
DocXPLORES

Reference Guide

Copyright © 2001-2008 SOFHA GmbH

Version 2.3.4

N905368

Preface

Welcome to DocXPLOLER!

DocXPLOLER is the monitoring and control application of the DDP Server printing system.

DocXPLOLER is described in the following manuals:

- DDP Server User's Guide – describing the installation and giving an overview of all DDP Server components
- DocXPLOLER Reference Guide – this manual

The DocXPLOLER reference guide is stored in machine readable form (PDF format) on the DDP Server CD-ROM. 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**.
- Functions available to the administrator only, and not to the normal user, are marked at the beginning of the corresponding sections.

Copyright © 1999 - 2008 SOFHA GmbH, Germany.

Version 2.3.4, 17 Nov. 2008

SOFHA, POD Server, ProfiRIP, SOFHA DocuFLOW, and DocXPLOLER are registered trademarks of SOFHA GmbH, Germany.

Adobe, Acrobat and PostScript are registered trademarks of Adobe Systems Incorporated in the U.S.A. and other countries.

Microsoft and Windows are registered trademarks of Microsoft Corporation in the U.S.A. and other countries.

AppleTalk, Macintosh and MacOS are trademarks of Apple Computer, Inc., registered in the U.S.A. and other countries.

All other company and product names are (registered) trademarks of the respective owners.

While every effort has been made to ensure the accuracy of information contained in this document, SOFHA GmbH shall not be held responsible for any inaccuracies it may contain.

All specifications are subject to change without notice.

Contents

Preface	ii
General	1
DocXPLOER Overview	1
Getting started – User	2
Getting started – Admin.....	2
User / administrator mode.....	2
User tasks.....	3
Administrator tasks.....	3
Queue types	3
Job types	4
Job ownership	5
Forms.....	6
User interface operations	6
MacOS X menus.....	7
Tasks	8
Discovering DDP Servers.....	8
Naming a DDP Server	8
Managing fonts.....	9
Load Balancing.....	10
Job Splitting.....	11
Accounting.....	12
Reboot / Shutdown	12
Defining and managing queues.....	13
Printing jobs.....	13
Job Tracking	14
Handling failed jobs.....	14
Defining forms.....	14
Applying forms.....	15
Creating and handling archive jobs.....	15
Functions	17
Tree view display.....	17
RIP list display.....	18
Queue list display	19
Job list display	21
RIP details.....	23
RIP details – General	24
RIP details – Communication	25
RIP details – Engine Communication.....	26
RIP details – Media type/color mapping	27
RIP details – Accounting	28
RIP details – Event logging	28
Queue details	29
Job details	31
Job details – Print settings	32
Job details – Page settings	38
Edit RIP list	39

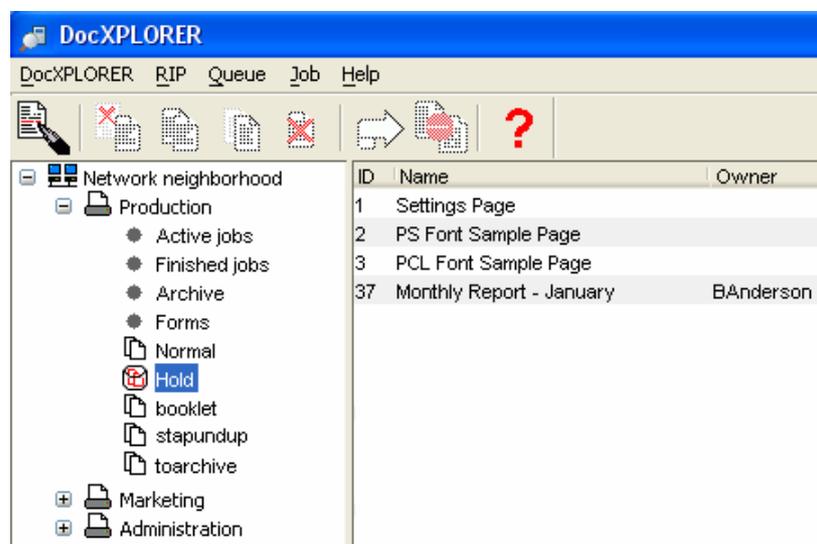
DHCP Server	40
Preferences.....	42
Admin login / logout.....	42
Color Calibration	42
Font Management	44
Load Balancing	45
Accounting.....	46
Event Log.....	47
Reboot / Shutdown.....	47
Download Job	48
Pause/Resume Job.....	48
Feedback and preview.....	49
Job merging	51
Export / import archive jobs	52

Glossary

53

General

DocXPLOER Overview



DocXPLOER allows users to monitor and control a cluster of DDP Servers in a network.

As a normal user, you can use DocXPLOER to submit and monitor jobs, edit the job ticket, and perform special functions like merging jobs, and feedback.

As an administrator, you can configure DDP Servers, especially for load balancing, setup queues to provide different printing profiles and collect accounting data to charge back users.

The DocXPLOER interface includes a cluster topology overview, showing jobs and queues lists and detailed views of jobs, queues and DDP Servers. The left panel of the main window shows a navigable tree overview of the network with DDP Servers and queues. The right panels shows lists of DDP Servers, queues and jobs, depending on what is selected on the left panel. Detail dialogs allow users to view and edit details of selected DDP Servers, queues, or jobs, depending on their access rights.

DocXPLOER performs continuous monitoring of all viewed objects. The status of the DDP Servers, queues, and jobs in the main window is regularly updated to reflect their changes. This is performed without placing an extra burden on network traffic.

Getting started – User

To install DocXPLOER on Windows, run the setup application on the CD-ROM. On Macintosh, run the Installer from the CD-ROM.

On Windows, launch DocXPLOER from the Start menu. On Macintosh, launch DocXPLOER from the folder chosen during installation.

If you are using DocXPLOER in a network without gateways, DocXPLOER shows you all available DDP Servers.

If your network contains gateways, and you want to access DDP Servers outside your own network segment, you have to set up a list of DDP Servers which DocXPLOER should look for. See **Discovering DDP Servers**.

Getting started – Admin

To make a DDP Server available in your network, you should perform the following tasks:

- Assign communication settings (name and IP address) to the DDP Server.
See **Naming a DDP Server**.
- Define queues.
See **Defining and managing queues**.
- Configure load balancing, if you want several DDP Servers to share the printing load.
See **Load balancing**.
- Install forms.
See **Defining Forms**.

User / administrator mode

DocXPLOER can be operated in user or in administrator mode. Several functions are available to administrators only. To obtain administrator status for a DDP Server, select the **RIP » Admin login** function and enter the administrator password. To return to the normal user status, select the **RIP » Admin logout** function.

Only one user can be administrator of a DDP Server at any time. You can acquire administrator rights via DocXPLOER or via the web browser. DocXPLOER has priority over the web browser. An administrator login by DocXPLOER cancels an existing web browser login.

The administrator can change the administrator password by the **RIP » Change Password** function. The administrator password is empty by factory default. It is reset to empty when the **Factory defaults** function is performed.

Functions available only to the administrator are marked by the prefix “Administrator” for the corresponding section.

User tasks

The following functions are provided to all users:

- View DDP Server settings
- View color calibration settings
- View available fonts
- View the load balancing configuration
- View and obtain own accounting data
- View and obtain the event log
- View queue settings
- Submit / create jobs
- Change /copy / move / view / merge / print / delete / cancel / pause / resume own jobs
- Copy / view / merge / print jobs owned by other users (this may be restricted, see **RIP » Details » General » Others can see jobs**)
- Create forms and archive jobs
- Export / import own archive jobs

Administrator tasks

The following functions are provided only to an administrator:

- Change DDP Server settings
- Change color calibration settings
- Download / manage fonts
- Configure load balancing
- View and obtain accounting data
- Reboot / Shutdown (from remote)
- Create / change / delete queues
- Change / copy / move / view / merge / print jobs owned by other users, including assigning another owner to a job
- Export / import archive jobs owned by other users

Queue types

DDP Server provides the user print queues and hold queues.



Print queue

Print queues are queues where jobs are submitted for execution. Jobs submitted to print queues are executed in FIFO (first in first out) order. The order of job execution may deviate from FIFO if queues have been set up with different priorities, e.g. high or low.

Print queues can have a printing profile associated with them. The print settings of a queue define how its jobs are printed and finished. Each attribute of the

queue's print settings can be defined to take priority over the jobs' settings. For example, in a queue with staple mode set to corner and queue priority, each job will be corner stapled, regardless of the job's setting applied in the printer driver.



Hold queue

Hold queues are permanent containers for jobs. Jobs are not executed until moved from the hold queue to a print queue. Jobs in a hold queue can be submitted to a print queue at any time.

The administrator can define any number of print and hold queues. This can be used to provide different printing profiles according to the user group's needs.

Both print and hold queues can be installed as Windows or Macintosh printers. This allows easy and direct access to a queue with specified settings.

Visibility of queues in the network can be restricted by the administrator. This can be used to enforce that jobs are printed to a hold queue and must be explicitly released by the administrator using DocXPLOER. See **Queue » Details » Visible in the network**.

Job types

DDP Server supports several different processing types for jobs:

-  **Normal** Printing
-  **Hold** Storing in a hold queue: this is performed by printing to a hold queue. Jobs submitted to a hold queue are stored for later submission to a print queue.
-  **Archive** Archiving as rendered bitmap: this can be performed from the **Workflow** panel of the printer driver. Rendered bitmaps can be retrieved from the **Archive queue**. See **Creating and Handling Archive Jobs**.
-  **Forms** Establishing as form: this can be performed from the **Workflow** panel of the printer driver. Forms can be included for overlay printing in other jobs in the **Forms** panel of the printer driver. See **Defining Forms** and **Applying Forms**.

Job ownership

The owner of a job is the person or user account which printed the job.



Owner's (or administrator's) view of a job

The owner of a job has the right to perform all possible operations on the job, i.e. change, delete, copy, and view the job.



Any other user's view of a job

The access rights of other users are determined by the administrator. In the **RIP » Details » General** dialog, the administrator may allow or disallow that users view other users' job details. This means that all viewing operations are allowed or forbidden on other users' jobs.

Viewing a job comprises seeing the job in a job list, viewing its details, viewing its rendered bitmap, viewing the job log, and copying (resubmitting) the job.

When a job is copied by a common user, this user becomes the owner of the job. This allows to account the job to the person who has made the copy. If a job is copied by the administrator, the owner is retained.

Forms

A form is a single-page job which can be used instead of preprinted paper (electronic stationery). For example, a form may contain a company letterhead or logo.

Printing a document with a form results in printing the document pages over the form pages (PS overlay) or merging the document page bitmaps with the form bitmaps (bitmap overlay). To print the final version of a job, you may select a tray with offset printed paper instead of the form.

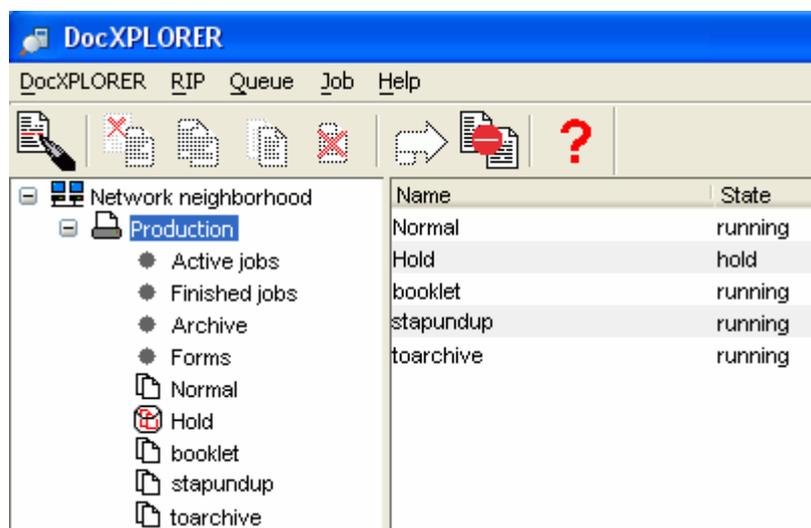
Forms can be created from any software application, e.g. MS Word. Forms are created by printing the document with Destination = Form in the **Workflow** panel of the printer driver, or by selecting Destination = Form in the **Job » Details** dialog.

Forms are applied from the **Forms** panel of the printer driver, or by selecting **Use PS overlay = ...** or **Use bitmap overlay = ...** in the **Job » Details** dialog.

Applying a form can also be associated with a queue. Printing to the queue will then apply the form.

User interface operations

The graphical user interface with its explorer-like main window provides intuitive access to all operations. Selected objects (DDP Servers, queues, jobs, and pages) show applicable operations in context menus and through tool bar buttons.



The following keyboard operations are supported: Enter to confirm and leave a dialog, Escape to cancel a dialog, Tab to step through the input fields of a dialog.

Note: On Macintosh menus, the shortcut key is named "Meta". "Meta" refers to the command key. "Backspace" refers to the key which, e.g., in the Finder is used to delete files.

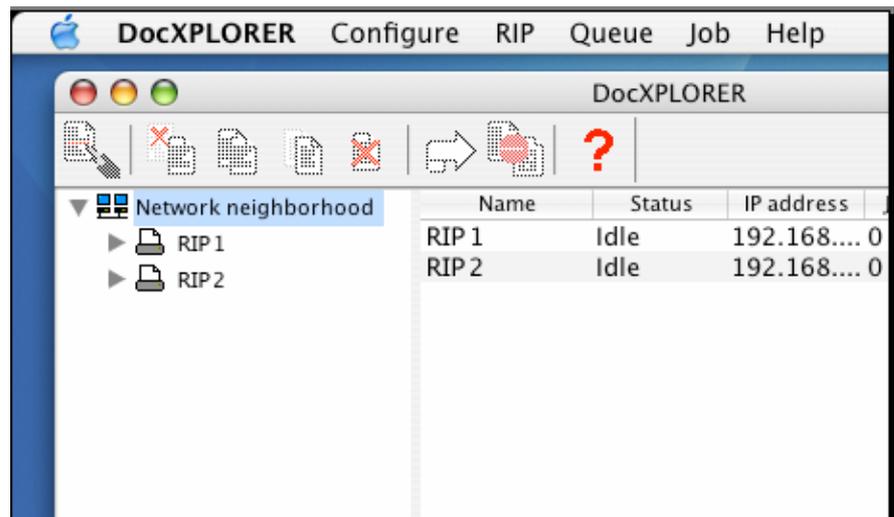
Copying operations can be performed by drag and drop. Drag and drop can be used in the DocXPLOERER to move jobs between queues or to submit jobs from

Microsoft Windows Explorer or Macintosh Finder. Just drag a file with a supported type (PostScript, PDF, PCL, TIFF, ASCII) from the Windows Explorer or Finder to a queue.

All list displays in the main window of DocXPLOER can be sorted by each column simply by clicking on the column header. For print queues, the default sorting order for job lists, execution order, can be restored by the **Job » Print order** command.

MacOS X menus

The file menu for MacOS X differs from the windows file menu in the following manner:



The MacOS X operating system adds a menu with the application name (DocXPLOER) to the menu bar of each application. The MacOS X DocXPLOER menu shows entries which allow interactions between the application and the operating system. For compliance with MacOS X, it contains the items About and Preferences, which are offered in different menus in the Windows version of DocXPLOER. The Windows DocXPLOER menu is offered by the name "Configure" under MacOS X.

Tasks

Discovering DDP Servers

DocXPLOERER discovers DDP Servers in the current network segment automatically by regular broadcast calls. Broadcast is performed continuously, so newly found DDP Servers are displayed immediately within your DocXPLOERER tree without any further specific user action. If your network contains no gateways, DocXPLOERER finds all DDP Servers by itself.

