

Princt Information

HEIDELBERG

Princt MetaDimension
Version 2016
User's Guide
Revision 1.0
Order No.SZ.111.2231

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Glossary

About This Documentation

This documentation applies to Prinect® MetaDimension® version 2016. This manual contains all the information you need to work with Prinect MetaDimension. Please see the "Prinect MetaDimension – Installation" manual for details about installing Prinect MetaDimension and setting up printer drivers and PPD files and assigning access permissions.



Note: Please note that the printed documentation may differ in its content from the online documentation (PDF, online help), since for printing-related reasons it is not always possible to include the most current changes in the printed manuals. You can always find the most recent information in the online documentation.

What you should already know

We assume that you are familiar with the basic functions of the supported operating systems. For outputting from a DTP application program, it is assumed that the operator knows how to operate the application, especially with regard to printing.

Other Manuals

You will find additional information in the following documentation:

- in the enclosed "How to get started" leaflet
- in Heidelberg Prinect Licensing - Operation manual
- Prinect MetaDimension – Installation
- Prinect Calibration Manager – User's Guide
- Prinect Licensing – Operation
- Prinect MetaDimension – Color Proof Pro
- Prinect MetaDimension - Proofing Engine Manager
- MetaDimension - Screen Frequencies
- Online Help for the Speedway Engine Manager, the TIFF-B Engine Manager, the Topsetter Engine Manager, the Proofing Engine Manager and Color Proof Pro.

Symbols and Styles

The following conventions are used in this manual:

- References to other chapters and sections are [blue](#) (on the screen) and underlined.

Example: See [section "Symbols and Styles", page 18](#).

- Quotes are used to indicate menus, folders, names of functions, hardware conditions, switch settings, system messages, etc.

Example: Set the switch to "off".

- Menus, functions and sub-functions are separated by ">".

Example: Select "File > Open...".

- A plus sign is used to indicate that several keys have to be pressed at the same time.

Example: Press Alt+A.

Important Information

Important information in the text is marked by symbols that are used as follows:



Warning: Contains information that must be taken into consideration to protect the user from injury.



Attention: Contains information that must be taken into consideration to prevent damage to hardware or software.



Note: Contains important general or supplementary information about a specific topic.



Prerequisites: Lists requirements which must be fulfilled before the steps which follow can be performed.

What's New in This Version?

Supported Operating Systems

Windows 7 Professional N, 64 bit

Windows 8 Professional 64 bit

Windows 8.1 Professional 64 bit (recommended)

Windows Server 2008 R2

Windows Server 2012

(Windows XP and Windows Server 2003 R2 32 bit are still accepted)

Interpreter Improvements

- New Adobe PDF Print Engine version 3.5
- Bug fixes
- PostScript Interpreter version 3020.101 (as in version 2015)

Output Devices

- All output devices supported in version 2015 are supported further.
- Topsetter devices are only supported if they are driven by a MetaShooter, version 2011.

New Technologies

- Prinect Remote Upgrade
- MetaDimension services are controlled by the Prinect Supervisor. The Supervisor replaces the functionality of the "Prinect Service Control" tool. The user interface of the Prinect Supervisor is integrated in the Prinect Remote Upgrade user interface.

Color Proof Pro

Prinect MetaDimension 2016 is delivered with the Color Proof Pro version 5.1.9. This version offers the following new functions:

What's New?

- New supported proofers:
 - Canon iPF6400S (8 colors; format: DIN A1 609,6 mm)
 - Canon iPF8400S (8 colors; format: DIN B0 44")
- Inline certification data can be saved additionally in an IT8 file.
- New profiles for Saphira 2 paper.

Other Improvements

- Stabilization of the output process.

What's New in Version 2015?

What's New in the "Preview / Color" Tab

"Monitor Profile" button dropped, new buttons "Paper white" and "Spot colors"

The "Monitor Profile" button for loading a monitor profile file for the screen preview no longer exists because monitor profiles can be set in the operating system.

The "Paper white" and "Spot colors" buttons are now available instead.

"Paper white" button

This button lets you enable or disable paper white simulation in the preview.

"Spot colors" button

Click this button to open the "Spot color view" dialog. In this dialog, you can set the following parameters, separately for spot colors and dieline colors:

For spot colors but not dieline colors:

- "As in print": The transparency properties of the spot colors are displayed in the preview exactly as they are output in print.
- Transparent: The spot colors are transparent in the preview.
- Opaque: The spot colors are opaque in the preview.

For dieline colors:

- Transparent: The dieline colors are transparent in the preview.
- Opaque: The dieline colors are opaque in the preview.

Automatic Connection to a Prinect Integration Manager

If Prinect MetaDimension runs as an output engine with Prinect Integration Manager, Prinect MetaDimension must be connected to the Prinect server as an output engine. Connection is set up in "Administration > Configuration > JDF Portal" (see [section "JDF Portal Settings", page 200](#)).

The connection process was simplified in version 2015. You set up the connection by selecting the relevant Prinect server from the list of available servers and clicking "Connect". If the Prinect server is not listed, you can enter the server name (or its IP address) in a dialog after you click "Connect".

Connection is restored automatically after an update of the Prinect server software or the Prinect MetaDimension software. Manual disconnection before the update and renewed connection after the update are no longer necessary.

Prinect MetaDimension

Prinect MetaDimension offers a powerful system for controlling and editing print jobs, allowing the output process to be optimized and almost completely automated.

Printer Protocols

Prinect MetaDimension supports the following printer protocols:

- Windows printers
- Hot folder
- BSPP
- AppleTalk (PAP) (only for server operating systems)
- Remote LPR (Line Printer Protocol) (only for Server operating systems and in Windows Vista Business)

Functionality and Structure of Prinect MetaDimension

Prinect MetaDimension can process print jobs in PostScript format or in Adobe Acrobat PDF format. Printer output can be configured using so-called Output Plans.

Functional Principle

Prinect MetaDimension comprises essentially the following components:

Software components:

- User interface: Prinect MetaDimension Printmanager (Java user interface)
- Internet browser user interface ("Web user interface")
- Device management: Engine Managers for various output devices / exporting printing data
- Process calibration and linearization: Calibration Manager
- Monitoring the Prinect MetaDimension services: Service Control

Introduction

- Proofing with Color Proof Pro and/or the Proofing Engine Manager

Functional components:

- Virtual Printers
- ADOBE PostScript Interpreter
- ADOBE PDF PrintEngine (see the [section "Adobe PDF PrintEngine \(APPE\)", page 28](#))
- Output Plan editor
- Open prepress interface (OPI) functionality
- Image Includer
- Imagemanager functionality with image directories and layout file generator
- Color Management
- Font Handling
- Trapping functionality
- Definition of Page Positioning Schemes
- Drive Monitor
- ROOM Proof ("**R**IP **O**nce Output **M**any")
- Contone preview
- Halftone preview
- Paper stretch compensation

Connection options:

- For input:
 - Connection of Prinect MetaDimension to the Prinect Integration Manager™ as a Prinect Integration Manager engine
 - TIFF-B Import
 - TIFF/IT P1 Import
 - Processing of imposed Prinect Signa Station sheet layouts
 - Importing Delta Technology Delta Lists
- For output:
 - Connection to imagesetters controlled via a Prinect Shooter workstation. Data transfer is through export in TIFF-B format

- TIFF-B Export
- Direct connection to Heidelberg SupraSetter 105, SupraSetter A52/74 and ProSetter platesetters as well as to Primesetter filmsetters via a Speedway interface
- Connection to proofers (color and imposition proof)
- Connection to Heidelberg Quickmaster DI / Speedmaster DI presses through export in TIFF-B format
- PDF, TIFF, JPEG and PostScript export
- Connection to various digital presses

You will find detailed information about the components listed in the following sections of the manual or in the online documentation.

Components

Prinect MetaDimension comprises the following components:

Prinect MetaDimension Printmanager

The Printmanager is the main user interface and the central configuration and monitoring instrument for the system. You can use it to configure Prinect MetaDimension components or to launch additional software components (Calibration Manager, Engine Managers) and to monitor running operations.

Engine Managers

In Prinect MetaDimension, various output devices such as the imagesetter or proofer are managed by so-called "Engine Managers". Engine managers are programs in which device-specific output parameters are set. The Engine Managers also control the connected imagesetters and proofers and/or create TIFF-B files. You can also control specific device functions for some output devices, for example, material feed and cutting for imagesetters.

The following Engine Managers are available:

- Speedway Engine Manager
for recorders with Speedway connection (Heidelberg platesetter, Heidelberg filmsetter)
- Topsetter Engine Manager
for all Topsetter platesetters
- Color Proof Pro
for proofing devices
- Proofing Engine Manager
for proofing devices (based on Windows drivers) and for TIFF, JPEG or PostScript export

Introduction

- TIFF-B export Engine Manager
for output devices processed with imagesetter data in TIFF-B format, for example platesetters with upstream Prinect Shooter or Heidelberg Quickmaster DI / Speedmaster DI press machines. The TIFF-B Export Engine Manager lets you manage the export of jobs in TIFF-B format.

With an Engine Manager you can, for example, perform the following tasks:

- Monitor the processing status in the output device
- Control the imagesetter (stopping for changing material, advancing, cutting...)
- Set the page positioning parameters (distances between the pages, collect mode)
- Set the output materials parameters (film, foil, plate) and test them
- Define templates for punch and offset parameter setting



Note: Not all of the options listed above are available for all output devices. Some Engine Managers have additional setting options. For more details on how to operate the Engine Manager versions, please refer to the relevant Engine Manager online help.

As different Engine Managers are required depending on the output device, the necessary Engine Managers have to be installed in addition to the Prinect MetaDimension standard software.

Linearization / Process calibration

Prinect MetaDimension supports linearization and process calibration. Special software, the "Calibration Manager", is provided to perform linearization or process calibration.



Note: Details about linearization and process calibration can be found in the documentation for the Calibration Manager.

Prinect MetaDimension service control

You can use service control to manually start or stop the Prinect MetaDimension system services. The system is only functional when the Prinect MetaDimension services are active.

The "Report" button lets you create a "service report" that can help with servicing if problems occur. In contrast to a job report, a service report does not have any job-specific information. A job report also contains the information found in the system report. You can find detailed information about this in the section [Creating a Job Report, page 62](#).

Virtual Printers

The virtual printers are the "input channels" for Prinect MetaDimension. You can set up virtual printers as printer drivers ("Printer Mode") or as hot folders.

In Printer Mode, you can print as on a "normal" printer with the print command on your DTP application. The printing data is transferred via the network to the Prinect MetaDimension server, processed and output.

