

Sheet Sheet of printed paper; in duplex printing, two pages are printed on one

sheet.

SOFHA DocuFLOW[®] Print on Demand Software for the ProfiRIP. Comprises custom queues,

archive printing, forms overlay, job merging, and cluster printing.

Soft form s. form

Subnet 1. a set of IP numbers sharing a number of leading bits

2. a segment of a network separated from the rest of the network by a

gateway

TCP/IP A network protocol used for communication in local area networks and the

internet.

User User with simple printing rights on a DDP Server. See administrator.

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