If you want DocXPLOERER to find DDP Servers in another network segment, e.g. beyond a gateway, you have to establish a list of DDP Servers. Select the **DocXPLOERER » Edit RIP list** dialog (under MacOS X: **Configure » Edit RIP list**). This dialog allows you to enter DDP Servers by name or by IP number. You need to build the DDP Server list only once; it will be stored for future sessions.

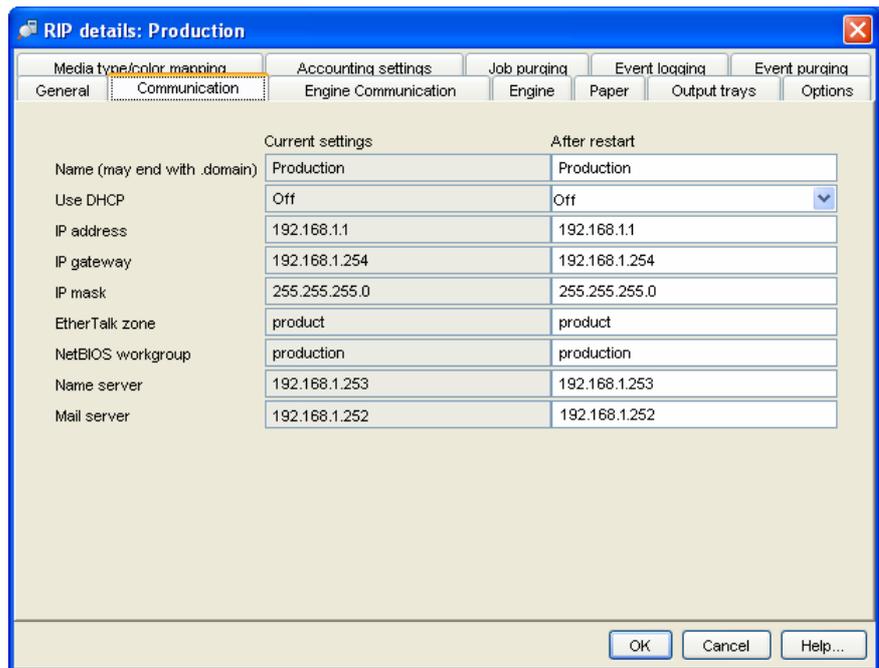
Naming a DDP Server

Administrator:

The default network protocol supported by a DDP Server is TCP/IP. However, a new DDP Server added to the network with factory settings has no IP address. There are two ways to assign an IP address to a new DDP Server:

- Using an existing DHCP server in the network. The RIP looks for one after booting.
- By simulating a DHCP server with the DocXPLOERER. See **DHCP Server**.

You can change name and IP address of a RIP in the **RIP details » Communication settings** dialog tab sheet. This tab sheet allows you also to configure other attributes: NetBIOS workgroup, AppleTalk zone and domain name server.



If you relocate the RIP to another network, you can direct the RIP to use DHCP again by turning on the Use DHCP flag in the **RIP details » Communications settings** tab sheet.

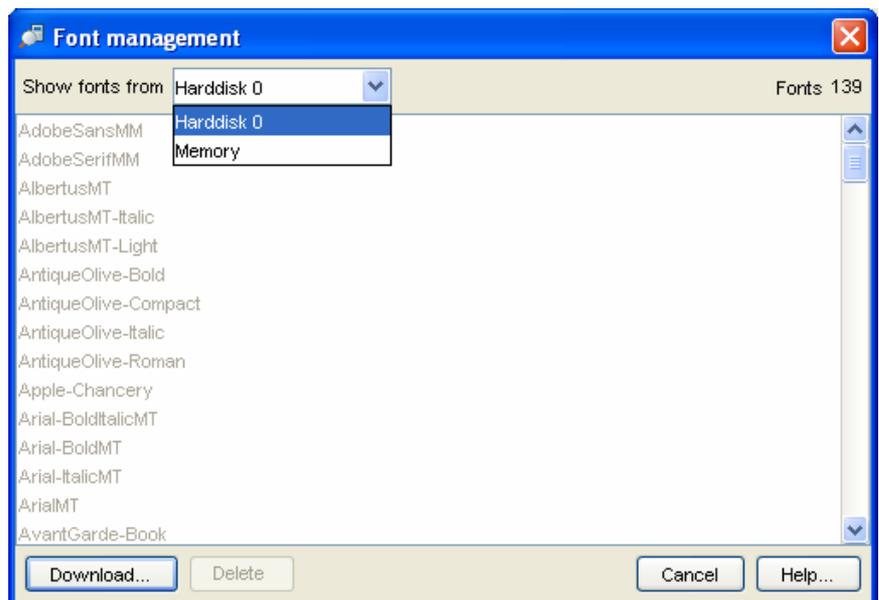
If the DDP Server's communication settings have been accidentally lost, you can restore them to DHCP by the Initialize Disk function. See DDP Server User's Guide.

Managing fonts

Administrator (users can view fonts):

Font Management allows you to download fonts to the DDP Server and to view the list of available fonts. Fonts can be downloaded temporarily to memory or permanently to disk.

Use the **RIP » Font Management** dialog to download or view the list of fonts.



On Windows systems, fonts are usually sent with the PostScript job. So downloading fonts makes sense if you configure your Windows printer not to send fonts. In this case, fonts downloaded on the RIP save download time for jobs.

On Macintosh, available printer fonts are queried before sending a job. So fonts downloaded on the RIP save download time for jobs.

In a hard disk based system like DDP Server, it is generally better to download fonts to disk. Fonts downloaded to memory will be lost after rebooting the DDP Server.

Font downloading on the Macintosh uses a direct channel which in the chooser appears as an additional print queue. You should, however, not use this for printing jobs, as some job ticket options are not available through the direct channel.

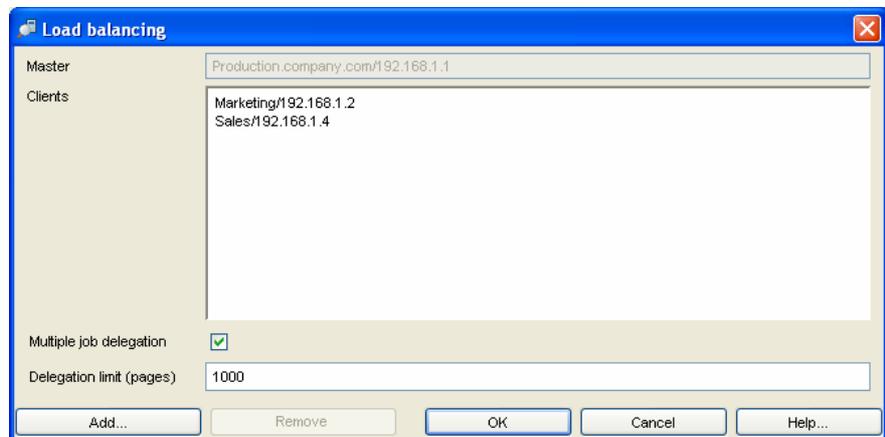
Note: Certain fonts, e.g. some Japanese Macintosh fonts, cannot be installed using DocXPLORER as they use proprietary protection mechanisms. Use the font installer supplied with the font instead.

Load Balancing

Administrator (users can view the configuration):

Load balancing means using two or more DDP Servers to share print load among several printers. In a load balancing configuration one DDP Server is configured as master while a number of other DDP Servers are configured as clients. The master can then delegate jobs to the clients. Since all DDP Servers are able to be both master and client you can choose any of them to be master and you can change the configuration at any time. Although it is possible to define more than one master at a time it does not make sense and may be confusing.

To configure load balancing, select the **RIP » Load Balancing** dialog.



In a load balancing configuration print jobs are typically only sent to the master DDP Server. The jobs are delegated to the next available DDP Server in the cluster automatically where they are printed with exactly the same settings as if they would be printed at the master. All accounting and logging information is collected by the master DDP Server and can be found in it's accounting and finished jobs dialogs.

Job delegation is usually performed by round robin, i.e. for each job the next available client is determined and the job is sent to it. Delegation of many small jobs may be customized by "multiple job delegation". With multiple job delegation enabled, the switch to the next available client will only be performed after a specified number of pages.

If your job has been split into smaller packets (see **Job Splitting**) then each packet may be delegated to another DDP Server in the cluster.

If you wish your job not to be delegated to a client but printed at the master then you can set the job feature “Delegation” to “Off”.

In a load balancing configuration it makes sense to hide all client queues by setting the queue feature “Visible in Network” to “No”.

If you have defined a number of print queues with special settings (like Layout is Booklet or Staple Mode is Corner) at the master then you don't need to define these queues at the clients as well. Typically, no additional queues are defined at the client DDP Servers.

To avoid malfunction make sure that the same fonts and forms are available on all DDP Servers in the cluster.

Delegation is not supported for jobs submitted via a direct port.

Job Splitting

To optimize load balancing, jobs can be automatically split into packets. 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.

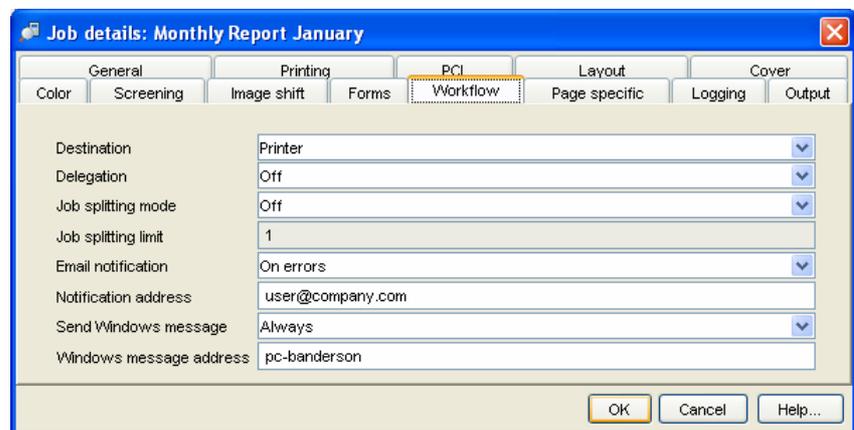
Job splitting can be applied independently of load balancing.

Jobs can be split by pages or by copies:

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.

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.

Job splitting can be selected in the **Workflow** panel of the printer driver plugin, or in the **Job » Details » Workflow** dialog panel. 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.

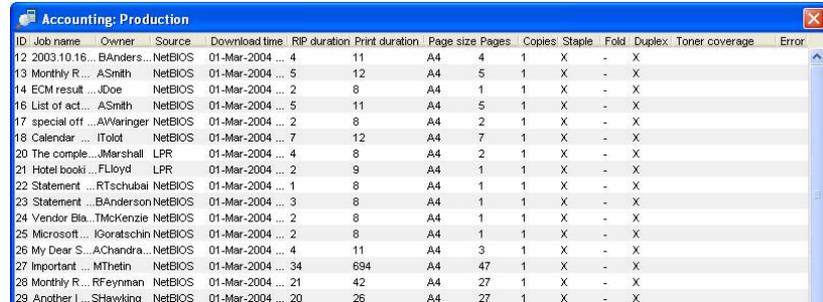
Page splitting can also be used to divide a booklet into portions which can be handled by the finisher. E.g. to print a 150 page document as booklet, select page splitting with a limit of 64 pages. This will create three booklets which fit into the booklet printing limit of 64 pages (= 16 sheets).

Job splitting is not supported for jobs submitted via a direct port.

Accounting

Administrator (users can view own data):

During processing, the DDP Server collects accounting data about each job. Call the **RIP » Accounting** dialog to view accounting data for all jobs.



ID	Job name	Owner	Source	Download time	RIP duration	Print duration	Page size	Pages	Copies	Staple	Fold	Duplex	Toner coverage	Error
12	2003.10.16...	BAnders...	NetBIOS	01-Mar-2004 ...	4	11	A4	4	1	X	-	X		
13	Monthly R...	ASmith	NetBIOS	01-Mar-2004 ...	5	12	A4	5	1	X	-	X		
14	ECM result ...	JDoe	NetBIOS	01-Mar-2004 ...	2	8	A4	1	1	X	-	X		
16	List of act...	ASmith	NetBIOS	01-Mar-2004 ...	5	11	A4	5	1	X	-	X		
17	special off ...	AWaringer	NetBIOS	01-Mar-2004 ...	2	8	A4	2	1	X	-	X		
18	Calendar ...	ITolet	NetBIOS	01-Mar-2004 ...	7	12	A4	7	1	X	-	X		
20	The comple...	Marshall	LPR	01-Mar-2004 ...	4	8	A4	2	1	X	-	X		
21	Hotel booki...	FLloyd	LPR	01-Mar-2004 ...	2	9	A4	1	1	X	-	X		
22	Statement ...	RTschubal	NetBIOS	01-Mar-2004 ...	1	8	A4	1	1	X	-	X		
23	Statement ...	BAnderson	NetBIOS	01-Mar-2004 ...	3	8	A4	1	1	X	-	X		
24	Vendor Bla...	TMckenzie	NetBIOS	01-Mar-2004 ...	2	8	A4	1	1	X	-	X		
25	Microsoft ...	IGoratschin	NetBIOS	01-Mar-2004 ...	2	8	A4	1	1	X	-	X		
26	My Dear S...	AChandra...	NetBIOS	01-Mar-2004 ...	4	11	A4	3	1	X	-	X		
27	Important ...	MThetin	NetBIOS	01-Mar-2004 ...	34	694	A4	47	1	X	-	X		
28	Monthly R...	RFeynman	NetBIOS	01-Mar-2004 ...	21	42	A4	27	1	X	-	X		
29	Another l...	Shawking	NetBIOS	01-Mar-2004 ...	20	26	A4	27	1	X	-	X		

The accounting dialog shows you a list of finished jobs with details like download time, RIP and print duration, pages printed, and finishing options.

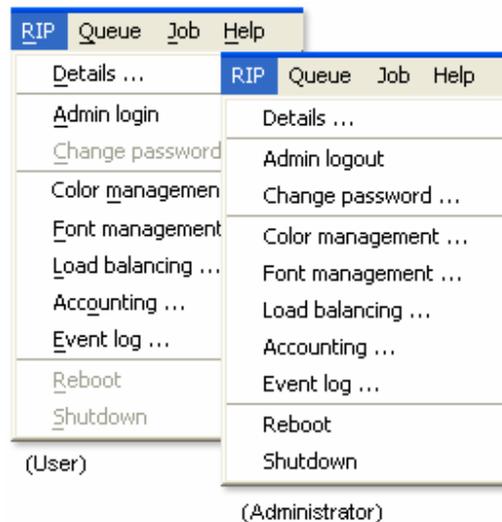
You can export the accounting records to your workstation for further processing, e.g. billing. Click **Save** to save the accounting data in tab separated values (.tsv) format, for easy import into spreadsheet applications.

Accounting data can be deleted by clicking **Purge** and **Purge all** (for selected or all jobs). This deletes the job entries completely from the DDP Server job database.

Reboot / Shutdown

Administrator:

You can reboot or shut down the DDP Server from the DocXPLOER using the **RIP » Reboot** or the **RIP » Shutdown** command. This performs an operating system level restart or software controlled power off of the DDP Server.



You can also shut down the DDP Server by pressing the standby button at the DDP Server's front panel. This function performs a software controlled power off which you can recognize by repeated beep tones from the RIP after a few seconds of waiting.

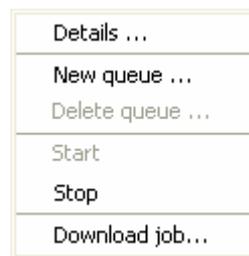
Avoid turning off the power of the DDP Server by the rear side power switch or by disconnecting the power cable, as this may cause data loss.

Defining and managing queues

Administrator:

DDP Server provides print queues and hold queues.

To create a queue, select the **Queue » New queue** command.



Select print queue or hold queue as queue type. This cannot be changed afterwards. Select the queue in the main window and select the **Queue » Details** dialog to set the queue attributes.

After its definition, the queue will be visible in the DocXPLOERER. Visibility as Windows printer queue and as Macintosh printer can be switched on or off as a queue attribute.