In hot folder mode you first have to connect a virtual printer as a network directory (hot folder) to your DTP workstation. In your DTP application you then output into a file using a PostScript printer driver. You can save this PostScript file either directly to the hot folder or to a different directory where you can convert it into a PDF file using Acrobat Distiller. You can move the PDF file from your DTP workstation to the hot folder through a network connection (e.g. in Windows Explorer). Each PostScript or PDF print job transferred to a hot folder is automatically processed and output. You will find details about the setup of virtual printers in section [Setting up the Virtual Printer as a Windows Printer \(Windows Queue\), page 178](#) and in section [Virtual Printer Setup at the DTP Computer, page 351](#).

Internal Job Processing

Internal job processing groups all the components that are required for the processing and output of print jobs. These components are:

- PostScript/PDF interpreter:

The interpreter converts the input data into a data format which the output device can process. This process is also known as "rendering". After interpretation, the software data is screened by the screening generator software. The interpreter also processes the Output Plan information needed for rendering and controls the relevant output options. Furthermore, the interpreter contains the Adobe InRIP trapper.

Prinect MetaDimension can run with one of the following renderers:

- With the Adobe CPSI ("Configurable PostScript Interpreter") PostScript interpreter
- With the Adobe PDF PrintEngine ("APPE") (as an option). You must first convert PostScript data to PDF data because the Adobe PDF PrintEngine can only process PDF data.

In the Output Plan you can set up that the Adobe PDF PrintEngine will be used automatically for processing PDF documents and the CPSI interpreter for PostScript documents.

- Interface to the output device:

In order to control specific output devices, a special interface card (Speedway interface, Topsetter interface) may be required.

Output Plan Templates

The Output Plan Editor is used to create or modify Output Plans. An Output Plan is used on a job. It defines the single steps in job processing and its parameters. Output Plans are equivalent to what is known as "Adobe Job Tickets" (Portable Job Ticket Format). Output plans are device-specific, i.e. an Output Plan is only valid for a specific output device. You can find more details about the setup of Output Plans in the section .

Adobe PDF PrintEngine (APPE)

As an option, Prinect MetaDimension can use the "Adobe PDF PrintEngine (APPE)" for rendering instead of the conventional Adobe CPSI ("Configurable PostScript Interpreter"). The Adobe PDF PrintEngine processes solely PDF documents. This means that you must first convert documents that are in PostScript format to PDF format before you process them with Prinect MetaDimension.

The Adobe PDF PrintEngine has a number of advantages for the processing of PDF documents:

- Original PDF interpreter:

In contrast to the CPSI interpreter, PDF documents no longer have to be converted internally to PostScript before the job data undergo rendering. APPE processes the PDF code directly.

- Support of PDF, JDF and JMF data:

The CPSI PostScript interpreter is controlled by PostScript commands. At the same time, the content data are also in the PostScript code. This mix of content and control data occasionally causes conflicts between the control data in the PostScript code and the control data of the RIP/workflow system.

APPE processes the content data in PDF format. In contrast to PostScript, PDF is a pure document format and not a programming language. The Job Definition Format (JDF) and the Job Messaging Format (JMF) are used for job control. Through the separation of content and control data, the content data can be processed very consistently and can be reproduced for processing with the sophisticated JDF/JMF-based workflow control. You can add the JDF and JMF control data to the job from a DTP application, an imposition application, a workflow system (e.g. Prinect Prepress Manager) or the RIP (Prinect MetaDimension). This gives you a great degree of flexibility in planning how your data will be processed.

- Enhanced processing of transparencies

In contrast to PostScript, the PDF format supports several layers. This means that a PDF document can have several separations in different layers. You can define that objects in the single layers are transparent, allowing some of the objects lower down to "shine through" them. This mechanism lets you create very differentiated transparency effects in the PDF format. You can also define very precise trap lines at the transitions of such objects (see also the [section "Trapping Functionality \(Option Protected by a License\)", page 31](#)).

In the CPSI PostScript renderer, transparent objects in the PDF documents must first be made "flat", i.e. the layer data are eliminated. In this process, new objects that appear transparent in the result are calculated and added at those points where objects with transparency elements overlap. Such documents are only trapped after they are converted to PostScript. This might cause problems in certain constellations as a result (e.g. "steps" at the trap lines).

The Adobe PDF PrintEngine keeps the layer structure and the transparency data until rendering is finished. Transparency elements that are defined between the single color separations are processed separately for each layer by the Adobe PDF PrintEngine. InRIP trapping also keeps the layer structure. This gives you noticeably enhanced output results for transparency elements. Adobe talks about "live transparency".

- The Adobe PDF PrintEngine is based on the same technical principles as Adobe Acrobat and Adobe Creative Suite. This makes sure that a common technology is used to create PDF files, for screen previews and for proofing and imaging. With this PDF rendering technology, the screen preview shows you the result that will also be printed. This means that you are likely to have fewer correction runs for your proofs or prints.
- Supported PDF versions:
 - PDF 1.3 thru 1.8
 - PDF/X-1a and PDF/X-3
 - PDF/X-4
 - PDF/X-5
- Color handling:
 - All PDF color spaces are supported (Device CMYK, Device RGB, Device Gray, Device N, CIE L*a*b*, XYZ, ICC color spaces, Separation, Indexed, Pattern, Cal RGB, Cal Gray, hi-fi color (xclr)).
 - True-to-print color handling, where color conversion operations are postponed to the last possible moment in rendering.
 - Full n-color proofing using ICC profiles
- Standards:
 - PDF and PDF/X
 - Compatible with JDF 1.1, 1.2 and 1.3
 - ICC (V.4)
- Fonts:
 - Adobe Type 1 with CFF OpenType
 - TrueType with TrueType OpenType
 - CID-encoded with CID-encoded OpenType
 - Adobe Type 3

Paper stretch compensation

In web printing and large-format sheetfed printing, paper may stretch as it passes through the press from one printing unit to the next. The result of this is that the register between the single separations is no longer accurate.

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To compensate this paper stretch in the RIP, the digital bitmap in Prinect MetaDimension can be modified to match the stretching that is expected. To do this, you can define compensation parameters for every printing unit in "Administration > Resources > Paper Stretch Compensation (see the [section "Paper stretch compensation", page 127](#)). You can save the parameter sets as templates. You can then enable the templates in the Output Plan Editor for imaging or for TIFF-B output (if necessary, separately for front and back) (see the [section "Paper Stretch Compensation for Front/Paper Stretch Compensation for Back", page 247](#)).

OPI Functionality (Option Protected by a License)

Prinect MetaDimension supports the OPI ("Open Prepress Interface") image data inclusion. Image data substitution means that layout files with a low resolution are created from high-resolution image data. These layout files are integrated into the DTP layout instead of the high resolution images. When the data is being printed via Prinect MetaDimension, the layout files are replaced with the original high-resolution image data. Prinect MetaDimension has an Imagemanager with a layout file generator for creating layout files (see the [section "Image Manager", page 337](#)). For background information about the OPI functionality, please see the section [OPI \(Image Data Inclusion\), page 331](#).

Color Management (Option Protected by a License)

For true-color output to film/plate or to a color proofer Prinect MetaDimension makes a color handling option available. Color Management matches the colors in a scanned or digital original with the colors displayed on the monitor during image editing and output to a color proofer or imagesetter. The scanner, the monitor and the output device are all characterized in this process. The result of characterization is saved as so-called "ICC profiles" (scanner, monitor and output ICC profiles). Prinect MetaDimension supports the management of input and output ICC profiles and can control a color proofer or imagesetter in such a way that true-color output is possible.



Note: Special software with matching measurement devices is required for characterizing output devices (e.g. "Prinect Profile Toolbox").

In Prinect MetaDimension you can enable Color Management in an Output Plan template and assign ICC profiles in "Proof" or "Color Management".



Note: Color Management is free of charge for proofing.

You will find information about Color Management setup in the Output Plan for an imagesetter output in the section [Color Management, page 269](#). You will find notes on proofing in the section [Proof, page 264](#). Background information about Color Management is found in the section [Basics of Color Management, page 313](#).

Proofer Linearization

The "Color Proof Pro" module contains a linearization wizard that enables you to linearize proofers. Further details can be found in the Online Help of the Color Proof Pro Engine Manager.

Font Handling

In Prinect MetaDimension you can save fonts and use them as required for outputting. This option should be used if print jobs are to be processed where not all of the fonts used are embedded. In this case, Prinect MetaDimension can use the fonts installed on the server for output. More details about font management can be found in the section [Fonts, page 151](#).

Trapping Functionality (Option Protected by a License)

Trapping is a technique for correcting errors in offset printing that may be caused by register errors, inaccuracies between printing units or distortion of the paper. Prinect MetaDimension includes the Adobe InRIP Trapper that can perform trapping in the RIP, i.e. when the print job has been sent from the DTP application. Trapping can only be used on jobs in a composite format. You can configure and save the trapping option in the Output Plan templates. You can find information about trapping configuration in the section [Trapping, page 256](#). For background information about trapping, please see the section [Trapping, page 323](#).

Managing Color Tables

Spot color tables may be required for trapping and Color Management. PANTONE® and HKS color tables are supplied with the shipment. If required, you can define and save additional color tables.



Note: PANTONE® color tables are only shown if the PANTONE® libraries are licensed and if the appropriate permissions are assigned to the user who wishes to use them.

For more information about color table management, see the section [Color Tables, page 159](#).

Definition of Page Positioning Schemes

In Prinect MetaDimension you can define page positioning schemes. Depending on the output device connected, you can arrange several pages in a positioning scheme and save this as a template. In addition to the arrangement of the pages, you can define other parameters such as punches, marks, page orientation, etc.

For more information, see the sections [Page Positioning, page 141](#) and [Layout & Marks, page 253](#).

Drive Monitor

You can use the drive monitor to monitor the capacity of the hard disk drives of the Prinect MetaDimension PC. You can use this tool to prevent one of the system's hard disks "overflowing" with data so that as a result the system may not be able to continue to work. If the data load on a monitored drive exceeds a preset limit, the virtual printers and the PDF PrintEngine are stopped and you will be given the opportunity to free some space on the drive in question.

You can find detailed information about the drive monitor setup in the section [Drive Monitor, page 195](#).

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ROOM Proof Workflow

You can use a "ROOM Proof Workflow" for a workflow with TIFF-B export. This calculates the proof data from the screened TIFF-B data without having to repeat the RIP stage for proofing. You can find more details about this in the sections [ROOM Proof Workflow, page 363](#) and [ROOM Proof, page 273](#).

Preview

You can generate TIFF previews for the jobs you are currently processing and view them in the job properties. This means that you have information about the layout of pages and about colors in the job before printing and you can measure certain parameters of the job. You can find more details about this in the sections [Preview / Color Tab, page 69](#) and [Preview, page 263](#).