To install a queue as a printer on a Windows workstation, run the DDP Server Printer Installer.

To delete a queue, select the **Queue » Delete queue** command. After a confirmation, this deletes the queue and all jobs contained in it. There is no recovery for deleted queues.

To manage a queue, select the queue in the main window and select the **Queue » Details** dialog. For a print queue, you can edit general settings like queue name, visibility or priority, as well as printing attributes like staple, duplex and form application.

Hold queues do not provide print settings. Print settings are activated only by submitting a job to a print queue. However, jobs submitted to a hold queue can have their own job settings and these can be edited by the user.

After creating, deleting, or renaming a queue or changing its visibility, you should reboot the DDP Server to make the changes effective for the printing protocols, i.e. NetBIOS, lpr, and EtherTalk.

See **Queue list display**.

Printing jobs

There are several ways to submit a job for printing:

1. Call the Print dialog of your application. On Windows, job settings can be edited in the properties dialog, and its DDP Server tab sheet. On Macintosh, job settings can be edited in the DDP Server extensions of the printer dialog. This creates a job ticket.

The print target of the print dialog may be a print queue or a hold queue. Print queues are for execution in FIFO order. Hold queues are for storing print jobs permanently.

Job settings are stored with the job as a job ticket. They will be applied on execution of the job, unless the corresponding queue settings are set to override job settings.

2. Copy a job from a hold queue to a print queue. This can be done by drag and drop.
3. Download a file with a supported type (PostScript, PDF, PCL, TIFF, ASCII). To do so, select a queue, then select the **Queue » Download Job** function.
4. Copy a job from the Windows Explorer or Macintosh Finder. Files of a supported type can be submitted by drag and drop directly from the Windows Explorer or Finder.

Job Tracking

Tracking allows you to monitor the processing status and events of a job during its lifetime. After a job is submitted to a print queue, it stays there waiting for execution, then moves to the **Active queue** while it is processed, then moves to the **Finished queue**. At any time you can select the job and select the **Job » Details** dialog. The **Logging** tab sheet will show you all processing events occurred up to now. If there were errors, there will be an explanatory message.

The event log of a job can also be viewed from the **RIP » Accounting** dialog.

Handling failed jobs

Jobs may fail, e.g. because the requested paper size is not available. Failed jobs are marked with an error status in the list of finished jobs.

Failed jobs can be copied to a print queue for resubmission. It may be necessary to edit the job ticket (e.g. change requested paper tray), or to change the DDP Server's engine configuration (e.g. supply right paper size) before resubmission.

The job sources necessary for resubmission are automatically purged following criteria defined by the administrator, e.g. by available space. So resubmission may not be possible after a while, although the job is still visible in the list of finished jobs.

Defining forms

A form is a one page job which can be used instead of preprinted paper (electronic stationery). For example, a form may contain the company letterhead or logo.

Forms are created by printing the form document with appropriate settings. There are three ways:

1. In the Windows printer dialog, select **Properties » DDP Server » Workflow**. Then set the attribute Destination = Form. Then submit the job for printing.
2. In the Macintosh printer dialog, select **DDP Server Workflow**. Then set the attribute Destination = Form. Then submit the job for printing.
3. In the DocXPLOERER, select the job, select the **Job » Details** command and, in Workflow tabsheet, set the attribute Destination = Form. Then submit the job to a print queue.

In all of the three cases, after job execution its preview appears in the **Forms** queue of DocXPLOER and in the **Forms** panel of the printer driver.

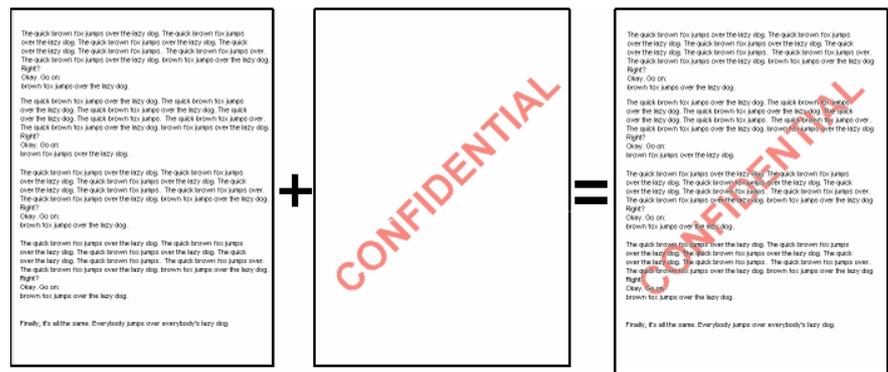
For the creation of the form, job ticket attributes for tray selection and finishing are ignored.

Administrator:

To define a queue with the new form, create a queue or select an existing queue, select **Queue » Details**, then select the **Forms** tab sheet and set the attribute **PS Overlay** or **Bitmap Overlay** to the desired form.

Note: Forms can be created only from PostScript files. Forms cannot be created by downloading a PDF file, even to a queue which is setup to create forms. To create a form from a PDF file, open it in Adobe Acrobat and print it as described above.

Applying forms



Your document

+ form to apply

= result

Forms can be applied from the **Forms** panel of the printer driver dialog. In the Windows printer dialog, select **Properties » DDP Server » Forms**. In the Macintosh printer dialog, select **DDP Server Forms**. Check the **Merge Document with form** field.

To preview a form in the DocXPLOER, select the form in the **Forms** queue and select the **Job » Feedback** command. This shows you a thumbnail view of the form. To obtain a full screen resolution preview, select one of the **File » Save ...** commands.

To apply a form in the DocXPLOER, select the job and select the **Job » Details** command. In the **Forms** tab sheet, select **PS Overlay** = <desired form> or **Bitmap Overlay** = <desired form>.

To apply a form to specific pages of your job, select **Job » Details » Page Specific » PS Overlay** or **Bitmap Overlay** and enter the desired page numbers. See **Job Details – Print Settings**.

Creating and handling archive jobs

The following job operation causes the DDP Server to store a bitmap with a job:

- Archiving as a rendered bitmap – this is achieved by selecting in the printer driver or in the **Job » Details** dialog: Destination = Archive.

The DDP Server produces print resolution bitmaps. The resulting job is available in the **Archive queue**. The bitmaps can be used to print the job without new execution or to merge jobs.

The bitmaps can be viewed by selecting the job and selecting the **Job » Feedback** command. The DDP Server first shows thumbnail views of the available bitmaps. If you select a bitmap, you can download it by the **File » Save** or the **File » Save as** command. You can download all bitmaps of the job by the **File » Save job** or the **File » Save job as** command.

Archive jobs can be printed by selecting the **Job » Print** function. This opens the job details dialog and, after possible changes, submits the job for printing. Not all job ticket attributes can be changed for an archive job to be printed, because some attributes, like screening, or booklet half size, work on the PostScript interpreter.

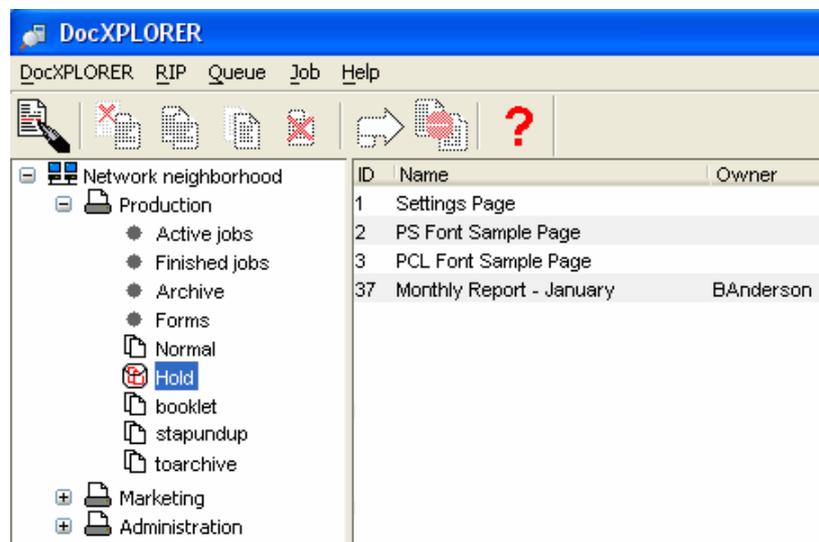
Archive jobs can be prepended or appended to another job. Prepending can be used, e.g., to add a cover page in front of your document. Appending can be used, e.g., to add terms and conditions at the end of your document. Use the **Job » Details » Forms » Prepend** or **Append** function to add an archive job to your document. See **Job Details – Print Settings**.

Archive jobs can be merged by selecting the **Job » Merge** function. See **Job Merging**.

Archive jobs can be exported and imported for backup on external media. See **Export / import archive jobs**.

Functions

Tree view display



The network tree view on the left side of the main window shows DDP Servers and their queues in your network. See **Discovering DDP Servers** about how to get all the DDP Servers in your network displayed.

The tree view can be browsed by clicking on the +/- marks to open and close subtrees. On the Macintosh, click the triangles or double-click the DDP Server icons. Corresponding to the object selected in the tree view, the following objects are shown in the right panel:

- Network: RIP list
- RIP: Queue list
- Queue: Job list

To edit or view details of any object in the tree view, select the object by clicking on it, and select the **RIP / Queue / Job » Details** dialog.

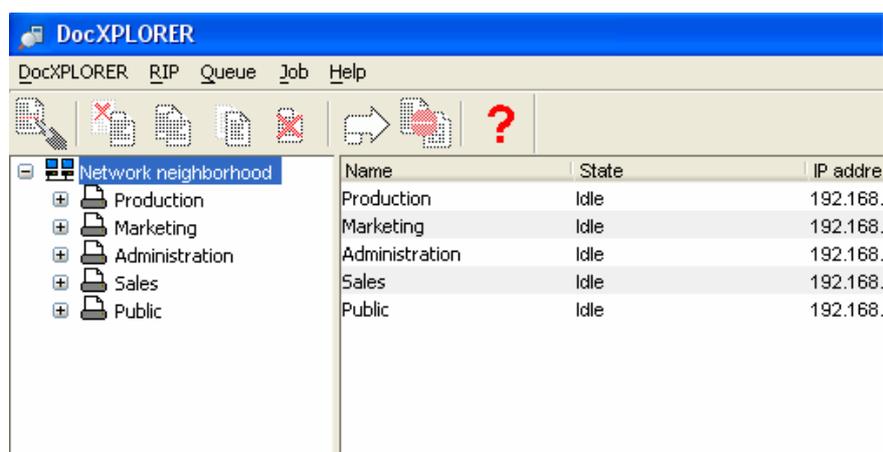
The following virtual queues show jobs with special status. They are only available in the network tree view and cannot be manipulated by users:

- **Active** jobs – jobs currently being interpreted or output.
- **Finished** jobs – jobs which have finished execution. The Finished jobs queue shows only printed or failed jobs. Forms and archive jobs are shown in the Forms or Archive queue, respectively.

- **Archive** – jobs whose bitmaps are archived for reprinting or feedback to the client workstation.
- **Forms** – jobs to be applied as forms from other jobs

The above mentioned virtual queues should not be confused with print or hold queues. They are not available as NetBIOS, lpr, or EtherTalk queues. The unqualified term “queue” always refers to a print or hold queue.

RIP list display



The RIP list on the right side of the main window is used to monitor the activity and the load of the DDP Servers in the network. See **Discovering DDP Servers** about how to get all the DDP Servers in your network displayed.

The RIP list shows the following attributes for each found DDP Server:

- Name, state, IP address, jobs, pages, comment, model

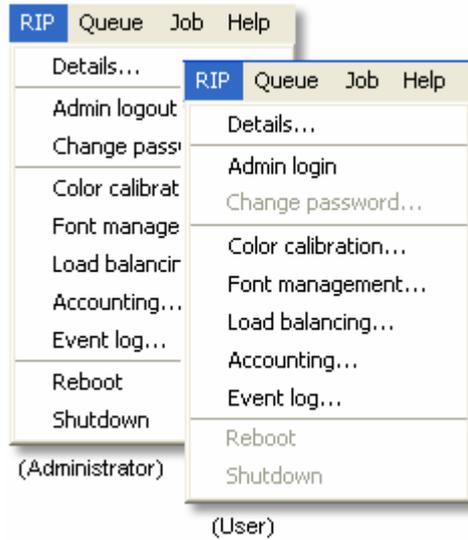
Pages is the sum of the print pages of all jobs in all running print queues of the DDP Server. Print pages of jobs in hold queues or stopped queues are not counted. The number of print pages of a job is the number of its document pages times the number of its copies.

Note: The number of print pages is not shown for PDF jobs.

To edit or view details of any DDP Server in the list, select the row in the list by clicking on it, and select the **RIP » Details** dialog.

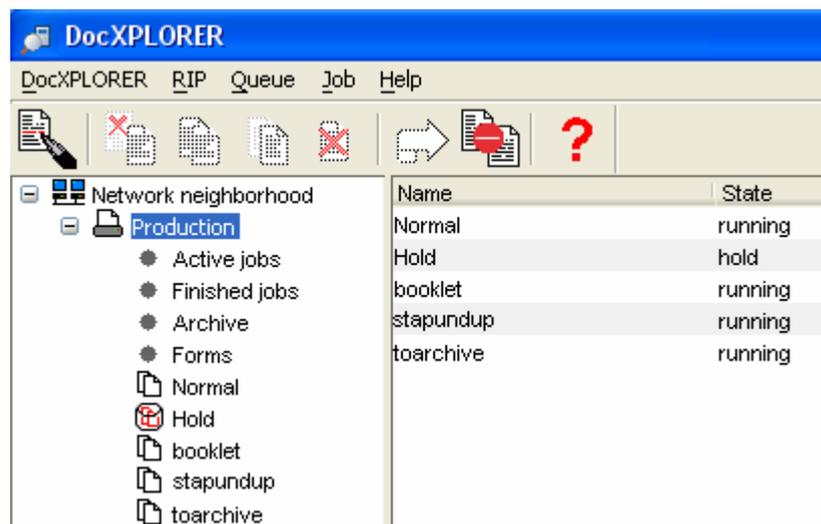
The RIP list can be sorted by each column simply by clicking on the column header. E.g. to sort by number of outstanding jobs, click on the jobs column header.

The operations available for RIPs are shown in the screenshot below (some entries are admin-only accessible and therefore greyed out for users without sufficient permissions.):



- **RIP details** – view RIP properties and change RIP settings
- **Admin login / logout**
- **Color calibration** – view and edit color calibration curves
- **Font management** – view and download fonts on the RIP
- **Load balancing** – define master / client configuration
- **Accounting** – view the accounting log
- **Event log** – view the event log
- **Reboot / shut down**

Queue list display



The queue list on the right side of the main window is used to monitor the activity and the load of the queues on a selected DDP Server. It shows the following attributes for each queue:

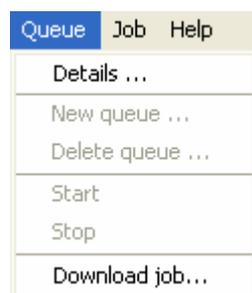
- Name, status, jobs, pages, comment

Pages is the sum of the print pages of all jobs in the respective queue.

In the active job list, print pages shows which page/copy is currently printed. E.g., P:25,C:3 means that page 25 of the third copy is printed.

To edit or view details of any queue in the list, select the row in the list by clicking on it, and select the **Queue » Details** dialog.

The operations available for queues are shown in the screenshot below (grey entries are accessible only with administrator rights granted).

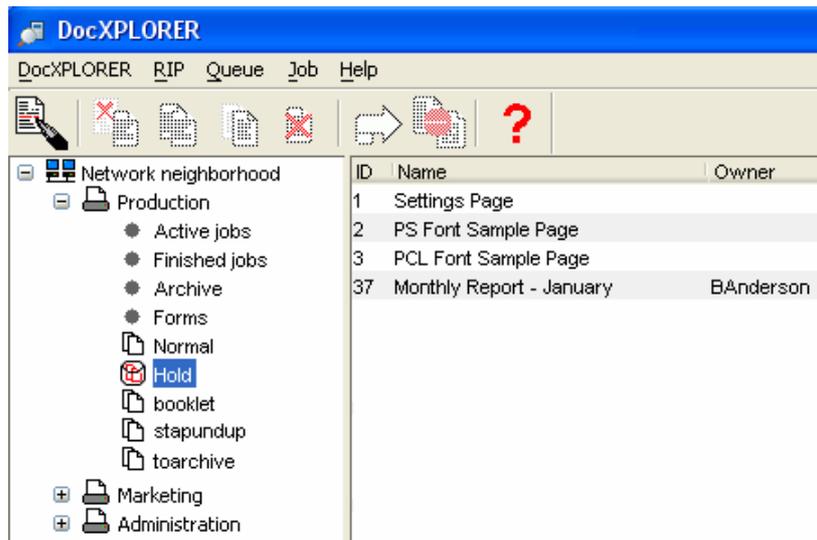


- **Queue details** – display queue properties and change queue settings
- **New queue** – the queue is created either as hold or as print queue
- **Delete queue** – this deletes the queue and all jobs in it, after confirmation
- **Start queue** – resume processing jobs after stop
- **Stop queue** – stop processing jobs
- **Download job** – select a job for download to the selected queue

To make the creation or deletion of a queue effective for NetBIOS, lpr, and EtherTalk, the DDP Server should be rebooted.

The queue list can be sorted by each column simply by clicking on the column header. E.g. to sort by number of outstanding pages, click on the pages column header.

Job list display

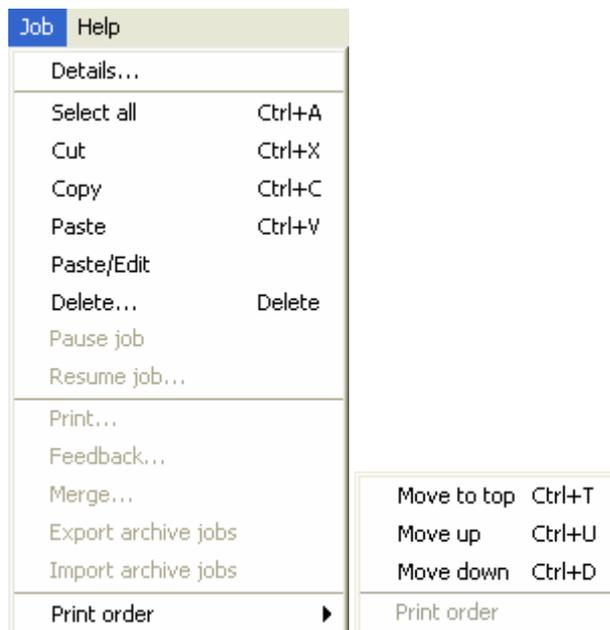


The job list on the right side of the main window is used to monitor the execution of jobs. It shows the following attributes for each job:

- ID, name, owner, source, pages, state, comment

Pages is the number of document pages in the job. Copies is the number of copies of the job.

The job list allows you to select single or multiple jobs. The operations available for jobs are shown in the screenshots below (Print, Feedback, Merge, and Export/Import are available only for archive jobs; Cancel, Pause, Resume are available only for active jobs):



Using the above menu commands or using drag and drop, the following tasks can be performed on jobs:

- **Edit job details** – this shows the job ticket and allows the owner or administrator to change it.
Menu: select the job, select **Job » Details**.
- **Copy job(s)** from one queue to another queue – the jobs are submitted to the target queue and left in the source queue.
Drag and drop: select the job and drag it to the target queue.
Menu: select the job, select **Job » Copy**, select the target queue, select **Job » Paste**.
- **Copy+edit job(s)** – the jobs are submitted to the target queue and the job tickets of the target jobs are edited.
Drag and drop: select the job and drag it to the target queue with the Shift modifier held.
Menu: select the job, select **Job » Copy**, select the target queue, select **Job » Paste/Edit**.
- **Move job(s)** from one queue to another queue – the jobs are submitted to the target queue and deleted from the source queue.
Drag and drop: select the job and drag it to the target queue, on Windows with the CTRL modifier key held, on Macintosh with the option key held.
Menu: select the job, select **Job » Cut**, select the target queue, select **Job » Paste**.
- **Delete job(s)** – this deletes the selected job(s).
Menu: select the job, select **Job » Delete**.
- **Cancel job** – this cancels execution of the selected active job.
Menu: select the job in the active queue, select **Job » Abort**.
- **Pause or Resume a job** – this pauses or resumes execution of the selected active job; see **Pause/Resume Job**.
Menu: select the job in the active queue, select **Job » Pause/Resume**.
- **Print** – this is only applicable to archive jobs; it opens the job details dialog and, after possible changes, submits the job for printing.
Menu: select the job in the archive queue, select **Job » Print**.
- **Feedback** – this shows a thumbnail preview of a job in the archive or forms queue; see **Feedback and Preview**.
Menu: select the job in the forms or archive queue, select **Job » Feedback**.
- **Merge** – this creates a new job from the bitmaps of two jobs selected in the archive queue; see **Job Merging**.
Menu: select the a job in the archive queue, select **Job » Merge**.
- **Export/Import archive jobs** – this exports or imports the selected archive jobs for backup on external media; see **Export / import archive jobs**.
Menu: select the job(s) in the archive queue, select **Job » Export archive jobs**. Or select the archive, select **Job » Import archive jobs**.
- **Change job execution order** – this function moves the selected job to another position in the selected print queue and changes the execution order accordingly.
Menu: select the job (while the job list is in execution order), select **Job » Print order » Move to top/up/down**.

The target queue for copying and moving can be a print or hold queue either on the same or on another DDP Server.

The functions **Edit (change) job details**, **Delete job**, **Move job**, **Change execution order**, **Cancel job** are available only to the job owner or the administrator.

Viewing job functions are available either to all users or only to the job owner / administrator depending on **RIP » Details » General » Others can see jobs**.

The job list can be sorted by each column simply by clicking on the column header. E.g. to sort by owner, click on the owner column header. The default sorting order for job lists, execution order, can be restored by selecting the **Job » Print Order** command.

RIP details

The RIP details provide information about the DDP Server and the connected printer. It can be changed only by the administrator. The following information is provided:

- General – see **RIP details - General**
- Communication – see **RIP details - Communication**
- Engine communication – see **RIP details – Engine Communication**
- Engine – this shows the following engine attributes: vendor, model, revision, status, error message, memory, etc.
- Paper – this shows information about the installed paper trays: paper size, paper quantity in tray, paper type (if available), comment.
- Output trays – this shows the configuration and state of the available output trays.
- Options – this shows information about the installed finishing options, e.g. stapler.
- Media type/color mapping – see **RIP details - Media type/color mapping**.
- Accounting – see **RIP details - Accounting**
- Job Purging – this contains directives for purging jobs. Jobs are distinguished as normal (successfully executed) and failed jobs. Purging strategies may be by age, by amount (number of jobs), or on request of the administrator.
- Event Logging – see **RIP details – Event Logging**
- Event Purging – this contains directives for purging event records. Purging strategies may be by age, by amount, or on request of the administrator.

RIP details – General

RIP details: Production	
Media type/color mapping	
Accounting	
Job purging	
Event logging	
Event purging	
General	Communication
Engine Communication	Engine
Paper	Output trays
Options	
Model	DDP Server
Version	2.2H-882
Serial number	2400007
Installed memory (MB)	256
Administration	Yes
Status	Idle
Pages to print	0
Job count	0
Others can see jobs	On
ASCII printing	Off
Autoselect tray	In the DDP server
Memory for bitmap spooling (%)	0
Default page size	A4
Media weight unit	g/m2
Time	Sep 15, 2005 10:47:57 AM <input type="checkbox"/> Synchronize
Comment	
Location	
Contact	

This tab sheet of the RIP details dialog comprises the following attributes: model, system software version, serial number, current time, administrator status, etc. They can be changed only by the administrator.

The **Others can see jobs** field indicates the rule for access to job details by other users than their owner. The following operations are distinguished:

- Edit (change) job details, delete, move, cancel, pause, resume jobs, change execution order – these operations are only available to the job owner or the administrator.
- Show job details, copy job, feedback, print, merge, display of job name and comment in the job list – these operations are available depending on the **Others can see jobs** field: if it is enabled, these operations are available to all users; if it is disabled, these operations are available only to the owner and the administrator. In particular, with the feature disabled, normal users see only their own jobs in the job list.

The **ASCII Printing** field indicates if ASCII text jobs are accepted for printing. If it is enabled, jobs of unknown type (not PostScript, PDF, PCL, or TIFF) will be printed as ASCII text.

The **Autoselect tray** field indicates if automatic tray selection is performed by the DDP Server or by the printer.

Memory for bitmap spooling (MBS) indicates the amount of memory allocated for spooling bitmaps to allow that pages of a job can be reprinted without re-ripping when a job is resumed after pausing.

MBS can be configured as percentage of the amount of memory for multiple purposes. This is the memory exceeding 128 MB RAM. In order to achieve that

MBS can be used to accelerate resuming, it must be configured to at least 100 MB (e.g. 80% of the 128 MB available when total RAM is 256 MB).

After changing MBS, the DDP Server must be rebooted such that the change becomes effective.

WARNING: Before physical RAM is reduced, e.g. by taking out 128 MB of 256 MB, MBS must be configured to 0% and the DDP Server rebooted to allow it to adjust its reservation for fixed memory used for booting.

The RIP **Default page size** defines the page size for jobs which do not contain a page size command. It applies to the sample pages (settings and font sample pages) and may apply to jobs created by other printer drivers. (Jobs created by the DDP Server printer driver always contain a page size).

The RIP default page size may be A4 or Letter. It is applied together with the queue default page size (see **Queue Settings**).

The **Unit of media weight** field indicates how media weights requested in PostScript jobs created by other drivers are interpreted: as g/m² or as lb bond. See **Job details – Page settings**.

The administrator can check the **Synchronize** box; this causes the DDP Server to take over the current time from the client workstation when the dialog is left with OK.

The **Comment** field is displayed as the RIP comment in the RIP list of the main window.

The **Location** field specifies the DDP Server's location as shown by SNMP.

The **Contact** field specifies the DDP Server's contact as shown by SNMP.

RIP details – Communication

The screenshot shows the 'RIP details: Production' dialog box with the 'Communication' tab selected. The dialog is divided into several sections: 'Media type/color mapping', 'Accounting settings', 'Job purging', 'Event logging', and 'Event purging'. The 'Communication' section is further divided into 'General' and 'Communication' sub-sections. The 'Communication' sub-section contains a table with two columns: 'Current settings' and 'After restart'. The table lists various network parameters and their values for both current and after restart settings.

	Current settings	After restart
Name (may end with .domain)	Production	Production
Use DHCP	Off	Off
IP address	192.168.1.1	192.168.1.1
IP gateway	192.168.1.254	192.168.1.254
IP mask	255.255.255.0	255.255.255.0
EtherTalk zone	product	product
NetBIOS workgroup	production	production
Name server	192.168.1.253	192.168.1.253
Mail server	192.168.1.252	192.168.1.252

At the bottom of the dialog, there are three buttons: 'OK', 'Cancel', and 'Help...'

This tab sheet of the RIP details dialog shows the current and planned communication settings. They can be changed only by the administrator. Planned communication settings will be applied after the next reboot of the DDP Server. Communication comprises the following attributes:

- Printer name – the host name used for TCP/IP, NetBIOS, lpr, and EtherTalk. The host name may be entered with fully qualified domain name.

If a Domain Name Server (DNS) is used in the network, the combination of printer name and IP address should match the entry made in the DNS.

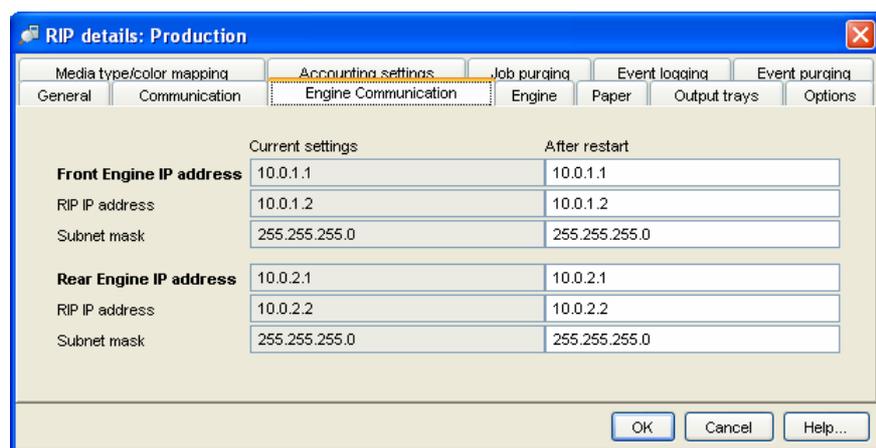
- DHCP flag – if this flag is enabled, the DDP Server looks for a DHCP server when it boots to obtain communication settings.
- IP address
- IP Gateway – maybe empty if there is no gateway
- IP subnet mask
- EtherTalk Zone
- NetBIOS Workgroup
- Domain name server (DNS) IP address
- Mail server name or IP address

If the DDP Server shall perform email notification, a mail server must be specified which accepts the email notifications. This can be done by entering the mail server address directly, or by entering the DNS address. If none of them is supplied, job ticket requests for email notification will be ignored.

If a DNS only is supplied, the printer name must be entered with a fully qualified domain name. Also, the DNS should contain an MX record for the domain referring to the mail server. This enables the DDP Server to look up the mail server at the DNS.

For email notification, the DDP Server must be announced to the mail server as a possible client.

RIP details – Engine Communication



This tab sheet of the RIP details dialog shows the current and planned engine communication settings. They can be changed only by the administrator. Planned engine communication settings will be applied after the next reboot of the DDP Server. Engine communication comprises the following attributes:

- Front engine communication:
 - RIP IP address – the IP address of the network card in the RIP which is connected to the front engine.

Front engine IP address

Subnet mask – the subnet mask used for communication between RIP and front engine.

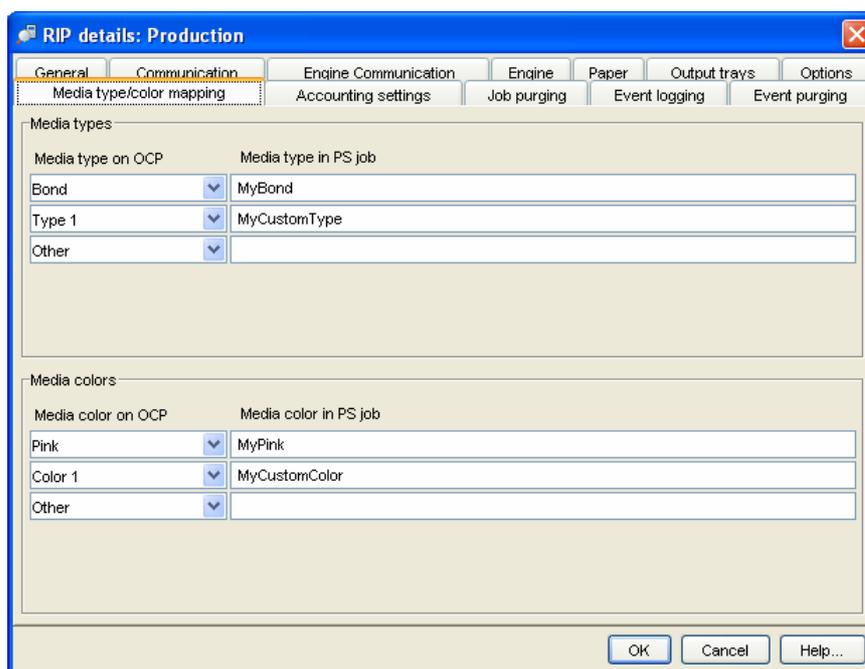
- Rear engine communication:

RIP IP address – the IP address of the network card in the RIP which is connected to the rear engine.