Halftone softproof

A low-resolution reproduction of the screened job data is generated in the halftone softproof. A high-resolution halftone softproof with the original screened data is also possible. You can view the halftone softproof in the job properties before the job is output. The halftone softproof provides you with various items of information about the job (colors, geometry, screen), and you can scale up the preview by a high factor, for example, to examine the transitions between objects. For more information about halftone softproof, see the sections [Halftone Soft Proof tab, page 89](#) and [Halftone Soft Proof, page 263](#).

Support of Object Screening

Prinect MetaDimension supports the output of PDF documents that were processed with the Prinect Screening Selector, provided that the "Object Screening" option is licensed and enabled. Prinect Screening Selector is part of the Prinect PDF Toolbox and provides users with tools for assigning particular screen settings to single objects in PDF documents that are open in Acrobat.

The object screen settings are evaluated and used for output with "Object Screening". These jobs must be edited with the Prinect Screening Selector of the Prinect PDF Toolbox in order to be able to use the "Object Screening" option. The Prinect PDF Toolbox can be installed on a DTP computer, for example. The object/screen settings are ignored if the "Object Screening" option is not enabled and the screen settings of the Output Plan are used. You can find information about using the Prinect Screening Selector in the Prinect PDF Toolbox documentation.

Import and Export Functions

Prinect MetaDimension provides some import and export functions that are important for connection to workflow environments or to special output routes.

Importing Delta Technology Delta Lists

With Prinect MetaDimension you can import and process Delta Lists which were created using Delta Technology Version 7.0 or higher. The DeltaFlow license option is required for importing Delta Lists.

Connection to the Prinect Integration Manager

You can use Prinect MetaDimension as an "output RIP" for the Prinect Integration Manager workflow system. For more information about the connection to Prinect Integration Manager, see [Configuration of Prinect MetaDimension as a Integration Manager Engine, page 399](#).

TIFF-B Export

With Prinect MetaDimension you can export screened print jobs in TIFF-B format. This TIFF-B data can either be output at a later time or you can use this data format as an exchange format with other RIPs or output devices, for example, for another Prinect MetaDimension system, a Prinect Shooter, a Heidelberg DI press or a proofing device that can process TIFF-B data as an input format. A separate Engine Manager is installed for the TIFF-B export.

TIFF-B Import

The TIFF-B license option must be enabled in order to import TIFF-B files. TIFF-B import is only via hot folders (see the [section "Setting Options for Virtual Printers", page 171](#)). Every hot folder can process TIFF-B data that has been created on another Prinect MetaDimension computer. To do this, the TIFF-B data must be transferred to a hot folder using a network connection, for example. When the imported TIFF-B data is processed, all output-specific hot folder settings are ignored with the exception of the "Mirroring" and "Negative Mode" options.

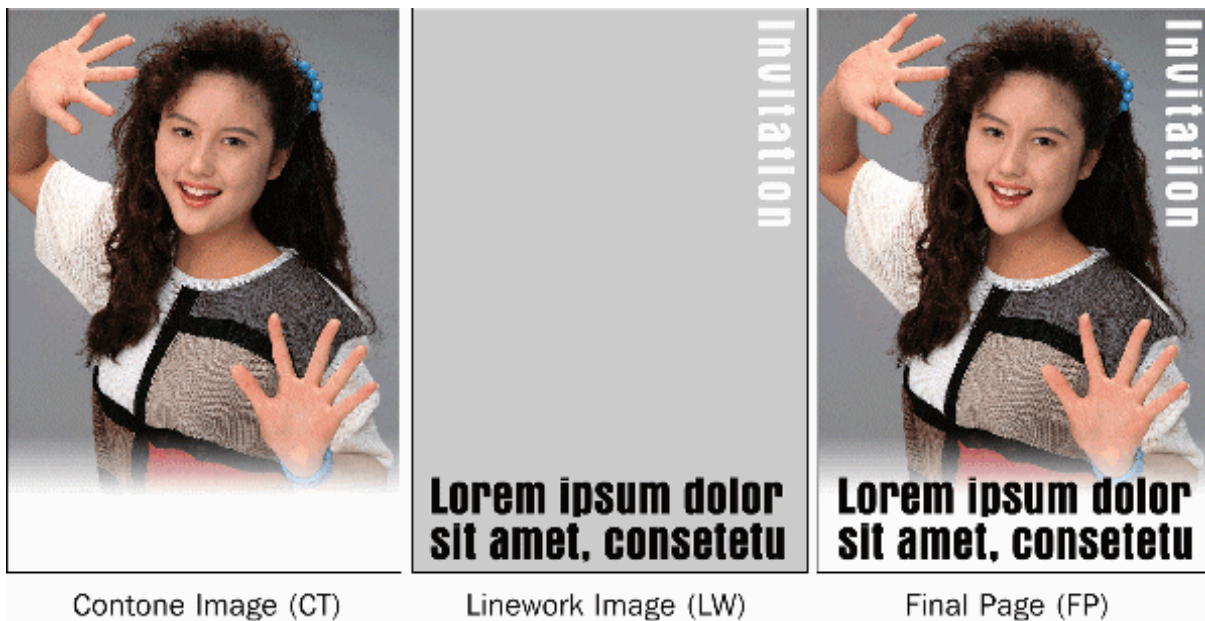
TIFF/IT P1 Import

TIFF/IT-P1 stands for "Tagged Image File Format/Image Technology Profile One" and is an exchange format for printing data. P1 is a subset of TIFF/IT and has restrictions, for example, only CMYK can be processed and no spot colors are possible. The TIFF/IT-P1 license option must be enabled in order to import TIFF/IT-P1 files.

The TIFF/IT-P1 specification contains the following data:

- .fp file (fp=final page), this file contains references to the component files .ct, .lw and .hc. It can also contain a low-resolution thumbnail.
- .ct file (ct=contone), this file contains midrange resolution image data, e.g. 300 dpi.
- .lw file (lw=linework), this file contains high-resolution text and linework data, e.g. more than 1000 dpi.
- .hc file (hc=high-resolution contone), this file contains high-resolution image data/contours so that high-resolution transitions between one image and the next are reproduced correctly. This component is not found in a TIFF/IT-P1 job if such data are not required.

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The job is composed of .ct, .lw and .hc data by placing the partially transparent .lw and .hc data (if they are part of the job) over the full-format .ct data.

TIFF/IT-P1 can be imported by copying it to the hot folder or with the "New" button in the Job View. In both cases, a virtual printer must be set up with a hot folder (see [section "Setting Options for Virtual Printers", page 171](#)). To be able to edit TIFF/IT-P1 files, all the files that make up the job must be located in a folder with a ".tiffit" extension. The "import.tiffit" folder is created automatically in the hot folder. You can create other subfolders with a ".tiffit" extension in this folder, for example, give each job its own folder.



Note: To edit normal TIFF files using the same hot folder as the TIFF/IT files, you must copy the TIFF files to the top hierarchy level of the hot folder and not to a TIFF/IT subfolder.

Methods

Creating a TIFF/IT folder:

Create a "tiffit" folder for each job to which all the files of the job will be copied. A "tiffit" folder is a folder to which "tiffit" was added as the extension. You can create new "tiffit" folders in the hot folder or add "tiffit" to existing folders and then copy them to the hot folder. All the data that are part of a TIFF/IT job must be copied to the "tiffit" folder.

Timeouts

- In Prinect MetaDimension, a new job is created when a .fp file is copied to the hot folder (or more precisely, to a folder with a ".tiffit" extension in the hot folder).
- The .fp file is evaluated and the system waits for the other component files that are named in the .fp file.
- The job is aborted with a message saying that the time was exceeded if the component files are still not available in the TIFF/IT hot folder after approx. two hours of copying.

- The job is aborted with an error message if approx. 2 minutes go by after the .fp file is copied to the hot folder and the component files are not copied to the .fp file during this period.
- The job is not aborted if, for example, copying of the .ct file to the hot folder starts one minute after the .fp file, even if it takes 20 minutes to copy the .ct file. Processing continues if copying of the .lw file starts one minute after that.

We recommend that you copy all the files of a job together or in quick succession to the hot folder, without copying other data sets at the same time or overloading the network connections of the Prinect MetaDimension PC. This reduces the risk of timeouts.



Note: If you have several sets of TIFF/IT files in one common source folder, in Windows Explorer you could copy all the .fp files first to the hot folder, followed by all the .ct and then all the .lw files. Prinect MetaDimension would generate a job for the first .fp file and would wait for the related .ct and .lw files. A time of two minutes for the first job could easily be exceeded if the .ct files of all the TIFF/IT sets were now copied to the hot folder at the same time. This would cause the job to abort.

If a slow network causes long transfer times, you can work around this as follows:

1. First copy the TIFF/IT data sets to a "normal" folder, i.e. not a hot folder, on a hard disk of your MetaDimension computer. When all the files are in the folder, move the files to the hot folder or
2. copy the data sets to the hot folder, first of all without the .fp files and add the .fp files only at the end.

Renaming Files

In principle, you should not rename the files.

If, nevertheless, you have to rename TIFF/IT files for an important reason, you can only rename the .fp file. Never rename the .ct, .lw or .hc files as the .fp file has references to these files and would not find them if their names were changed. If you do so, your processing can be faulty and files can remain unedited in the hot folder.

Other Info

You can delete the .fp file and its component files from their tiffit folder when they are processed. Afterwards, you can delete the tiffit folder in the hot folder (not the "import.tiffit" folder).

Only one tiffit data set at a time can be converted to a PDF job. This is only relevant if you are using several virtual printers for tiffit processing.

Applications that create TIFF/IT-P1:

- DaVinci
- Creo Brisque
- Dalim TWIST
- Harlequin 5.5r1a
- Jaws 2002.4

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- Lucid Dream TIFF/IT flow v4

PDF Export

The PDF Export function allows you to export proof data as PDFs for a true-color output on another Prinect MetaDimension system ("remote proof"). This requires that the same proofer is available on both Prinect MetaDimension systems.

With PDF Export, it is possible for an imaging shop to make a true-color proof of a customer job and then to export the proof data to the PDF format (PDF 1.3). At this stage, this proof data contains all the data required for color matching (ICC profiles). The PDF data can now be sent to the customer, for example, via email where it can be output on a second Prinect MetaDimension system with the same type of proofer. This allows the customer to assess the proof and, if satisfied with the result, to give the go-ahead for imaging without having to send a copy of the proof by courier.

The PDF Export function is configured in the Output Plan Editor by selecting a "PdfExport" proofer as your output device (see the [section "Proof", page 264](#)).

Prinect Integration Layer (PIL) as a Communication Level in the Prinect System

Prinect MetaDimension, for example, can be integrated into a Prinect workflow environment through connection to a Prinect Integration Manager.

Communication between the individual components within a Prinect system is done on a special "communication level": the "Prinect Integration Layer (PIL)".

One part of this communication level is the Master Data Store. The Prinect Integration Manager makes the Master Data Store available in a Prinect environment.

If MetaDimension is not connected to a Prinect Integration Manager, you can install the Master Data Store when you install the MetaDimension software. This way, master data that is managed by Prinect MetaDimension is also available for other Prinect MetaDimension systems. As a rule, if the Master Data Store is not available, the master data is stored and managed locally by MetaDimension.



Note: You can also install the Master Data Store as a stand-alone application to its own separate computer. Insert the Prinect MetaDimension installation data media and select the "MDS Installation" option. The installation is started.

Master Data Service enables central management of so-called "master data" for the entire Prinect system. Master data is information that can be used at several points in the Prinect workflow. Prinect MetaDimension can manage the following master data:

- User data and user permissions
- Printing materials (paper grades),
- Colors / color tables.
- Imagesetter data

This data is stored in a central location in the Master Data Storage. If you define printing material data, for example, in MetaDimension, you can also select this data from the pool of printing material data in the Master Data Store if you are in other applications in the Prinect environment. This avoids redundancies and minimizes mistakes.

User data are filed centrally in the Master Data Store but user administration is local in the Prinect MetaDimension system.

The Master Data Store manages imagesetter data that is available as "IPR" files (see the [section "Create IPR:", page 191](#)). You can generate this data at a Prinect Shooter output station, for example, and file it in the central Master Data Store. The device data is available to all applications there that can access the Master Data Store.

If the master data storage location changes, for example, because of a software update or connection to a Prinect Integration Manager environment, the master data is automatically synchronized. This also happens if the local available MetaDimension master data are transferred to a master data storage location. If a name conflict occurs during synchronization, for example when identically named print materials have differing attributes in master data storage and local data storage, the master data storage takes priority. Information about enabling the Master Data Store can be found in section [Prinect® Services, page 202](#).

Remote Control

You can either operate Prinect MetaDimension directly on the server PC or you can monitor job processing from another computer by "remote control". For remote control operations, you can install a remote administration version of the Prinect MetaDimension user interface on a (Windows) PC. The remote administration version has a user interface which essentially corresponds to the standard Prinect MetaDimension user interface.

As an alternative to the remote administration version, you can call up the Prinect MetaDimension browser user interface in an Internet browser. To do so, enter the IP address or the network name (in each case with port number 8080) of the Prinect MetaDimension server as the URL in the browser, e.g. "http://MetaDimension-PC:8080"). You can call up the browser interface from any computer platform (Windows, Macintosh, Unix). The only requirement is that an Internet browser is installed and that the Prinect MetaDimension server is accessible in the network.

Starting and Terminating Programs

When the Prinect MetaDimension software has been installed successfully, you will find "Heidelberg Prinect MetaDimension" plus related menu items in the Windows Start menu. If set accordingly during installation, you will also find the "Heidelberg Prinect MetaDimension" folder on the Windows desktop; this has the same entries as the Heidelberg Prinect MetaDimension Start menu. In this way, you can choose whether you wish to call up the various applications from the Start menu or by double-clicking the desktop folder.

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The MetaDimension Start menu contains the menu items listed below:

- Key Request

PDF forms for ordering license keys for Prinect MetaDimension options and updates.

- Service > RemoteService

Here you can call up the remote tool, which can be used to support this product. If need be, please contact your nearest Heidelberg office to set up the remote service.

- BooksOnline

Refers to a "link page" from where all available online documentation (in PDF format) relating to Prinect MetaDimension can be called up.



Note: To be able to read the PDF documents, you must have installed an Adobe Reader or an Adobe Acrobat version on your computer. You can download the Adobe Reader free of charge from the Adobe home page (<http://www.adobe.com>).

- Calibration Manager

You can use the Calibration Manager to perform process calibrations. Process calibration is used to harmonize the individual processing steps of the entire printing process, from the creation of the printing copies, via the creation of films / printing plates up to printing using an off-set printing press.

- Color Proof Pro

Launches the Color Proof Pro Engine Manager.

- Uninstall MetaDimension

- EPL View

Launches the EPL viewer.

- Save Configuration

Saves the current configuration.

- Restore Configuration

Restores a saved configuration.

- Modify License Server

If you wish to use a different License Server to the one set during installation, you can change the connection to the License Server with this menu item.

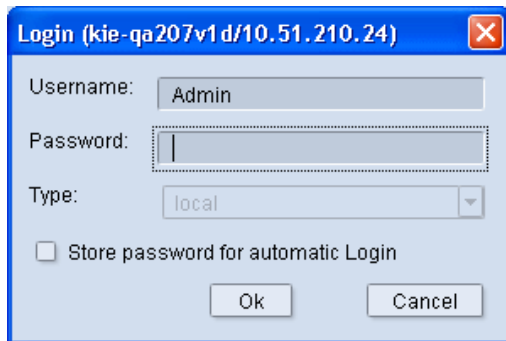
- MD-DHV_CurveTool

Call up the DHV calibration manager here to calibrate two press machines.

- MetaDimension Printmanager

The Printmanager is the central MetaDimension user interface. Here you can make all your system configuration settings and monitor job processing. To be able to start the MetaDimension Printmanager, the MetaDimension server must be started.

After the Printmanager starts, you must log in to Prinect MetaDimension with a valid user name and password. Take note of the instructions in the section [User Management, page 209](#).



For the first login, you should log in with the default user "Admin" and the password "Admin". This user has administrator permissions, and, as an administrator, you can set up and manage other users.

If you use a user name and password that are also set up in a Windows domain, you can write the domain name, separated by a backslash, before the user name, e.g. "MetaDomain\prinect".



Note: You must exit the Printmanager and restart it if you wish to log out of the system and log in again using another user account. Log in again with the new user name and password.

- MetaDimension Service Control

You can use this program to manually start or stop the MetaDimension system services. To start, simply click the green "arrow key", to stop click the red "stop key". Normally, the MetaDimension service is automatically started when the computer is starting up.

- Modify Folder Selection

This menu item allows you to change certain system folders that were set up during installation. You can change the following folders:

- Folder for temporary data

During job processing, Prinect MetaDimension generates temporary data that can be very voluminous. For this reason, you should set up the folder for temporary data on a different hard disk and not on the system partition.

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- Folder for user data

This path refers to a collective folder where certain subfolders for Prinect Shooter like hot folders, etc. are set up by default.

- Folder for spool data

This folder collects the data of jobs that are waiting to be processed or are currently being processed.

- Folder for output data

This folder collects the data that will be sent to the next step in processing (imagesetter, Prinect Shooter, etc.).

- Proofing Engine Manager

Launches the Proofing Engine Manager.

- Release Notes

Information regarding the current Prinect MetaDimension version, documentation, etc.

- Software Product Description

Detailed software product description

- SystemInfo

Important information regarding working with the current Prinect MetaDimension version.

- Tiff-B Engine Manager

You can launch the Tiff-B Engine Manager directly with this menu item if the Tiff-B Engine Manager is installed.

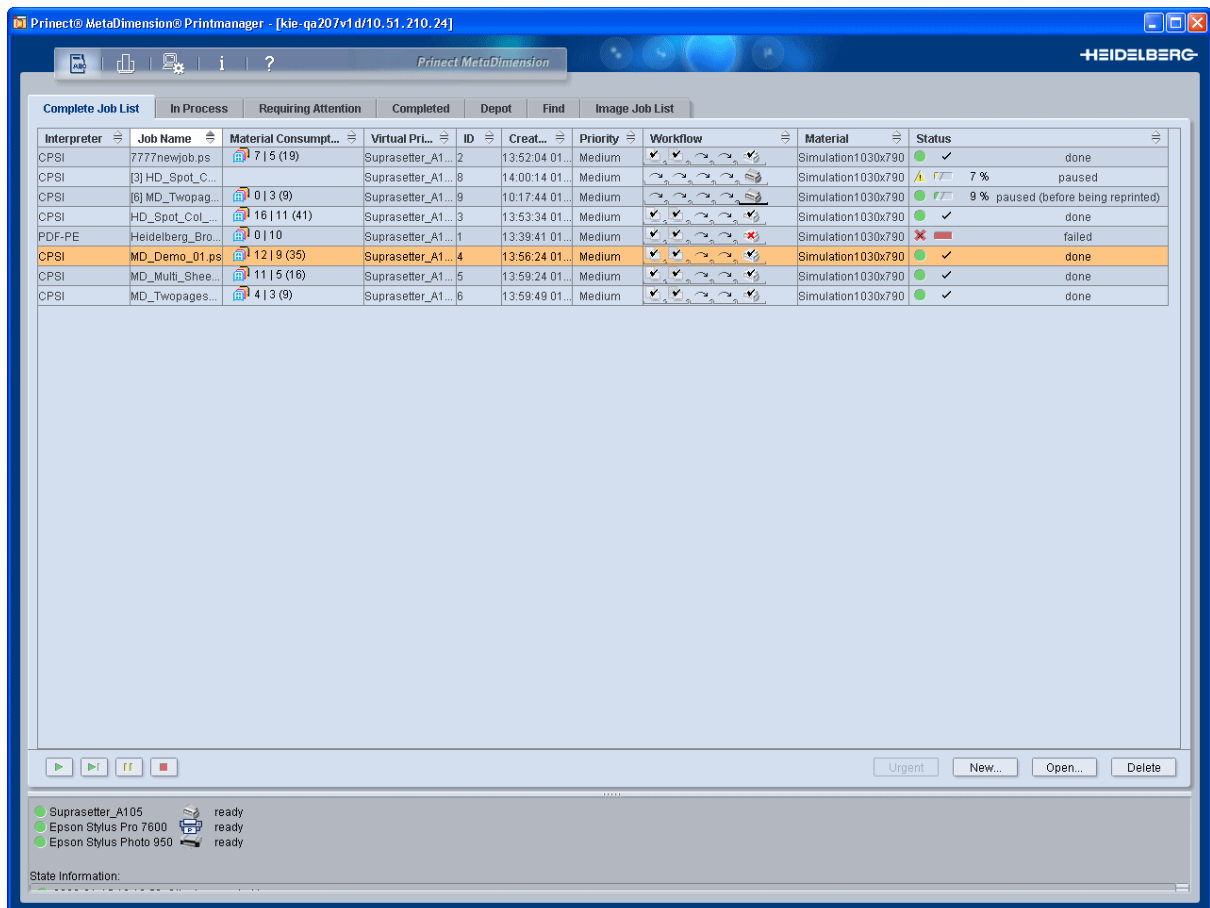
- WEB UI

Select this item if you wish to call up the default Internet browser with the MetaDimension browser user interface ("WEB UI") on the MetaDimension PC. Further details on the browser UI can be found in the respective online help. You can find details about configuration of the browser user interface in the Prinect MetaDimension installation manual in the chapter "Remote Control of Prinect MetaDimension".