Rear engine IP address

Subnet mask – the subnet mask used for communication between RIP and rear engine.

RIP details – Media type/color mapping



This dialog allows the administrator to define how non-standard media types and colors are handled by DDP Server. Non-standard media types and colors can be contained in PostScript jobs created by other drivers.

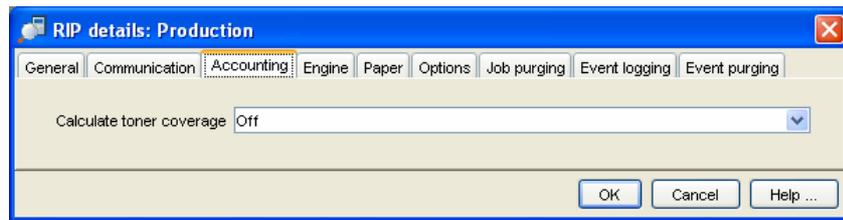
The right column shows the media types contained in your job. The left column shows the media types actually printed.

E.g. to print a PostScript job which selects the media type MyBond on the DDP Server media type Bond, select Bond in the left column and enter MyBond in the right column.

E.g. to print a PostScript job which selects the media color MyCustomColor1 by the DDP Server custom media color Color1, select Color1 in the left column and enter MyCustomColor1 in the right column.

See also **Job details – Page settings**.

RIP details – Accounting

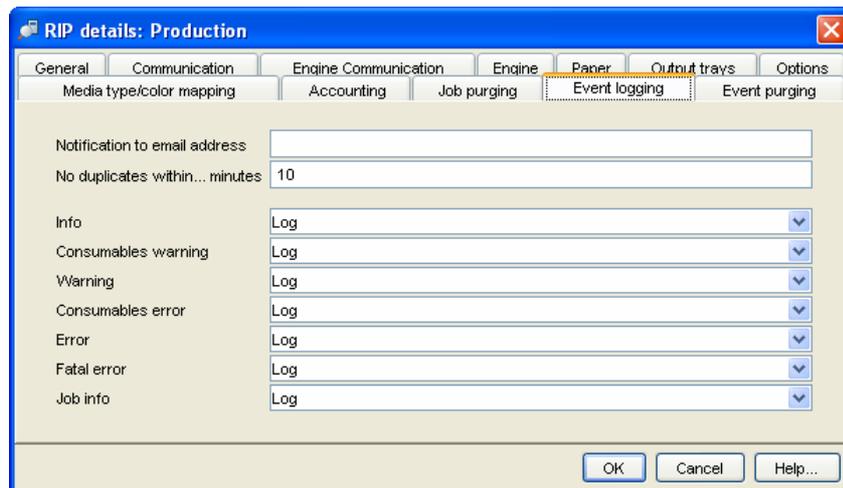


This dialog allows the administrator to configure the accounting.

The following option can be enabled.

- Calculate toner coverage – determines if toner coverage shall be calculated after rendering a job. The results of toner coverage are shown in the DDP Server's accounting log.

RIP details – Event logging



This dialog allows the administrator to configure how events on the RIP and on the printer are logged. Events which can be logged include, for example, RIP startup, email notification configuration problems, paper empty, and paper jam.

Events are divided into classes whose handling can be configured separately:

- Info – e.g., RIP startup
- Consumables warning – e.g., paper nearly empty
- Warning – e.g., hard disk nearly full
- Consumables error – e.g., paper empty
- Error – e.g., hard disk full
- Fatal error – severe system failures
- Job info – information about job processing (which is also logged individually for each job)

For each event class, the following actions can be chosen:

- None
- Log – the event is logged in the database for later lookup by the administrator
- Log and Notify – the event is logged and an email is sent to the specified email address

If the DDP Server shall perform email notification, a mail server must be specified which accepts the email notifications from the RIP. See **RIP Details – Communication**.

For certain events, which can occur in fast repetition, like “printer door open”, a timeout period can be specified. This suppresses duplicate email notifications for the same event within the given period.

The event log can be viewed in the **RIP » Event log** dialog.

Automatic purging of events can be configured in the **RIP details » Event purging** dialog. Event purging may be performed

- by age – events are purged automatically when they exceed a specified age,
- by amount – events are purged automatically when their number exceeds a specified value, or
- manually – only on administrator request.

Queue details

Field	Value
Name	Sta-Pun-Dup
Type	Print
Status	Running
Visible in network	Yes
Comment	
Priority	Normal
Direct port	9101
Preferred PDL	PS
Job size limit	100
Printing pages in queue	0
Jobs in queue	0

The queue details provide information about a queue. The following information is provided:

- General – this comprises the following attributes:
 - Name – the name is used with the DDP Server name to form NetBIOS, lpr, and EtherTalk queue names..
 - Type – this may be print or hold. Print queues execute jobs submitted to them. Hold queues store them for later retrieval.

- Status – for print queues, this may be running, stopping, stopped. See Queue list display.
- Visible in network – this determines if the queue is visible as a NetBIOS, lpr, and EtherTalk queue. If it is not visible, jobs can be only submitted to it via the DocXPLOER

To make a change of visibility effective for NetBIOS, lpr, and EtherTalk, the DDP Server should be rebooted.

- Comment – this field is displayed in the queue list of the main window.
- Priority – this determines a priority for jobs within this queue. There are three different priority levels. Jobs from queues with higher priority are chosen for execution with higher priority
- Job size limit – this specifies a limit of print pages for each job submitted to the queue. If the limit is exceeded, the job is moved to the normal queue.
Note: Job size limit is not enforced for PDF jobs.
- Direct port – specifies a direct port to be associated with the queue (only for print queues). Port numbers must be in the range 9100 to 9999. By factory default, the Normal queue is associated with port 9100.

When a job is printed to the direct port of a queue, the queue settings are used to initialize the job state. I.e., if the job contains no setting for an attribute, the corresponding queue setting is applied. This allows to use queues as print profiles for direct ports.

- Preferred PDL – this selects the preferred PDL (printer description language: PostScript or PCL) for the direct port of this queue. This allows to setup different queues for direct printing of PostScript or PCL.

For direct ports, jobs must have the selected preferred PDL, i.e. only PostScript for a direct PostScript port, and only PCL for a direct PCL port.

For spooled ports (NetBIOS, lpr, EtherTalk), the job's PDL will be sensed automatically if possible. If the PDL cannot be auto-sensed, and ASCII printing is ON, the job is treated as ASCII. If the PDL cannot be auto-sensed, and ASCII printing is OFF, the job type is set according to the preferred PDL of the queue.

- Print pages in queue – the sum of the print pages of all jobs in the queue.
- Jobs in queue – the number of jobs in the queue.
- PCL: Default page size defines a page size for each PCL job which does not contain a page size command. Such jobs cannot be created with the DDP Server printer driver, but only with other printer drivers. Default page size can be: the RIP default page size, any supported page size, or a custom page size.
- Printing, PCL, Layout, Cover, Color, Screening, Image shift, Forms, Workflow, Page specific (only for print queues) – these tab sheets comprise settings for printing and finishing. Print and finishing settings correspond to the settings available as job settings and in the printer driver.

Settings can be specified with job priority or queue priority. For each attribute with queue priority and each attribute where the corresponding job

setting is empty, queue settings are applied immediately prior to job execution.

Job details

Color	Screening	Image shift	Forms	Workflow	Page specific	Logging	Output
General	Printing	PCL	Layout	Cover			
Job ID	37						
Name	Monthly Report January						
Type	PS						
Status	Inqueue						
Comment							
Owner	BAnderson						
Source							
Host name							
Queue	Hold						
Pages to print	14						
Document pages	14						
Copy count	1						
Page size	A4						
Size (KB)	1.614						

The job details provide information about a job. The following information is provided:

- General – this comprises the following attributes: job ID, name, type, state, comment, source, owner, document pages, copy count, page size, size in KB.

If the Owner field is empty, the job can be edited, deleted or moved by any user.

The Comment field is displayed in the job list (under the same condition as the job name).

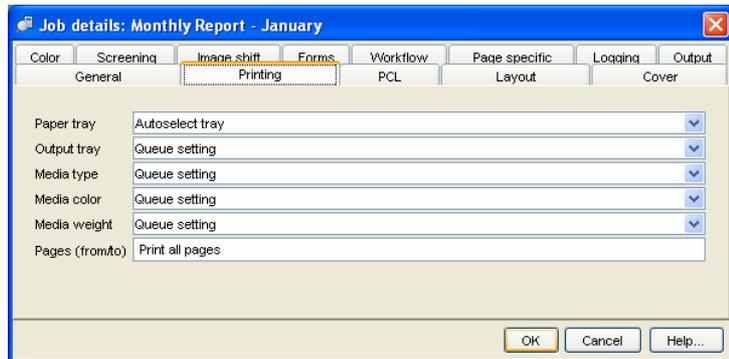
- Job specific print settings – see **Job details – Print settings**.
- Page specific print settings – see **Job details – Page settings**.
- Logging – this is a list of events during the processing of the job. Relevant events are: Download, create by copy, start RIP, start print, end print, pause/resume, delegate, finish, finished with error. In certain cases, additional information about the event is provided, e.g. target of delegation, packet number within a split job, messages about font substitution, or an explanation of how the completed job executed, such as finished with error.
- Output – this is text which the job has written to the backchannel during its processing. Output comprises error messages from the interpreter, messages about font substitution, and other messages output by the job.

Note: If there is no backchannel output, the output panel is suppressed.

Job details – Print settings

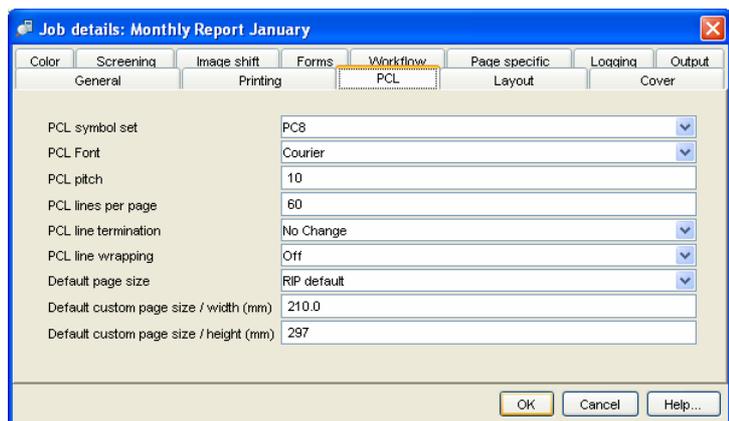
This dialog contains print settings which can be applied to a job as a whole. Print settings are described in detail in the help for the printer driver plug-in. The dialog comprises the following attributes:

- **General printing options:**



- Paper tray – paper trays can be specified explicitly, by **autoselect tray**, or by media type/color/weight. In this case, the best matching tray is selected.
- Output tray – selects the tray for paper output of the job.
- Media type/color/weight – constrains the automatic selection of a tray to the specified values.
- Pages from/to – allows a contiguous subset of pages to be entered for printing, e.g. 3-10
The value “all pages” may be entered as “1-0”.

- **PCL/ASCII:**



The features in this panel allow you to control the printing of ASCII files directly submitted to DDP Server. ASCII files are handled by the PCL interpreter, therefore the PCL features below can be applied to them.

The PCL features below can be entered as job settings or as queue settings. However, they cannot be entered in the printer driver, and in general, they are applied only to ASCII files. This is because printer drivers usually include their own settings for these features with a PCL job.

- Symbol set – selects the symbol set (character encoding)
- Font – selects a font. The actual font selection is based primarily on the symbol set, and only then on the given font.
- Pitch – selects the number of characters per inch (pitch)
- Lines per page – selects the number of lines per page. Note that, e.g., 60 lines per page result in a different number of lines per inch on A4 paper than on A3 paper.
- Line termination – selects the line end handling. In PCL and in Windows text files, the sequence CR/LF (carriage return + line feed) constitutes a line end.

Select **No change** to print Windows text files.

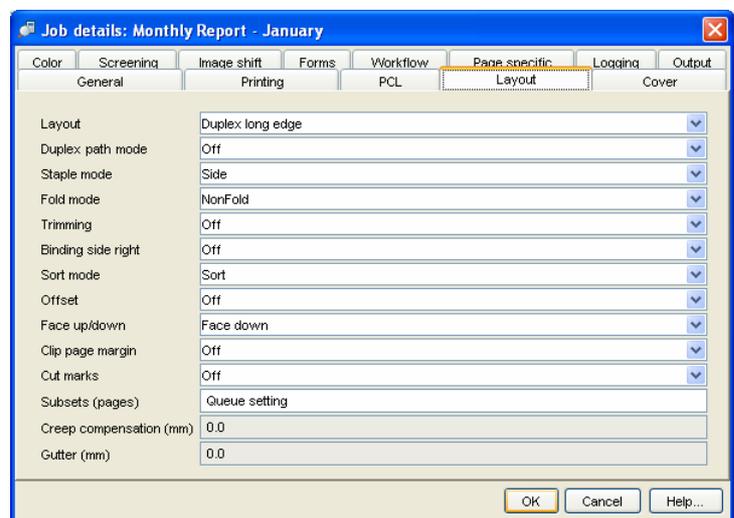
Select **Add LF after CR** to print text files from the Macintosh (line end = CR).

Select **Add CR before LF+FF** to print text files from Unix systems (line end = LF).

Select **Add LF, add CR** to combine both options.

- Line wrapping – selects if lines are wrapped automatically to fit the available page width. Line wrapping depends on the page size and orientation, and on the pitch.
- Default page size – selects the page size to be applied if the job does not contain a command setting the page size. Default page size can be: the RIP default page size, any supported page size, or a custom page size.
- Default custom page size (width/height) – specifies the width and height if default page size (above) is custom.

- **Layout and finishing:**



- Layout – defines how document pages are mapped on printed sheets, e.g. duplex or as booklet.

Layout = Mixplex determines that PS setpagedevice commands selecting simplex/duplex in the job shall be applied. This means that the job is printed with mixed simplex and duplex pages. With other values for Layout, these PS commands are ignored.

- Duplex path – determines that the job is printed using the duplex path even if it is simplex.

Printing a simplex job on the duplex path means that the job is printed with empty back pages. For small jobs which alternate between simplex and duplex (e.g. job 1 duplex, job 2 simplex, job 3 duplex), this speeds up printing because the paper path need not be changed between jobs.

If the job uses media types or media sizes for which duplex printing is not supported, this setting will be ignored. See your DDP184 documentation.

- Staple mode – selects the staple mode
- Fold mode – selects the folding mode
- Trim mode – selects if booklets are trimmed
- Binding side right - selects if booklet folding and finishing options (stapling and punching) should be applied to the right side.
- Sort mode – selects if documents are output sorted or grouped.
- Offset – selects if copies are offset in the output tray.

Offset = “Values in the job” determines that PS setpagedevice commands selecting offset in the job shall be applied. With Offset = On or Off, these PS commands are ignored.

- Face up – selects if copies are output face up
- Clip page margin – selects if pages are printed edge to edge or clipped by a margin.
- Cut marks – selects if cut marks are printed around the document.
- Subsets (pages) – specifies that the job is divided into subsets of the given number of pages, and that all finishing operations are applied separately to each subset.

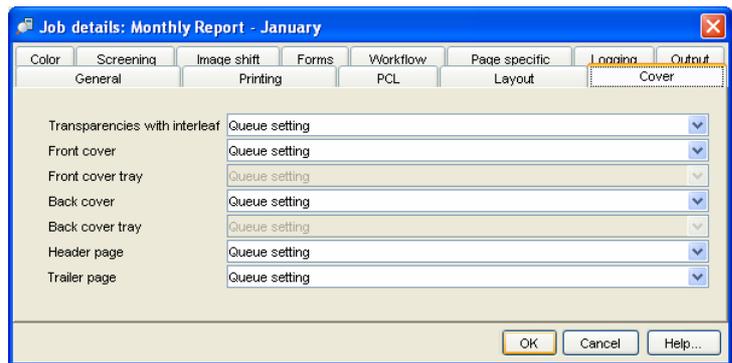
E.g. subsets = 5 together with layout = duplex and staple = corner means that a new sheet is started every 5 pages and that stapling is applied every 3 sheets.

Subsets = 0 means no special handling.

This feature supports, e.g. that in a mail merge or DPM job, finishing is applied to each individual letter, not the whole job. Also it can be used to divide booklets such that they fit the page limit of the booklet maker.

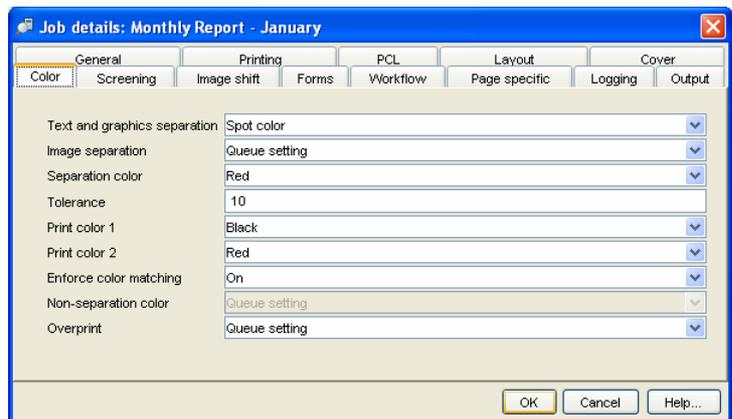
- Creep compensation – compensates for creep, i.e. the effect that outer pages of a booklet do not line up with the inner pages when they are folded
- Gutter – determines a fixed margin to be applied between the two document pages of an imposition

- **Cover sheets:**



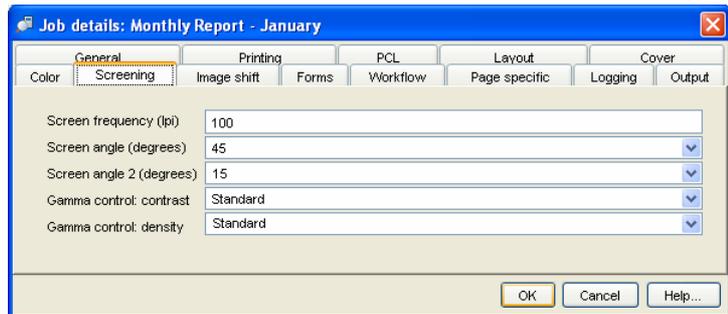
- Overhead transparencies – selects the creation of transparencies
- Front cover sheet – selects the insertion of a front cover sheet from the selected tray
- Front cover tray – selects the tray to be used for the front cover sheet
- Back cover sheet – selects the insertion of a back cover sheet from the selected tray
- Back cover tray – selects the tray to be used for the back cover sheet
- Header page – selects the insertion of a separator page with info about owner, job name, and print time
- Trailer page – selects the insertion of a separator page with info about owner, job name, print time, and print results.

- **Color:**

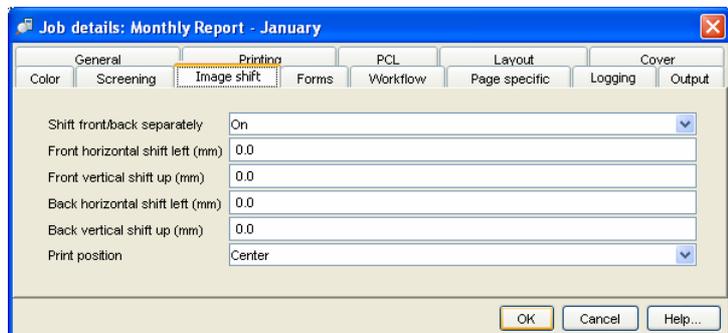


- Text/graphics separation mode – selects if no separation, or spot color separation, or mixing color separation is applied.
- Image separation mode – selects if no separation, or spot color separation, or mixing color separation is applied.
- Separation color – indicates which color is used for separation.
- Print colors – indicates which colors are expected to be present on the engines.
- Enforce color matching – selects if print colors must match engine colors exactly when a job is printed.

- Tolerance – selects how many color values near the separation color shall be mapped on the reference color.
- Non-separation color – selects the color to be printed in the case of no separation.
- 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.
- **Screening:**

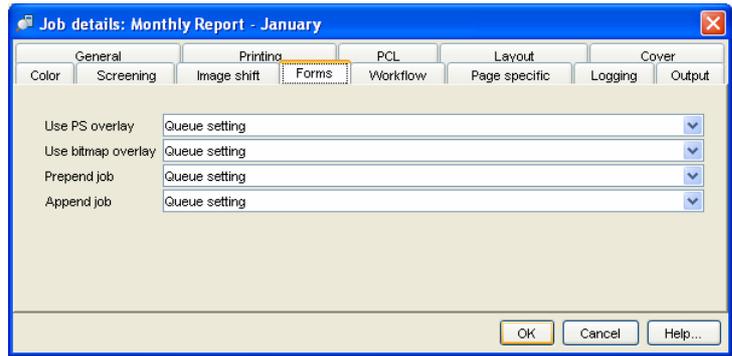


- Screen frequency – sets the screen frequency
- Screen angle – sets the screen angle
- Screen angle 2 – sets the screen angle for the second color during color separation
- Contrast – increases or decreases the contrast in the result page.
- Density – increases or decreases the density in the result page.
- **Image shifting:**



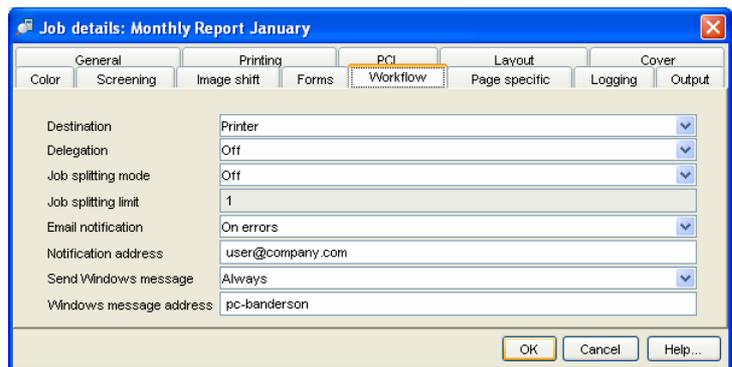
- Shift Front/Back separately – allows you to enter separate shifting values for front and back or let the front values apply also to the back.
- Front horizontal / vertical shift left / up – allows you to specify horizontal or vertical shifting on the image on the front page of the paper.
- Back horizontal / vertical shift left / up – allows you to specify horizontal or vertical shifting on the image on the back page of the paper.
- Print position – allows to align the document with one side or one corner of the paper.

- **Forms:**



- Use PS overlay – selects a form for PS overlay (execution of the form job before each page of the main job)
- Use bitmap overlay – selects a form for bitmap overlay (merging the bitmap of the form with the bitmaps of each page of the main job)
- Prepend job – selects an archive job for adding in front of the main job
- Append job – selects an archive job for adding at the end of the main job

- **Workflow:**



- Destination – this may be printer, form, archive, or archive and printer. See Job Types.
- Delegation – if delegation is off, the job is not considered for delegation in the context of load balancing.
- Job splitting mode – the amount of job splitting can be configured as page splitting and copy splitting:

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.

Page splitting limit indicates the maximum number of pages for each partial job. E.g. a page splitting limit of 100 means that bigger jobs are divided into subsets of max. 100 pages.

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.

Copy splitting limit indicates the maximum number of copies for each partial job. E.g. a copy splitting limit of 100 means that bigger jobs are duplicated with a reduced copy count of max. 100.

- E-mail notification / Notification address – the mode and address for notification when a job is finished.
- Send Windows message / Windows message address – sends a Windows message to the given client PC when a job is finished

Job details – Page settings

The screenshot shows the 'Job details: Monthly Report - January' dialog box with the 'Page specific' tab selected. The settings are as follows:

- PS overlay: [Empty] on pages [Empty]
- Bitmap overlay: LetterHead.pdf on pages [Empty]
- Insert from: Tray 1 before pages 15-20, Tray 2 before pages 26,30, Tray 1 before pages [Empty]
- Print on pages table:

Print on pages	Tray	Media type	Media color	Media weight
15	Tray 1	-	-	-
20	-	Bond	-	70-73 g/m2, 19 lb br
30	-	-	White	-
[Empty]	-	-	-	-
- Jog before pages: 27,32

This dialog contains print settings which can be applied to single pages of a job. Page settings are described in detail in the help for the printer driver plug-in.

The dialog comprises the following attributes:

- PS overlay / on pages – selects a form for PS overlay (execution of the form job before the selected pages of the main job)
- Bitmap overlay / on pages – selects a form for bitmap overlay (merging the bitmap of the form with the bitmaps of the selected pages of the main job)
- Insert from / before pages – page number specify that an empty sheet shall be inserted before the selected pages
- Print pages / Tray / Media type/color/weight – page numbers specify that the given pages shall be drawn from the tray specified in the same row, e.g. pages 18-25,37-39 from tray 3 or pages 31 to 33 from a tray containing Bond paper with a weight of 130-133 g/m² (35 lb bond)
- Jog before pages – determines that paper is offset in the output tray before each specified page

To override non-empty queue settings with “no pages”, enter a minus sign (-).

Edit RIP list

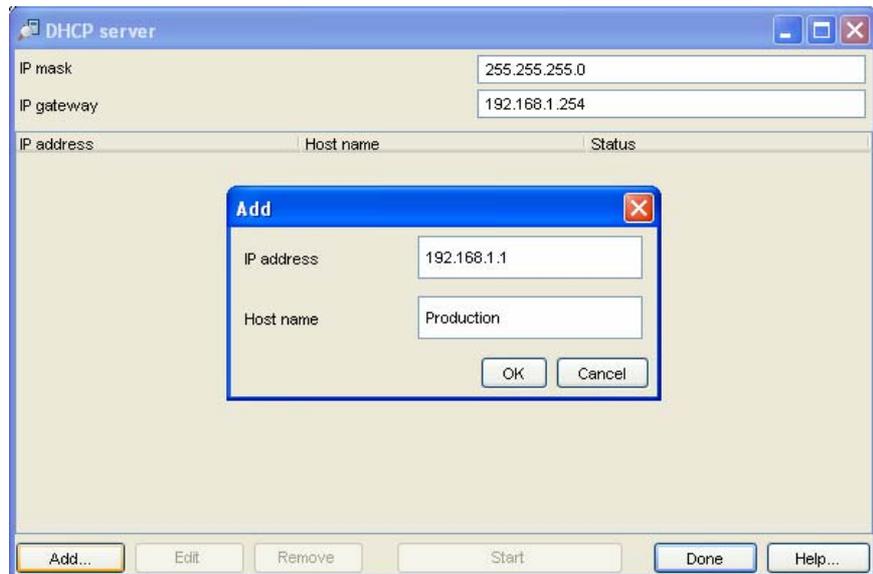


The **DocXPLORER » Edit RIP list** dialog (under MacOS X: **Configure » Edit RIP list**) allows you to tell DocXPLORER to look for DDP Servers which it would otherwise not find. DocXPLORER finds DDP Servers in the network via a broadcast call. However, by this method, it can find only DDP Servers in your current network segment. With the RIP list, it can find DDP Servers also outside your current network segment (even worldwide as far as firewalls do not prohibit the communication). Use

- **Add** to add a DDP Server to the list. You may enter a DDP Server by name or by IP number.
- **Remove** to remove a selected DDP Server from the list.

Note that this RIP list is only local to your PC. It does not affect any RIP in the network.

DHCP Server



Windows / DocXPLOER Administrator:

By factory default (after Initialize Disk), a DDP Server is configured to obtain an IP address via DHCP. DHCP is a network protocol used for assigning IP addresses to network devices.

For the first setup of a new RIP, your client PC and the RIP have to be in the same network segment (i.e. no gateways between). This is because their first communication requires a broadcast. Later you may place them in different network segments.

To assign an IP address to a RIP via DocXPLOER, select the **DocXPLOER » DHCP server** (under MacOS X: **Configure » DHCP Server**) dialog. Enter subnet mask and router IP address to be used for communication with the RIP. To ensure RIP discovery, take your PC's network settings for subnet mask. If there is no router, enter your PC's IP address.

Click **Add** to enter IP address and hostname for the RIP.

Click **Start**. This offers the IP address in your network. The status of this IP address is shown as offered.

Switch on the RIP. If the RIP is configured for using DHCP, it takes the name and IP address. After the RIP has consumed the IP address, the address is deleted from the **DocXPLOER**'s display of free IP addresses.

To ensure that the new IP address is correctly transmitted, do not close the **DHCP Server** dialog until the RIP has shown up in the DocXPLOER's RIP list.

If the RIP has obtained an IP address from a common DHCP server, this address will be set temporarily according to the *lease time* setting of the DHCP server. After expiring, the process of obtaining has to be repeated. If the RIP has obtained an IP address from **DocXPLOER**, it will be kept permanently.

See also **Naming a DDP Server**.

MacOS X:

In order to use the DHCP Server, DocXPLOLER has to be launched as **root**. Please note that **root** is not an “ordinary” administrator account but the primal default master account to configure and administer the computer. Before you can use the **root** account, you must enable it, e.g. using the Directory Utility of MacOS X.

For more information, please read the documentation of your Mac computer.

To launch DocXPLOLER with root rights, but without enabling the root account, please perform the following steps:

- open Terminal (Console)
- change the current directory to the java resource directory of the DocXPLOLER application (e.g. /Applications/DocXPLOLER.app/Contents/Resources/Java)
- enter: `sudo java -jar DocXPLOLER.jar`
- enter the **root** account's password

Now continue operation as described for Windows.

Note: When DocXPLOLER is launched from the command line as described above, its application name may change from “DocXPLOLER” to “docuflow.Console”.

Preferences



Call the **DocXPLORES » Options** (under MacOS X: **DocXPLORES » Preferences**) dialog to set preferences for the behaviour of the DocXPLORES. In this dialog, you can

- select the language for the user interface
- select the application for previewing jobs. This may be any application which can read and display TIFF files. The default application for previewing is the application associated with the .tif filetype on Windows, and the PictureViewer on Macintosh. See **Feedback and Preview**.

Admin login / logout

The DocXPLORES can be operated in administrator mode or in user mode. Several functions are available only to the administrator. See **Administrator tasks**. Other functions are only available to normal users. See **User tasks**.

To obtain administrator status, select the **RIP » Admin login** function and enter the administrator password. Only one administrator can be logged in at any time. To return to normal user status, select the **RIP » Admin logout** function.

The administrator password is empty by factory default. It is reset to empty when the **Factory defaults** function is called. The administrator can change the administrator password by the **RIP » Change Password** function.

In normal user mode, the user's name is retrieved from the operating system. On Windows it is taken from the network login or Windows login. On Macintosh it is taken from the main user entered for file sharing. In general, these names match the owner included in PostScript jobs on printing which in turn is used to determine the owner in the DDP Server.