The License Manager is installed in addition to the Prinect MetaDimension software. By doing this, you install not only the MetaDimension Start menu but also the Heidelberg Prinect Licensing Start menu. You can call up the License Manager in this menu.

MetaDimension Print Manager user interface

The user interface of the MetaDimension Print Manager consists of "static" and "dynamic" elements. The static elements are always visible while the dynamic elements can change their appearance and contents depending on the operational process that is currently in progress.



The user interface has the following static elements:

- the operating panel and
- the status panel

The user interface has the following dynamic elements:

- the dynamic window and
- the dynamic control area.

Concept of the user interface

The user interface of the MetaDimension Print Manager was designed to provide the best possible overview of the system at all times. A "flat" hierarchy was therefore selected for the elements displayed, in which – with a few exceptions – there are no overlapping windows. Things can quickly get muddled, especially when several dialog boxes, perhaps even overlapping each other, are open at the same time. The user interface was therefore designed in such a way that all important settings can be made in the main window of the application.

The operating panel

The operating panel is the central control element in the MetaDimension Print Manager.



The buttons for changing between "Jobs", "Devices" and "Administration" are found at the left of the operating panel. If you go to a different section, the contents of the dynamic window and the dynamic control panel change.



These areas constitute the top hierarchy level within the MetaDimension user interface.

Jobs



In the "Job" section, all the jobs that are currently in the system are listed. You can apply different filters to the listed jobs by switching between the tabs. For example, you can list those jobs that are already completed by switching to the "Completed" tab.

Devices



All the output devices which have been installed are listed in the "Devices" section. By double-clicking an entry in the list, you can call up an Engine Manager to manage the respective device.



Note: In this connection, the term "device" does not necessarily mean a physical output device. The TIFF-B export, for example, is also administrated by an Engine Manager.

Administration



Management of system resources such as Output Plan templates, fonts, ICC profiles, etc. is done in the "Administration" section. System configuration and user management settings are also done in the "Administration" section.

There are two buttons to the right of the three function buttons which you can use to call up the information page showing the Prinect MetaDimension version or the Online Help (question mark).



Note: You can also display the Online Help with the F1 key on the keyboard. A Help window whose content relates to the element you marked in the user interface then opens.

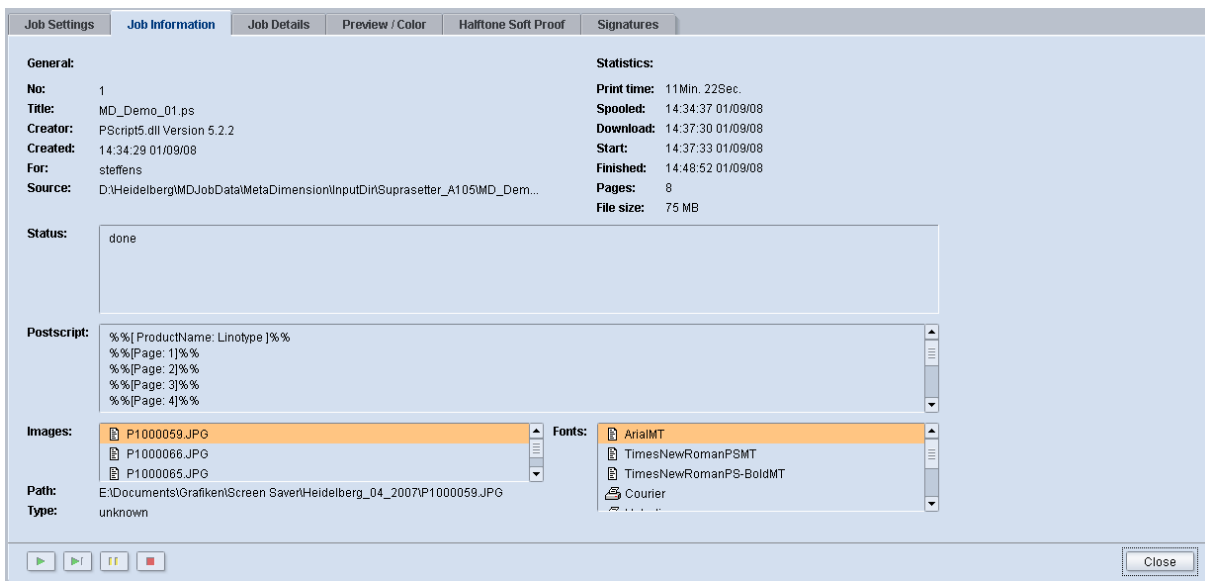
Dynamic Window

The contents of the dynamic window changes depending on the work context which is currently active. The basic view of the dynamic window is a list display.

Complete Job List										
In Process Requiring Attention Completed Depot Find Image Job List										
Interpreter	Job Name	Material Consumpt...	Virtual Pri...	ID	Creat...	Priority	Workflow	Material	Status	
CPSI	7777newjob.ps	7 5 (19)	Suprasetter_A1...	2	13:52:04 01...	Medium		Simulation1030x790		done
CPSI	[3] HD_Spot_C...		Suprasetter_A1...	8	14:00:14 01...	Medium		Simulation1030x790		7 % paused
CPSI	[6] MD_Two pag...	0 3 (9)	Suprasetter_A1...	9	10:17:44 01...	Medium		Simulation1030x790		9 % paused (before being reprinted)
CPSI	HD_Spot_Col...	16 11 (41)	Suprasetter_A1...	3	13:53:34 01...	Medium		Simulation1030x790		done
PDF-PE	Heidelberg_Bro...	0 10	Suprasetter_A1...	1	13:39:41 01...	Medium		Simulation1030x790		failed
CPSI	MD_Demo_01.ps	12 9 (35)	Suprasetter_A1...	4	13:56:24 01...	Medium		Simulation1030x790		done
CPSI	MD_Multi_Shee...	11 5 (16)	Suprasetter_A1...	5	13:59:24 01...	Medium		Simulation1030x790		done
CPSI	MD_Two pages...	4 3 (9)	Suprasetter_A1...	6	13:59:49 01...	Medium		Simulation1030x790		done

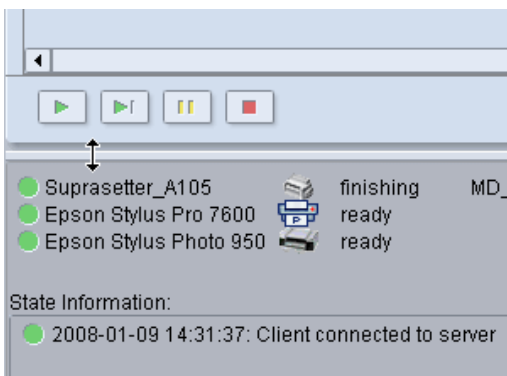
In general, you can switch over to a detail view by opening an entry in the list. This provides you with more detailed information or you can make detailed parameter settings here.

User Interface



Fitting the Window Size

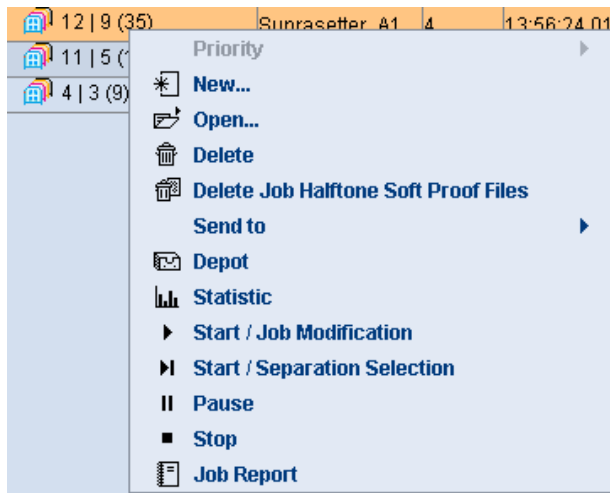
You can change the height of the dynamic window by positioning the mouse pointer on the separating line between the status panel and the dynamic window and then moving this line up or down.



The status panel becomes smaller as you make the dynamic window bigger.

Context-sensitive Menus

You can display a context-sensitive menu with the right mouse button when you are in the list view mode in the dynamic window. The context-sensitive menu allows you to trigger actions for the selected item in the dynamic window.



Sorting Columns

Items are often shown as lists in the dynamic window, for example, job lists or resources such as printing materials. You can change the order of the columns in these lists by clicking a column heading and then, with the left mouse button held down, moving the column to its new position.

Showing/Hiding Columns

You can display a context-sensitive menu with a list of the column headers by positioning the mouse pointer on a column header and right-clicking it. Select a heading to hide the column in question or select it again to show it. A column that is shown is marked by a tick before the menu item.



Dynamic Control Panel

The dynamic control panel contains a series of buttons, whose number and function vary depending on the content displayed in the dynamic window.



You will see buttons at the left of the dynamic control panel, some of whose functions can vary according to the operational context.



The buttons are like those on a video recorder, for example. These buttons are generally used to control the various processing procedures in Prinect MetaDimension. The buttons trigger processes such as, for example: starting, pausing or stopping a job.



The "Start Reprint" button allows you to reprint single separations of a job.



Note: More information about these buttons and how they affect job processing can be found in the [section "Buttons", page 52](#).

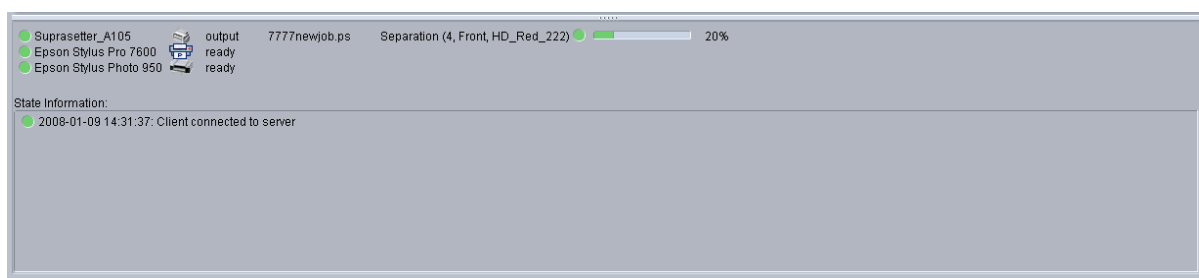
Tooltips

Tooltips provide you with information about the various elements in the user interface. When you leave the mouse pointer rest over a button in the dynamic control panel, for example, a small window appears after a few seconds, showing you the function of that button. The window disappears shortly afterwards.



Status Panel

The status panel is located below the dynamic window. It shows you details about monitored output devices and the job that is currently being imaged. The status panel is always visible, irrespective of the content in the dynamic window. The only time it is "hidden" is when you move the separating line between it and the dynamic window (see [section "Fitting the Window Size", page 44](#)).



Status or error messages concerning the output device are listed in the "State Information" box.



Note: You can set which output devices will be shown in the status panel in the "Devices" section. In the device list, select the device that will be monitored and then click "Watch" or select "Watch" in the context-sensitive menu. Three devices can always be monitored at the same time.

Device Name	Icon	Status
Suprasetter_A105		ready
Epson Stylus Pro 7600		ready
Epson Stylus Photo 950		ready



Checking Jobs

In the "Jobs" section, you can check the jobs that have been processed and those that are just being processed.

To allow specific groups of jobs to be viewed when there is a large number of jobs, different tabs are available where you can select various views.





Complete Job List										
In Process										
Requiring Attention										
Completed										
Depot										
Find										
Image Job List										
Interpreter	Job Name	Material Consumpt...	Virtual Pri...	ID	Creat...	Priority	Workflow	Material	Status	
CPSI	7777newjob.ps	7 5 (19)	Suprasetter_A1...	2	13:52:04 01...	Medium		Simulation1030x790		done
CPSI	[3] HD_Spot_C...	0 13 (9)	Suprasetter_A1...	8	14:00:14 01...	Medium		Simulation1030x790		7 % paused
CPSI	[6] MD_Two pag...	0 13 (9)	Suprasetter_A1...	9	10:17:44 01...	Medium		Simulation1030x790		9 % paused (before being reprinted)
CPSI	HD_Spot_Col...	16 11 (41)	Suprasetter_A1...	3	13:53:34 01...	Medium		Simulation1030x790		done
PDF-PE	Heidelberg_Bro...	0 10	Suprasetter_A1...	1	13:39:41 01...	Medium		Simulation1030x790		failed
CPSI	MD_Demo_01.ps	12 9 (35)	Suprasetter_A1...	4	13:56:24 01...	Medium		Simulation1030x790		done
CPSI	MD_Multi_Shee...	11 5 (16)	Suprasetter_A1...	5	13:59:24 01...	Medium		Simulation1030x790		done
CPSI	MD_Two pages...	4 3 (9)	Suprasetter_A1...	6	13:59:49 01...	Medium		Simulation1030x790		done

- "Complete Job List" tab All print jobs are displayed.
- "In Process" tab: All print jobs in the process or pause status are displayed.
- "Requiring Attention" tab: All print jobs in the error or pause status are displayed as well as all jobs that have encountered conflicts in their processing.
- "Completed" tab: Print jobs that are finished as well as aborted or faulty ones are displayed.
- "Depot" tab: All print jobs that are filed are displayed (see [section "Transfer to the Depot After Hours", page 176](#) and [section "Transfer to the Depot After", page 202](#)).
- "Find" tab: This tab lets you search the whole job list for jobs (see the [section "Searching for jobs", page 105](#)).
- "Image Job List" tab: Only image jobs that are processed by the Imagemanager are displayed in this tab (see the [section "Image Job Details", page 106](#)).

The "Complete Job List", "In Process", "Requiring Attention", "Completed", "Depot" and "Find" tabs use the following column headers:

- "Job number": This column displays the job numbers assigned in the Prinect Integration Manager if Prinect MetaDimension is linked with a Prinect Integration Manager or a Prinect Signa Station.
- "Interpreter": "The item in this column lets you keep track of which job was edited with what interpreter if the PDF PrintEngine is also installed besides the CPSI PostScript interpreter (see the [section "Adobe PDF PrintEngine \(APPE\)", page 28](#)).
- "Job name": Name of the print job
- "Material Consumption": This displays the number of finished and planned plates and proofs in a job and, if there is a reprint of single signatures, their total number. A tooltip shows you details when you leave the cursor for a moment on an item in this column.

Jobs

MD_Demo_01.ps	 35 35	Suprasetter_A1...	1	14:34:29 01...	Medium
MD_Twopages...	 4 9  2 2	Suprasetter_A1...	8	15:12:44 01...	Medium
Meta_DinA2 se...	 4 4	Suprasetter_A1...	6	14:38:03 01...	Medium
Plates: finished=3 planned=9 Proofs: finished=2 planned=2					

This information can be helpful especially with faulty/aborted jobs.

- "Versions / Product Parts": This column has items if Prinect MetaDimension is connected to a Prinect Integration Manager and if the processed print job is part of a product part. You can find more details about product parts in the Prinect Integration Manager documentation.
- "Layout Name": This column has items if Prinect MetaDimension is connected to a Prinect Integration Manager. The name of the used sheet layout then displays. You can find more details about sheet layouts in the Prinect Integration Manager documentation.
- "Sheet Name / Elements": This column has items if Prinect MetaDimension is connected to a Prinect Integration Manager. The name of the sheet used in the job and the Prinect Integration Manager elements then display. You can find more details about sheets and elements in the Prinect Integration Manager or Prinect Signa Station documentation.
- "Virtual Printer": The configurable input channels of Prinect MetaDimension are called "virtual printers". This can be a network printer or a "hot folder". Hot folders are directories that Prinect MetaDimension checks for incoming jobs. In the file system, you can copy print jobs in PostScript or PDF format to a hot folder. The jobs are then automatically processed by Prinect MetaDimension.
- "ID": The internal consecutive number.
- "Creation Date": Starting time for the job processing.
- "Priority": Display of the job priority (low, medium, high, urgent).
- "Workflow": Graphic display of the steps in the Prinect MetaDimension workflows.
- "Status": Displays the processing status of the job (see also the [section "Job States", page 50](#)).

Job States

Some job states are described below as examples. A progress indicator for the job status is displayed for all processes.



- "failed"



- "paused"



- "aborted"



- "scheduled": In "System Configuration > Virtual Printer", a period for processing the jobs can be set in the "Job Handling" section, in other words, processing of the job only starts at the set time. Jobs that will be processed at a later period because of this setting are given this status.



- "interpreting"



- "done": Jobs that are completed have this status.



- "done (warning)": Jobs in which conflicts occurred during processing that were remedied by Prinect MetaDimension are given the "done (warning)" status. An example of this is the inclusion of replacement fonts when the original fonts were not found.

You can display detailed information about a job by double-clicking a job in the job list in "Jobs" or by selecting a job there and clicking the "Open" button. This opens a job details view (see the [section "Viewing Job Information", page 65](#)).

In addition, certain processes within job processing are displayed in the area below the job list, e.g. the progress of single color separations.



Buttons

- "Urgent": If you select a job and then click the "Urgent" button, the job will be processed next (see also the [section "Printing "Urgent" jobs next", page 62](#)).
- "New": Opens a browse dialog where you can copy a PostScript or PDF job to the system (see the [section "Starting Jobs", page 52](#)).
- "Open": Allows you to view or change the current setup for the workflow steps (see the [section "Modification of the Job-specific Output Plan Setup", page 60](#)). Before the "Open" button is clicked, a job must be selected in the job list.
- "Delete": Deletes one or more selected jobs from the job list. You can only delete jobs that are not currently being processed. This means a job's state must be "done", "aborted" or "locked" (for DI jobs).

Starting Jobs

You can send jobs to Prinect MetaDimension in the following ways:

- By printing a job from a Windows application to a virtual printer.
- By printing a job from a Macintosh application to a virtual printer, either with AppleTalk protocol or Remote LPR (see the [section "Procedure on the Macintosh \(OS X\)", page 351](#)).
- By moving PostScript, PDF; JPEG; EPS, Scitex CT, Tiff or Tiff-IT P1 files (e.g. from a DTP computer) or Delta Lists to a hot folder through the network.

Hot folders are configured in the virtual printer settings. A hot folder is shared for Windows and Macintosh networks if you check the "Share hot folder" option in the settings dialog (see also the [section "Hot folder", page 175](#)).

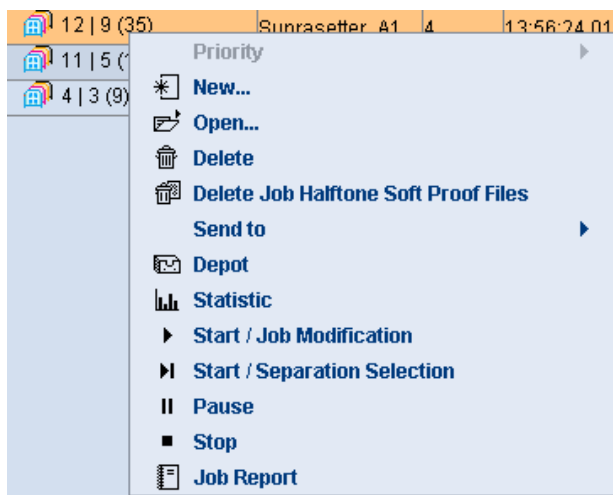
The option of creating jobs by copying PS, PDF or Tiff-IT files to a hot folder is also available in the "Jobs" section in the MetaDimension Printmanager: In "Jobs" click the "New" button. A browser dialog is displayed. Select the virtual printer you want in the "Virtual Printer" list box. Then in "Look in", select the drive and directory where the jobs you wish to output are located. Select the jobs you want. Confirm with OK.



Note: To transfer jobs to a hot folder in the file system, the "Hot Folder" option must be enabled in the configuration for the virtual printer (see the [section "Virtual Printers", page 171](#)).

Job list context-sensitive menu

Position the mouse pointer on an item in the job list or on the background of the dynamic window and click with the right mouse button. A context-sensitive menu displays, showing some functions that you can open for processing your job. Whether or not an option is available depends on the context indicated by the mouse pointer when you call up the function and on what options are installed. You can perform the following actions:



- Set the priority. The priority setting does not affect jobs whose processing is so far on that you can no longer change the processing order (see also [section "Printing "Urgent" jobs next", page 62](#)).
- Create a new job
- Open a job
- Delete a completed or aborted job
- Delete Tiff files that were created for halftone softproof (see also the [section "Halftone Soft Proof tab", page 89](#))
- Send job data to another virtual printer that can also be connected to another output device
- Store the job (see the [section "Transfer to the Depot After Hours", page 176](#) and [section "Transfer to the Depot After", page 202](#)).
- Export Tiff-B jobs
- View statistics about processed jobs (see the [section "Statistics about Processed Jobs", page 64](#))
- Use the functions for starting, pausing, resuming and reprinting a marked job or for starting a reprint of single separations (see the [section "Restarting, Pausing, Continuing and Reprinting Jobs", page 54](#)).
- Create a job report (see the [section "Creating a Job Report", page 62](#)).