Color Calibration

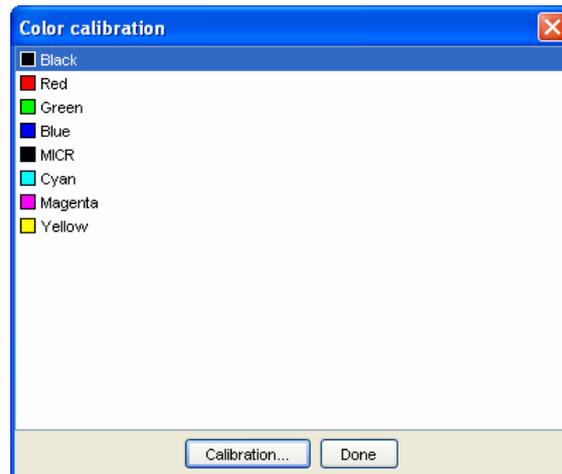
Administrator (users can view colors):

This dialog shows the available engine colors and allows to edit/view their calibrations.

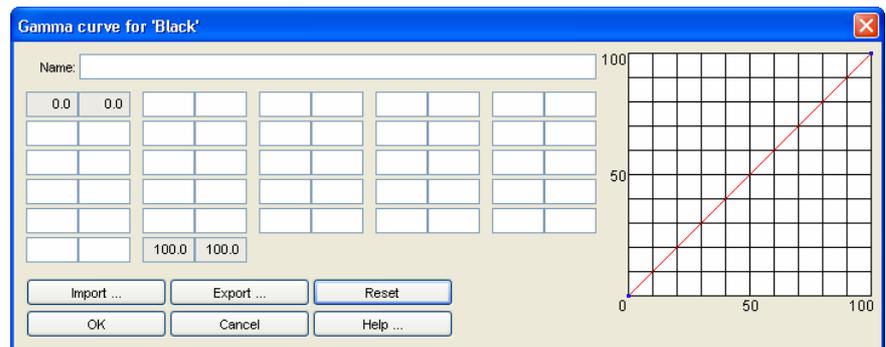
In a mechanical sense, calibration is the process of setting a device to known color conditions. A device is well calibrated if, for a given set of tints, the measured tonal values match the requested values. Calibration can be used to emulate a particular device behaviour, or to compensate for changes in the environment.

In the DDP Server, calibration is performed by adjusting the raster output to match desired tonal values. The process of calibration is controlled by a RIP object named "calibration". A calibration maps the tonal values of one color component on new tonal values. In the following, calibration means this RIP object.

To view the available engine colors, select **RIP » Color calibraton**. This shows the list of colors.



To edit or view a calibration, select a color and select **Calibration**. This shows the calibration of the selected color.



A calibration is given by a number of base points with respective mapped values. 100% stands for 100% coverage of the respective color. 0% stands for white. You can enter base points in two ways:

- Enter a pair of values in the fields on the dialog's left side. The tab key allows you to step through the fields.
To delete a base point / value pair, clear the field with the base point and move the cursor to another field.
- Click in the area with the curve on the dialog's right side.
To add a base point click somewhere in the curve area. Drag the point to the desired location. The curve will change appropriately.
To change a base point, click on it and drag it to a new location.
To delete a base point, click on it and drag it outside the curve area.

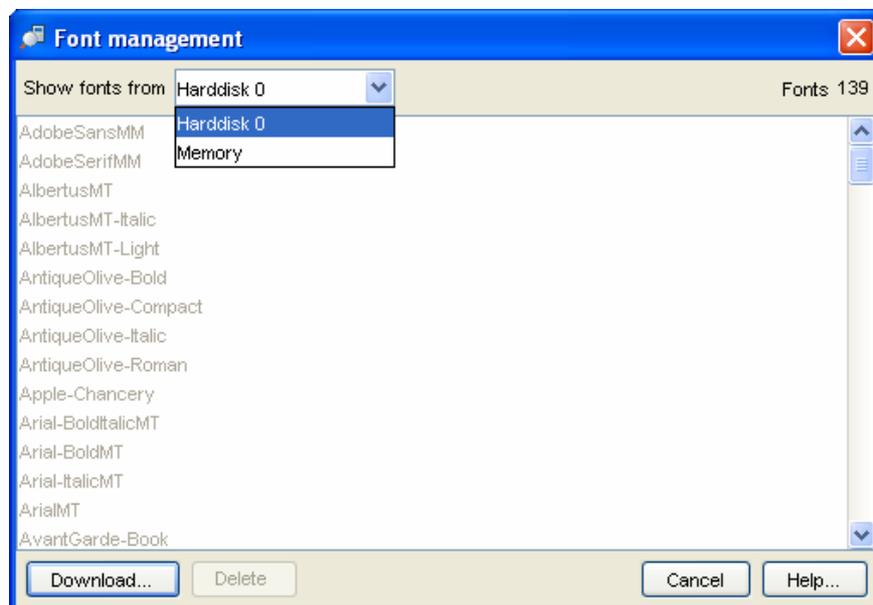
To save a calibration, click **OK**. To discard your changes, click **Cancel**.

Calibrations can be exported and imported by selecting **Export** or **Import**. This creates or reads a text file. To get a sample file, add some base points to a calibration and export it. You can edit the text file manually or create a new one with a calibration tool. A calibration file may contain up to 25 base point / value pairs.

Calibration is applied during the rasterization of a job. For color jobs, it is applied after color separation.

For archive jobs, calibration is applied when their bitmaps are created. Therefore, the calibration of an archive job may become invalid if the engine colors are changed later.

Font Management

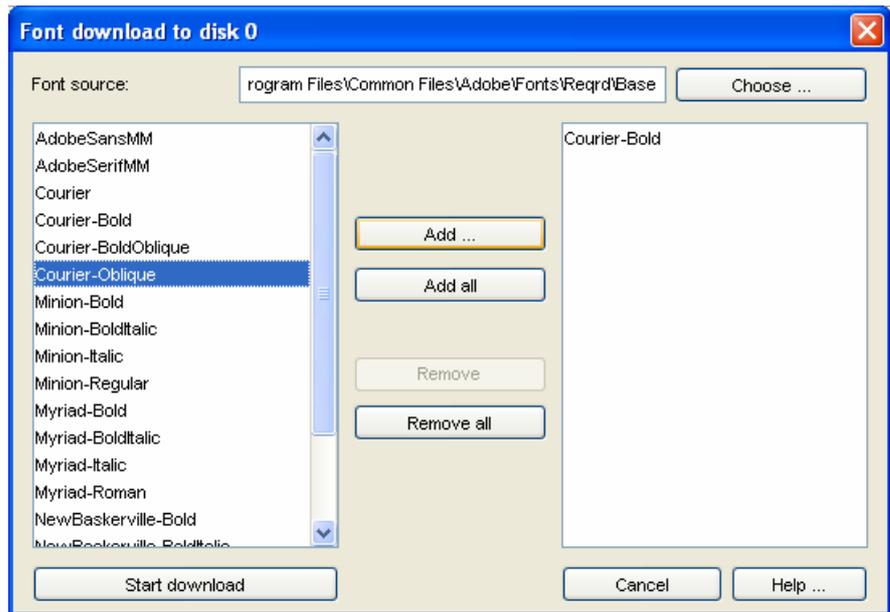


Administrator (users can view fonts):

To view and manage the available fonts on a DDP Server, select the DDP Server and select the **RIP » Font Management** dialog. This dialog shows the lists of available fonts. Choose Harddisk or Memory to view the corresponding list.

User installed fonts can be deleted from the hard disk by selecting the font and clicking the **Delete** button. System fonts cannot be deleted and are therefore shown in grey.

To download new fonts to hard disk or memory, click the **Download** button. This leads to the **Font Download** dialog.



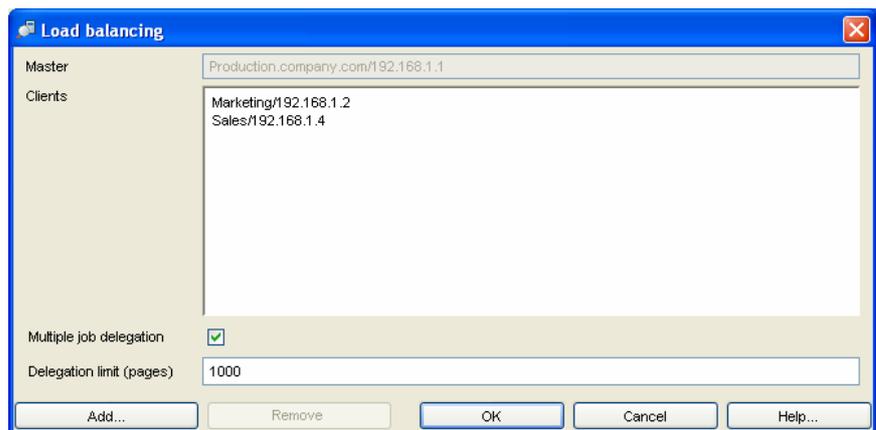
The **Font Download** dialog allows you to browse to a folder with fonts. It contains two panels:

1. Fonts available in the currently selected folder,
2. Fonts elected for downloading.

To elect fonts from the left panel for downloading, select one or more of them and click **Add**, or click **Add all**. To cancel the election, select one or more of them in the right panel and click **Remove**, or click **Remove all**. This does not delete the fonts, but only cancels the election for downloading.

To perform the download of the fonts in the right panel, click the **Start Download** button. During the download a progress bar is shown.

Load Balancing

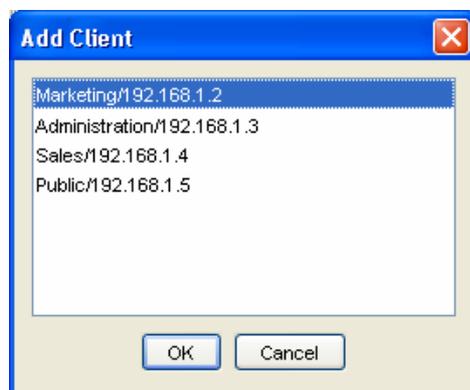


Administrator (users can view the load balancing configuration):

To view and configure load balancing, select a DDP Server and select the **RIP » Load Balancing** dialog.

Load balancing can be configured by designating a DDP Server as master and assigning it other DDP Servers as clients. This tells the master DDP Server to share its printing load with its clients.

A DDP Server is configured as master by assigning clients to it:



- **Add client** – this assigns another DDP Server as client to the master.
- **Remove client** – this unassigns the selected client from the master.

Multiple job delegation selects that the switch to the next available client will only be performed after the given number of pages has been delegated to the previous client. This can be used to enforce that many small jobs are delegated to the same DDP Server without switching in-between. Availability of the DDP Server is not checked in this case. Also rerouting of failed jobs is not performed.

Job splitting can be configured in the **Job » Details » Workflow** dialog panel by changing the **Job Splitting** attribute.

The processing log of a delegated or split job can be viewed in the **Job » Details » Logging** dialog panel.

Accounting

ID	Job name	Owner	Source	Download time	RIP duration	Print duration	Page size	Pages	Copies	Staple	Fold	Duplex	Toner coverage	Error
12	2003.10.16...	BAnders...	NetBIOS	01-Mar-2004...	4	11	A4	4	1	X	-	X		
13	Monthly R...	ASmith	NetBIOS	01-Mar-2004...	5	12	A4	5	1	X	-	X		
14	ECM result...	Doe	NetBIOS	01-Mar-2004...	2	8	A4	1	1	X	-	X		
16	List of act...	ASmith	NetBIOS	01-Mar-2004...	5	11	A4	5	1	X	-	X		
17	special off...	AWeringer	NetBIOS	01-Mar-2004...	2	8	A4	2	1	X	-	X		
18	Calendar ...	ITolst	NetBIOS	01-Mar-2004...	7	12	A4	7	1	X	-	X		
20	The comple...	Marshall	LPR	01-Mar-2004...	4	8	A4	2	1	X	-	X		
21	Hotel booki...	FLloyd	LPR	01-Mar-2004...	2	9	A4	1	1	X	-	X		
22	Statement ...	RTschubal	NetBIOS	01-Mar-2004...	1	8	A4	1	1	X	-	X		
23	Statement ...	BAnderson	NetBIOS	01-Mar-2004...	3	8	A4	1	1	X	-	X		
24	Vendor Bla...	TMckenzie	NetBIOS	01-Mar-2004...	2	8	A4	1	1	X	-	X		
25	Microsoft...	Igoratschin	NetBIOS	01-Mar-2004...	2	8	A4	1	1	X	-	X		
26	My Dear S...	AChandra...	NetBIOS	01-Mar-2004...	4	11	A4	3	1	X	-	X		
27	Important ...	MThetin	NetBIOS	01-Mar-2004...	34	694	A4	47	1	X	-	X		
28	Monthly R...	RFeynman	NetBIOS	01-Mar-2004...	21	42	A4	27	1	X	-	X		
29	Another I...	SHawking	NetBIOS	01-Mar-2004...	20	26	A4	27	1	X	-	X		

Administrator (users can view their own data):

During processing, the DDP Server collects accounting data about each job. Enter the **RIP » Accounting** command to view accounting data for all jobs.

The accounting dialog shows a list of finished jobs with the following attributes: name, owner, source, download time, RIP duration, print duration, page size, document pages, copies, finishing options, toner coverage, error message.

The following operations are available on a selected or all accounting records:

- **Details** – this shows the event log for the selected job
- **Save** – this saves the accounting records to the client workstation. The records are saved in tab separated values format, so they can be imported to a spreadsheet application.
- **Purge** – this deletes the accounting record for the selected job(s). Recovery is not possible.
- **Purge all** – this deletes the accounting records for all displayed jobs. Recovery is not possible.
- **Refresh** – this updates the list of accounting records.

For accounting purposes, jobs stay in the database after execution. If a job has been executed successfully, its source is deleted. If a job has failed, e.g. because a paper tray was not available, its source is kept. The job can then be **resubmitted** by copying it from the finished queue to a print queue. Finished jobs can be deleted explicitly, or are purged automatically following the rule given in **RIP » Details » Purging**.

Event Log



This dialog shows the log of DDP Server and printer events. The recording of events can be configured in the **RIP details » Event Log** dialog.

The **Event log** dialog allows to manually purge the event log. To purge the event log completely, click **Purge all**. To purge the event log partially, select an event and click **Purge**. This will purge the selected events and all older events.

Reboot / Shutdown

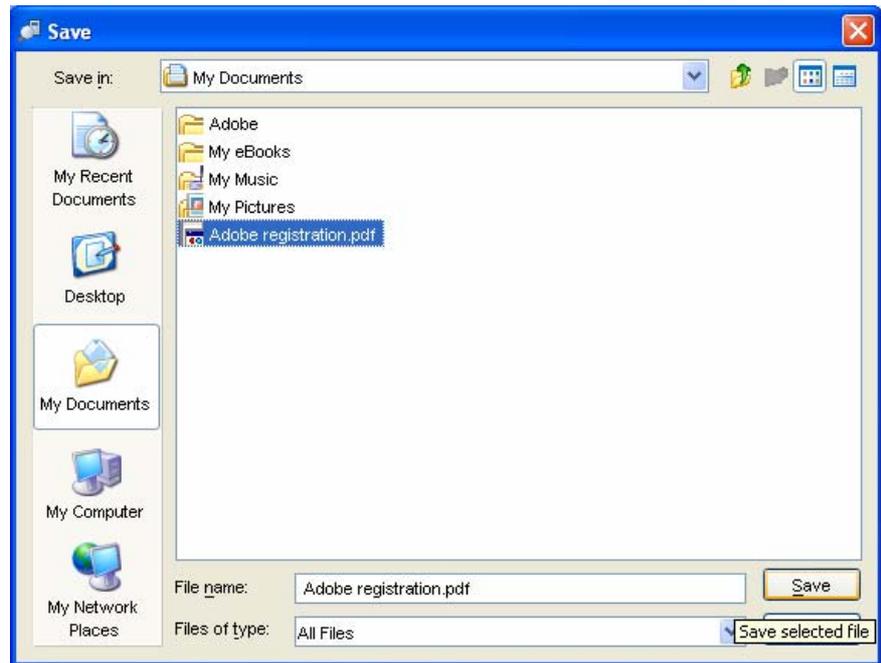
Administrator:

You can reboot or shut down the DDP Server from the DocXPLOER using the **RIP » Reboot** or the **RIP » Shutdown** command. This performs an operating system level restart or software controlled power off of the DDP Server.