Restarting, Pausing, Continuing and Reprinting Jobs

At the top of the dynamic control panel, you will find the buttons for triggering the "Start", "Start Reprint", "Pause" and "Cancel" functions. These buttons are also available when you open a job in the job details view mode.



You can use the functions by selecting a job in the job list and clicking the relevant function button.

Continue/Start:



This button affects selected jobs differently:

Marked jobs whose status is "paused" are resumed. This button does not affect marked jobs that are not paused if there are such jobs in addition to the paused jobs.

All marked jobs that are already completed are restarted if you only have marked jobs that are not paused. This is a full-scale reprint. In other words, if only single signatures in a job were selected for a reprint, the new job now has all signatures again.

Any proofing that was set is also output again.

Start Reprint



The "Start Reprint" button is used to reprint a job, thereby selectively choosing single color separations for the reprint. A window displays where you can select the separation for the reprint (see the [section "Reprint single separations without modified output options", page 56](#)).

There are two different scenarios when you select a job in the job list and click "Start Reprint":

- If the selected job came from a repeat job generated through a "Start Reprint", then the list will still have any deselected color separations.
- On the other hand, if it is not a repeat job, the list will display only the color separations that were calculated and output.

The "Start Reprint" function is particularly useful for output to plate processors if errors occurred while imaging a separation, for example. "Start Reprint" can be used to repeat the imaging (without another proof or generation of CIP3 data) of the faulty separation without having to output the entire job again.



Note: If you use this function for a reprint, the output parameters relating to the selected job are always used again. In other words, you always have a repeat job. This is applicable irrespective of whether the "Keep Job Settings" option is set or not (see the [section "Keep Job Settings", page 192](#)).

Pause a job:



Job processing is temporarily stopped when you "Pause a job". Pausing takes place at the next possible point in time, for example, between the proof and the final output. An output operation that is currently running is completed before the job is paused.

Cancel:



"Cancel" is used to stop job processing.

Printing a job with customized output options

In some cases, it can be a good idea to customize single output options for a job just before it is output. For example, it may be necessary to assign different material to a job that is too big for the material set in the Output Plan.

In a reprint, the parameter setup for processing the job is taken either from the predecessor job or from the current settings in the relevant virtual printer, depending on whether or not the "Keep Job Settings" option was selected in "Administration > Configuration > Preferences > Reprint" (see the [section "Preferences", page 187](#)).

The behavior of the restarted jobs depends on the "Pause job before reprint" option in "Administration > System Configuration > Preferences > Reprint". If the option is disabled, job processing restarts immediately. On the other hand, the restarted jobs are "paused" after a brief analysis if the option is enabled. A job-specific Output Plan can then be created in the "paused" state. You can select "paused" jobs and then resume them with the "Start" button (see Continue/Start item above).

To be able to change the output parameters before a job is processed, you must first set the following option in the Output Plan of the virtual printer (before a job is processed with this virtual printer):

Jobs

Printing Mode

☒ Material Name: Simulation1030x790 (Available)

Printing Material: No Change

☐ Iso Papertype Completion: 1 glossy coated

Job Iso Papertype Check: No Change

Paper Stretch Compensation for Front: No Change

Paper Stretch Compensation for Back:

Polarity: Automatic

Cut: No Change

Mirror: Off

Scale: Off

Action after spooling: No Change

Action after warning: wait

Ignore Job Orientation: continue

Set the "Action after spooling" option to "wait" in the "Printing Mode" group. This first sets all the jobs that will be edited with this Output Plan to the "paused" state. You can open the job in this status and make the required changes to the Output Plan in the "Job Settings" tab (see the [section "Modification of the Job-specific Output Plan Setup", page 60](#)) and, for example, change the material size in the "Printing Mode" group.

Save your changes and start job processing with "Start/continue":



Reprint single separations without modified output options

1. If you want to reprint one or more single separations, for example, because an error occurred during the imaging of a plate, mark the job in the job list and then click the "Start Reprint" button.



2. A "Start / Separation Selection" window displays:

Start / Separation Selection...

ID: 11 Job Name: 7777newjob.pdf

Accounting attribute: Normal

Reprint the following signatures:

	No.	Name	Color	Pages	Perfecting	Sheet
<input checked="" type="checkbox"/>	1	<7777newjob.pdf>	<Cyan>	{1}	YY	1
<input type="checkbox"/>	2	<7777newjob.pdf>	<Magenta>	{1}	YY	1
<input type="checkbox"/>	3	<7777newjob.pdf>	<Yellow>	{1}	YY	1
<input checked="" type="checkbox"/>	4	<7777newjob.pdf>	<Black>	{1}	YY	1
<input checked="" type="checkbox"/>	5	<7777newjob.pdf>	<Cyan>	{2}	YY	2
<input checked="" type="checkbox"/>	6	<7777newjob.pdf>	<Magenta>	{2}	YY	2
<input checked="" type="checkbox"/>	7	<7777newjob.pdf>	<Yellow>	{2}	YY	2
<input type="checkbox"/>	8	<7777newjob.pdf>	<Black>	{2}	YY	2
<input type="checkbox"/>	9	<7777newjob.pdf>	<Cyan>	{3}	YY	3
<input checked="" type="checkbox"/>	10	<7777newjob.pdf>	<Magenta>	{3}	YY	3
<input checked="" type="checkbox"/>	11	<7777newjob.pdf>	<Yellow>	{3}	YY	3
<input checked="" type="checkbox"/>	12	<7777newjob.pdf>	<Black>	{3}	YY	3
<input type="checkbox"/>	13	<7777newjob.pdf>	<Cyan>	{4}	YY	4
<input type="checkbox"/>	14	<7777newjob.pdf>	<Magenta>	{4}	YY	4
<input checked="" type="checkbox"/>	15	<7777newjob.pdf>	<Yellow>	{4}	YY	4
<input checked="" type="checkbox"/>	16	<7777newjob.pdf>	<Black>	{4}	YY	4
<input checked="" type="checkbox"/>	17	<7777newjob.pdf>	<HD_Blue_123>	{4}	YY	4
<input type="checkbox"/>	18	<7777newjob.pdf>	<HD_Dark_Yellow_111>	{4}	YY	4
<input type="checkbox"/>	19	<7777newjob.pdf>	<HD_Red_222>	{4}	YY	4

Copies: 1

Select All Deselect All Apply Cancel

- Select which signatures in the job are to be reprinted. Which separations are shown in the "Reprint the following signatures" list depends on how the separations are positioned on the single sheets. For example, there are no separate color signatures if four colors were placed on a sheet.

In the "Accounting attribute" list box, you can assign an accounting attribute within a Prinect Integration System that marks the reason for reprinting the plates. This attribute is registered, for example, by "Prinect Analyze Point" and can be used for a later analysis. The following options are available:

- "Normal" The reprint is entered as an original output with this option.
- "For operational reasons": The reprint was run for operational reasons, e.g. because an imaged plate was damaged.
- "Due to customer": The reprint was run by order of the customer, e.g. because more plates were needed because the print quantity was upped.



Note: "Normal" is set by default as the accounting attribute if the reprint is triggered without any modified output options.

- The "Select All" and "Deselect All" buttons let you select or deselect all the signatures at the same time.

Jobs

- You enable your selection by clicking "Apply". The "Start / Separation Selection" window closes. The reprint job displays as "paused" in the job list.
- To start your output, mark the job concerned in the job list and click the Start button. The selected signatures are reprinted.



Reprint single separations with modified output options

- If you wish to reprint a job or single separations but also want to modify the job-specific output options before you do (see the [section "Modification of the Job-specific Output Plan Setup", page 60](#)), mark the job concerned in the job list and click the Start button.
- A copy of the job is created and the status of this copy is "paused".

Complete Job List										
In Process Requiring Attention Completed Depot Find Image Job List										
Interpreter	Job Name	Material Consumpt...	Virtual Pri...	ID	Creat...	Priority	Workflow	Material	Status	
CPSI	7777newjob.ps	7 5 (19)	Suprasetter_A1...	2	13:52:04 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	✓	done
CPSI	[3] HD_Spot_C...	0 10	Suprasetter_A1...	8	14:00:14 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	7 %	paused
CPSI	[6] MD_Two pag...	0 3 (9)	Suprasetter_A1...	9	10:17:44 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	9 % paused (before being reprinted)	
CPSI	HD_Spot_Col...	16 11 (41)	Suprasetter_A1...	3	13:53:34 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	✓	done
PDF-PE	Heidelberg_Bro...	0 10	Suprasetter_A1...	1	13:39:41 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	✗	failed
CPSI	MD_Demo_01.ps	12 9 (35)	Suprasetter_A1...	4	13:56:24 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	✓	done
CPSI	MD_Multi_Shee...	11 5 (16)	Suprasetter_A1...	5	13:59:24 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	✓	done
CPSI	MD_Two pages...	4 3 (9)	Suprasetter_A1...	6	13:59:49 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	✓	done

- Open the job settings of the reprint job by double-clicking the relevant item or by marking it and then clicking "Open".
- Make any necessary changes to the job-specific Output Plan in the "Job Settings" tab. Then save your changes with "Save".

If you defined settings but have not yet confirmed them with "Save", a confirmation dialog displays when you go to the "Signatures" tab, asking whether you wish to save or discard your settings.

- Go to the "Signatures" tab.