You can also start or shut down the DDP Server with the standby button at its front panel. When the DDP Server is running, this button performs a software controlled power off which you can recognize by repeated beep tones from the RIP after a few seconds waiting.

Avoid turning the power off by the power switch on the back side of the DDP Server or by disconnecting the power cable, as this may cause data loss.

Download Job



PostScript, PDF, PCL, TIFF, and ASCII jobs on the client workstation can be submitted to the currently selected queue by the **Queue » Download Job** function. Jobs of these types can also be submitted to a queue by drag and drop from the Windows Explorer or Macintosh Finder to the target queue.

During the download a progress bar is shown.

To get a PDF or TIFF file printed with specific options, download it to a queue with these settings.

Note: A downloaded PDF, PCL, or TIFF file cannot be used to create a form. To create a form from a PDF file, print it from Adobe Acrobat. To create a form from a TIFF file, print it from an imaging application.

Pause/Resume Job

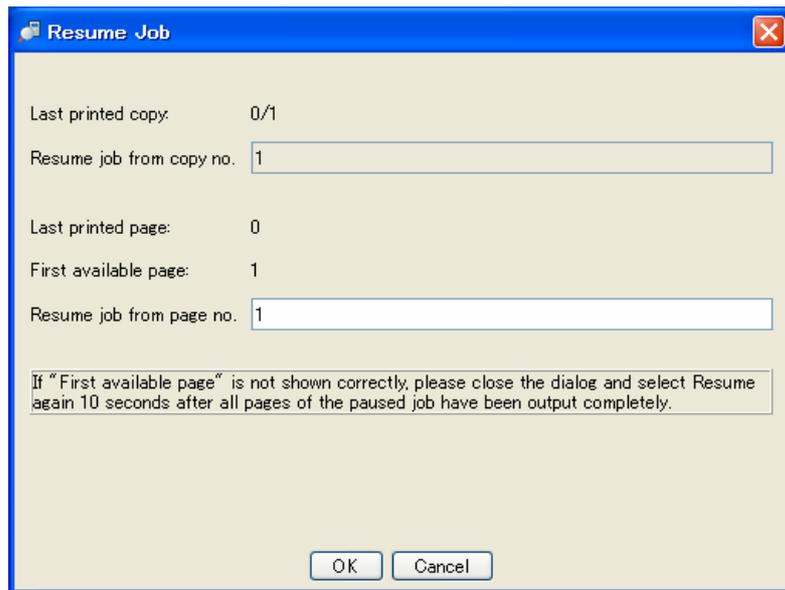
While a job is active, it can be paused and later resumed.

To pause a job, select it from the list of Active jobs, and select **Job » Pause**. When a job is paused, its transmission to the engine is stopped and it is canceled at the engine. No other job will start printing while a job is paused.

After a job has been paused, its processing state (copies and pages printed) is shown in **Job » Details » Logging**. Note that this information is not available immediately, but only a short time after the engine has output the last page.

A paused job can be canceled or resumed.

To resume a job, select it from the list of Active jobs, and select **Job » Resume**. This will show a dialog where you can enter the page number and copy number from which printing shall be resumed:



Jobs with multiple sorted copies and jobs with imposition or stapling can be resumed only from page 1. Other jobs (single copy or multiple grouped copy, no imposition or stapling) can be resumed from a page number between 1 and the last printed page + 1.

A job can be resumed at an earlier position than the last printed copy or page. E.g., if 275 of 500 copies (pages) have been printed, the job can be resumed at copy (page) 251.

Resuming creates a new job on the engine which prints the rest of the original job, starting from the given copy and page number. The job logging and accounting data is stored in the job details of the original job.

If not all pages necessary for resuming are available in memory, resume re-submits the job for execution. With respect to job logging and accounting, this will be a new job. Other jobs waiting behind the original job may be printed before this new job.

The number of pages which can be held in memory for resuming depends on the amount of RAM in the DDP Server and on the setting of **RIP Details » Memory for bitmap spooling**, see section **RIP Details – General**.

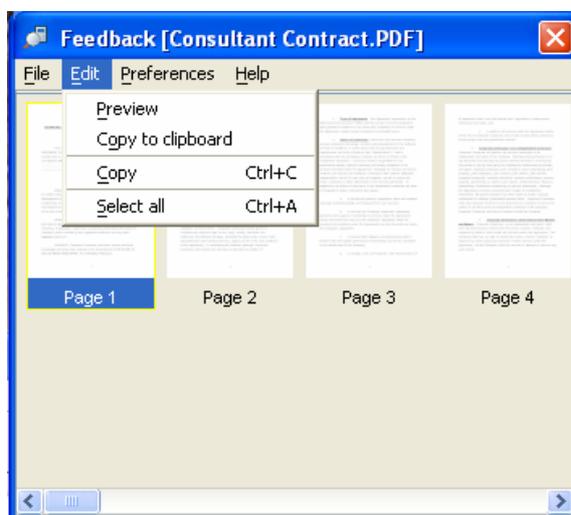
Jobs printed via a direct channel (e.g. port 9100) cannot be resumed by re-submission.

Feedback and preview

The **Job » Feedback** function can be applied to the following job types:

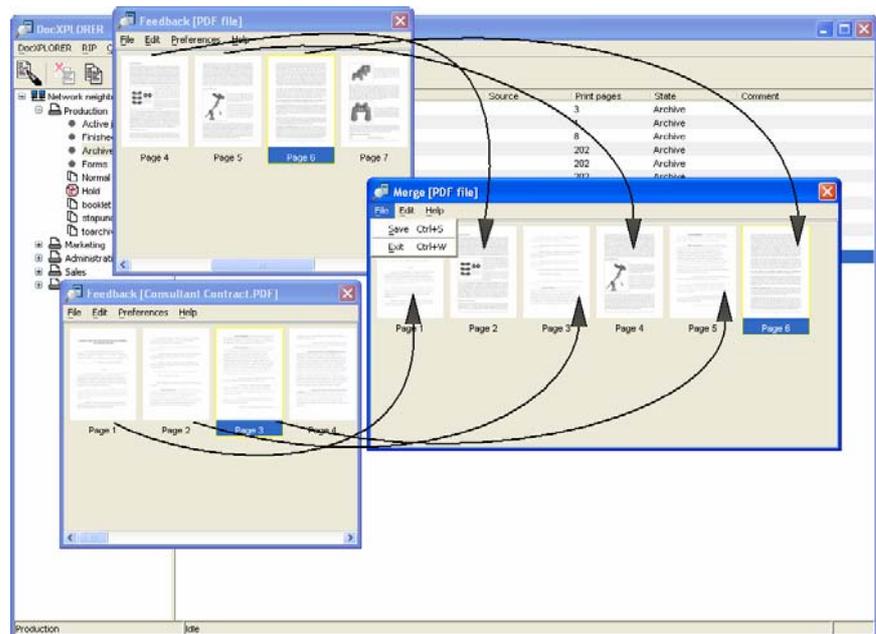
- Jobs in the **Archive queue** – these are jobs with a print resolution bitmap created by printing with Destination = archive.
- Jobs in the **Forms queue** – these are jobs which can be applied for overlay printing within another job. DocXPLOERER supplies a full screen resolution bitmap for them which you can paste into your application document to check matching of content with form.

For each job in the Archive or Forms queue, the **Job » Feedback** command can be called. This function show thumbnails for the images in the selected job. It offers the following operations:



- **Preview** – this previews the selected page in your browser or a program which you have selected for previewing. See **Preferences**.
- **Copy to clipboard** – this copies the selected page (in screen resolution) to the clipboard such that it can be inserted in another application.
- **Copy** – this copies the selected page to DocXPLOERER's internal clipboard such that it can be inserted into a merge window (see section **Job Merging**).
- **Select all** – selects all pages
- **Save page** – this saves the selected page to the client workstation with a default filename.
- **Save job** – this saves each page of the job. If multipage is on, the job is saved as one multipage TIFF file with a user specified filename. If multipage is off, each page of the job is saved as one TIFF file with a user specified filename, extended by page number.
- **Multipage** – selects the multipage mode for saving a job. See above.
- **Resolution** – selects the resolution for saving a job or page. Screen resolution is 75 dpi, full resolution is 600 dpi.
- **Compression** – selects the compression mode for saving a job or page.

Job merging



Jobs in the Archive Queue can be merged. Merging produces a new job from the bitmaps of several existing jobs. To merge jobs, select a job from the Archive Queue and select the **Job » Merge** function.

To add pages from other jobs, select one or more jobs from the Archive queue, then select **Job » Feedback**. After this you have one merge window and one or more feedback windows.

The merge window shows you the pages of the resulting job. To add pages to the result job, drag them from any feedback window into the result window. To add pages before the first or after the last page of the result job, drag them and hold the cursor close to the left or right edge of the result window. This will scroll the result window to the first or last page.

To move pages within the result window, drag them to the desired location. To delete pages, select them and hit the Delete button. To insert an empty page, select the page preceding it and select **Edit » Insert blank page**.

To save the result job, select **Save**. You will be prompted for a result job name. To close the dialog, select **Close**.

The resulting job can be printed from the Archive Queue by selecting it and selecting the **Job » Print** command.

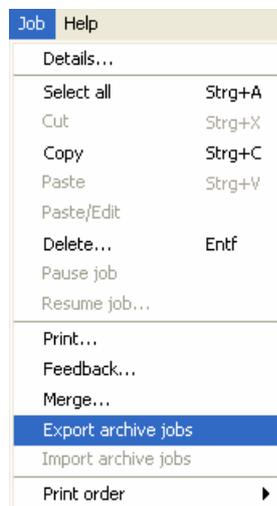
Note: Archive jobs with different resolutions cannot be merged.

Note: It is possible to merge jobs with different page sizes. However, the resulting merged jobs will have restrictions concerning layout and finishing.

Export / import archive jobs

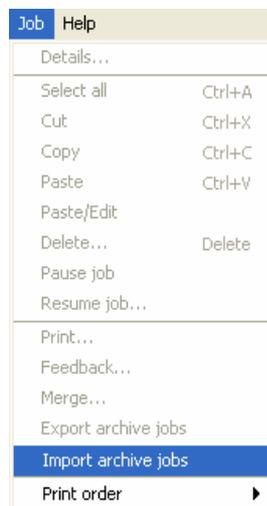
Archive jobs can be exported and imported again. This can be used to backup archive jobs on external media.

To export archive jobs, select one or more (or all) archive jobs, then select **Jobs » Export archive job(s)**.



You will be prompted for a folder where each archive job is stored as one TIFF file. The TIFF files can be viewed by an image viewing application. For color jobs, the planes of each page will be shown separately in this case. Each TIFF file contains the job settings of the archive job.

To import one or more archive jobs, select the archive, then select **Jobs » Import archive job(s)**.



You will be prompted to select one or more TIFF files. Select only TIFF files which have been exported from DDP Server before. These files will be restored with their job settings as new archive jobs.

Glossary

Term/Abbreviation	Explanation
Accounting	Providing the administrator with execution and consumables usage data for executed jobs, e.g. number and type of printed pages, print time, errors. DDP Server provides raw accounting data for individual processing.
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.
ASCII	An encoding for text.
Auto select tray	A method to select a paper tray matching the job's requirements, e.g. by page size and finishing options.
Bitmap	Image data produced by the RIP output on the printer, for job merging and overlay, and for preview.
Booklet	Layout of the pages of a document on the printed sheets such that the result can be center folded and then read as a booklet.
Client	A DDP Server configured for load balancing. The client takes over jobs from a master for execution.
DocXPLOERER	Monitoring and control application for DDP Server. DocXPLOERER allows to manage a network of RIPs together with the queues and jobs on them.
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
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.
Download	Sending a job or font to the DDP Server. Download can be performed in the DocXPLOERER by menu command or via drag and drop.
dpi	Dots per inch – measuring unit for printer resolution.
Electronic stationery	s. form

Term/Abbreviation	Explanation
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.
Feedback	Obtaining a bitmap from the DDP Server. Bitmaps are available for jobs rasterized for later printing and for forms. Bitmaps are available as thumbnails, full screen resolution and size, or full page resolution and size.
FIFO	First in first out – the normal processing order of a queue
Finished jobs	A virtual queue showing jobs which have finished execution. (Jobs executed successfully with destination form or archive are stored in the Forms or Archive queue, respectively.)
Finishing	Post printing operations, e.g. stapling, punching, folding.
Font	Set of typographically designed characters. Typical font types are TrueType and Type 1 (PostScript) fonts. Fonts may be available as screen fonts (for display) and as printer fonts (for high resolution output).
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.
Forms queue	A virtual queue containing jobs which can be applied as PS overlay to other jobs.
Gateway	s. router
Hold queue	A queue with jobs stored for later submission to a print queue.
HTTP	Hypertext transfer protocol. A network protocol used for communicating linked pages in local networks and the internet. HTTP is provided by the web server on the DDP Server.
Imposition	Instructions on how the pages of a job are laid out on the printed sheets, e.g. booklet.
IP	Internet protocol. The lower layer of the TCP/IP protocol.
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 attribute defined in a job. Job settings may be set in the printer driver and edited in the job details dialog of the DocXPLOERER. Job settings may be overridden by queue settings.
Job size limit	Maximum number of print pages (document pages times copies) allowed for the jobs in a particular print queue.
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.
KB	K-Byte (1024 Bytes).
Limit	s. job size limit
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.

Term/Abbreviation	Explanation
Log	List of events produced by the execution of a job, e.g. submission, start printing, end printing, errors. Available as finished job data or accounting data.
lpi	Lines per inch – measuring unit for raster frequency.
Master	A DDP Server configured for load balancing. The master accepts jobs from clients and sends (delegates) them to the clients (including itself) for execution. Typically, in a load balancing configuration, users send jobs only to the master. A DDP Server can be master and client at the same time.
MBS	Memory for bitmap spooling, used to accelerate resuming of paused jobs.
MX record	Mail exchange record provided by a domain name server. The MX record refers to a mail server accepting email for a specific domain.
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	<p>1. document page (in the application)</p> <p>2. printed page (on paper)</p> <p>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.</p>
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.
PDL	Page description language. Language for expressing document content on a printer instruction level. E.g. PostScript, PDF.
PostScript	Page description language (PDL) with a rich feature set for mapping text, graphics and images on raster devices like printers and film recorders.
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.
Priority	The priority of a queue allows to schedule their jobs for faster or slower execution. Typically used to schedule smaller jobs for faster 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.

Term/Abbreviation	Explanation
Queue	<p>A container for jobs. DDP Server provides print queues and hold queues. The administrator may define any number of print and hold queues.</p> <p>On the user's workstation, queues may be visible as MS Windows printers, or as Macintosh desktop printers.</p>
Queue setting	Job 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.
Reboot	Restarting and initialising a DDP Server
RIP	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. DDP Server
RIP list	<p>The list of RIPs currently monitored by the DocXPLOERER. RIPs may be found by broadcast call in the local subnet, or from the edited RIP list of the DocXPLOERER.</p> <p>A user edited list of RIPs outside the local subnet, which the DocXPLOERER should monitor.</p>
Router	A network device connecting a subnet to other networks.
Sample page	Predefined job in the hold queue showing configuration data on the DDP Server. There are sample pages for settings (Settings page) and for fonts (Font sample page).
Settings page	See sample page.
Sheet	Sheet of printed paper; in duplex printing, two pages are printed on one sheet.
SMTP	Simple mail transfer protocol. SMTP is used by the DDP Server to send email notifications about job execution to the owner.
SOFHA DocuFLOW®	Print on Demand Software for the ProfiRIP. Comprises custom queues, archive printing, forms overlay, job merging, and cluster printing.
Subnet	<ol style="list-style-type: none"> 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.
Tracking	Collecting the processing history of a delegated job for display at the master.
User	User with simple printing rights on a DDP Server. See administrator.