Job Settings Job Information Job Details Color **Signatures**

ID: 12 Job Name: [11] 7777newjob.pdf

Accounting attribute: Normal

Reprint the following signatures:

	No.	Name	Color	Pages	Perfecting	Sheet
<input checked="" type="checkbox"/>	1	<7777newjob.pdf>	<Cyan>	{1}	YY	1
<input type="checkbox"/>	2	<7777newjob.pdf>	<Magenta>	{1}	YY	1
<input type="checkbox"/>	3	<7777newjob.pdf>	<Yellow>	{1}	YY	1
<input checked="" type="checkbox"/>	4	<7777newjob.pdf>	<Black>	{1}	YY	1
<input checked="" type="checkbox"/>	5	<7777newjob.pdf>	<Cyan>	{2}	YY	2
<input checked="" type="checkbox"/>	6	<7777newjob.pdf>	<Magenta>	{2}	YY	2
<input checked="" type="checkbox"/>	7	<7777newjob.pdf>	<Yellow>	{2}	YY	2
<input type="checkbox"/>	8	<7777newjob.pdf>	<Black>	{2}	YY	2
<input type="checkbox"/>	9	<7777newjob.pdf>	<Cyan>	{3}	YY	3
<input checked="" type="checkbox"/>	10	<7777newjob.pdf>	<Magenta>	{3}	YY	3
<input checked="" type="checkbox"/>	11	<7777newjob.pdf>	<Yellow>	{3}	YY	3
<input checked="" type="checkbox"/>	12	<7777newjob.pdf>	<Black>	{3}	YY	3
<input type="checkbox"/>	13	<7777newjob.pdf>	<Cyan>	{4}	YY	4
<input type="checkbox"/>	14	<7777newjob.pdf>	<Magenta>	{4}	YY	4
<input checked="" type="checkbox"/>	15	<7777newjob.pdf>	<Yellow>	{4}	YY	4
<input checked="" type="checkbox"/>	16	<7777newjob.pdf>	<Black>	{4}	YY	4
<input checked="" type="checkbox"/>	17	<7777newjob.pdf>	<HD_Blue_123>	{4}	YY	4
<input type="checkbox"/>	18	<7777newjob.pdf>	<HD_Dark_Yellow_111>	{4}	YY	4
<input type="checkbox"/>	19	<7777newjob.pdf>	<HD_Red_222>	{4}	YY	4

Copies: 1

Select All Deselect All Save Close

6. Select which signatures in the job are to be reprinted. Which separations are shown in the "Signatures" tab depends on how the separations are positioned on the single sheets. For example, there are no separate color signatures if four colors were placed on a sheet.

In the "Accounting attribute" list box, you can assign an accounting attribute within a Prinect Integration System that marks the reason for reprinting the plates. This attribute is registered, for example, by "Prinect Analyze Point" and can be used for a later analysis. The following options are available:

- "Normal" The reprint is entered as an original output with this option.
- "For operational reasons": The reprint was run for operational reasons, e.g. because an imaged plate was damaged.
- "Due to customer": The reprint was run by order of the customer, e.g. because more plates were needed because the print quantity was upped.



Note: "For operational reasons" is set by default as the accounting attribute if the reprint is triggered with modified output options.

7. The "Select All" and "Deselect All" buttons let you select or deselect all the signatures at the same time.
8. Save your settings with "Save" and close the job details.

If you defined settings but have not yet confirmed them with "Save", a confirmation dialog displays after you click "Close", asking whether you wish to save or discard your settings.

Jobs

- To start your output, mark the job concerned in the job list and click the Start button. The selected signatures are reprinted with the modified output parameters.



Modification of the Job-specific Output Plan Setup

You can modify the job-specific Output Plan for the following cases:

- for jobs sent the first time to Prinect MetaDimension for editing and whose "Action after spooling" is set to "wait" in the "Printing Mode" of the Output Plan or
- for jobs that were already output and that you wish to reprint with different Output Plan parameters. This requires that the jobs were restarted as a "reprint" and that their state is "paused" (see the [section "Reprint single separations with modified output options", page 58](#)).

The parameter setup is saved together with the job. The parameters are used whenever these job are reprinted, provided that the "Keep Job Settings" option in "Administration > System Configuration > Preferences > Reprint" is checked. If this option is not checked, the parameters are taken from the job parameters (DTP application, Prinect Signa Station, etc.) and the virtual printer settings (Output Plan).

The reprint of jobs with a modified Output Plan setup is designed for cases where you were not happy with the job settings and you now want to output the job correctly without having to send it from the DTP application again. You can also output the same job with different setups.

Procedure:

- Select the job you want in the job list by clicking it.
- Click the "Start" button to restart the job.



Wait until the job status is "paused".

Complete Job List										
In Process Requiring Attention Completed Depot Find Image Job List										
Interpreter	Job Name	Material Consumpt...	Virtual Pri...	ID	Creat...	Priority	Workflow	Material	Status	
CPSI	7777newjob.ps	7 5 (19)	Suprasetter_A1...	2	13:52:04 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	✓	done
CPSI	[3] HD_Spot_C...	0 3 (9)	Suprasetter_A1...	8	14:00:14 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	7 %	paused
CPSI	[6] MD_Two pag...	0 3 (9)	Suprasetter_A1...	9	10:17:44 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	9 %	paused (before being reprinted)
CPSI	HD_Spot_Col...	16 11 (41)	Suprasetter_A1...	3	13:53:34 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	✓	done
PDF-PE	Heidelberg_Bro...	0 10	Suprasetter_A1...	1	13:39:41 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	✗	failed
CPSI	MD_Demo_01.ps	12 9 (35)	Suprasetter_A1...	4	13:56:24 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	✓	done
CPSI	MD_Multi_Shee...	11 5 (16)	Suprasetter_A1...	5	13:59:24 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	✓	done
CPSI	MD_Two pages...	4 3 (9)	Suprasetter_A1...	6	13:59:49 01...	Medium	✓ ✓ ✓ ✓ ✓ ✓	Simulation1030x790	✓	done

Urgent New... Open... Delete

- Click the paused job to select it and click the "Open" button or double click the listed job.

4. You can now set the job-specific Output Plan parameters in the "Job Settings" tab:

You can set the following sections:

- "Priority": You can select another priority for job processing (Low, Medium, High or Urgent).
 - Output Plan Editor: In the Output Plan settings, you can change single parameters, if necessary. You can find details about working with the Output Plan Editor in the [section "Princt MetaDimension Output Plan Editor", page 217](#).
5. Click "Save" if you wish to apply the modified Output Plan settings to your job. If you want to discard your changes, click "Close" and answer the "Confirm save Job Setting changes" dialog with "No".
 6. Close the job details. In the job list, check that this job is marked and click the Start button to continue processing using the new parameters.



Printing "Urgent" jobs next

You can give "Urgent" priority to jobs to mark that they are to be processed immediately. You can set a job's priority to "Urgent" by marking the job concerned and clicking "Urgent". Multiple selection is also possible. As an alternative, you can also select "Priority > Urgent" in the context-sensitive menu.



Note: The options described here for preferential output of urgent jobs are only possible if "Urgent" is set as the priority. They are not possible with "High". The "Low", "Medium" and "High" priorities only control the order of the jobs in the print queues without interrupting any running jobs and without the option of placing a job right away at the top of the queue.

An "Urgent" priority affects imaging and proofing differently.

Imaging

In principle, imaging of a plate, once running, is not stopped. This also applies to the Prinect Shooter. On Suprasetter, Prosetter or Topsetter platesetters, imaging of loaded plates of the running job continues until it is finished.

Jobs currently in process that consist of several separations (plates) can be interrupted by jobs marked as "urgent". In this case, imaging of a plate that is currently running continues until it is finished. The next plate to be imaged is the first plate of the job marked as "urgent". The second plate of this job is then imaged and so on. Imaging of the original job resumes after output of the entire job marked as "urgent" is completed.

Proofing

A proof that is output with Color Proof Pro and marked as "urgent" moves in the queue to the position immediately following the job currently being printed. It is not possible to interrupt a job that is currently being printed.

The "Urgent" priority does not affect proofs output with the "Concept Proof" option of the Proofing Engine Manager because these printers use the printer driver and the spool functionality of the Windows operating system. The Prinect MetaDimension job control has no influence on the Windows printer queue.

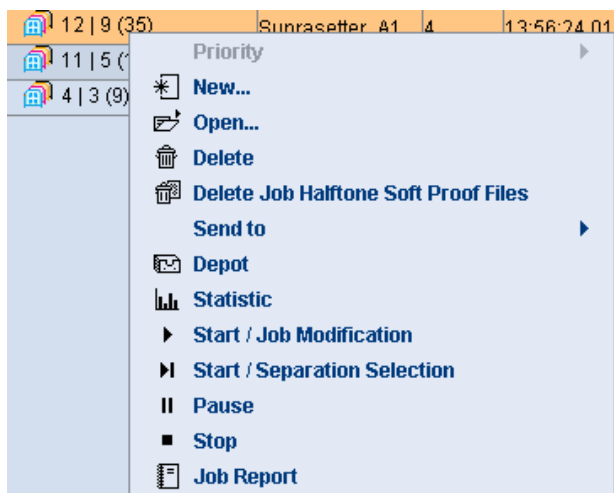
Creating a Job Report

If you have faulty jobs, you can use "Job Report" in the context-sensitive menu to save the data needed for an error analysis to a ZIP archive. The Heidelberg Service department can run an error analysis on these data. The following data are saved:

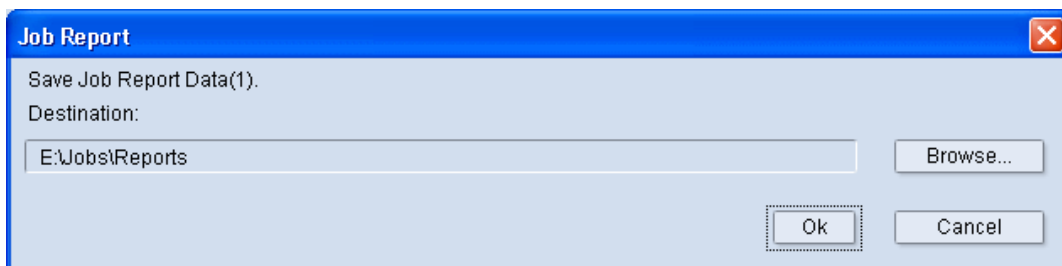
- Job files
- Registry information
- Version information

Proceed as follows to create a job report:

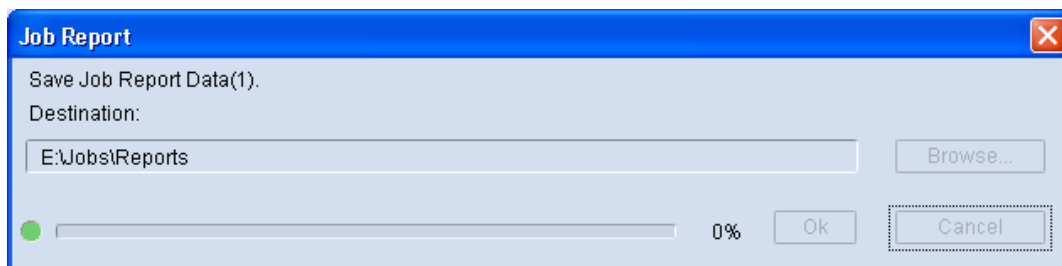
1. In the job list, mark one or more jobs that you want to create job reports for. A ZIP archive will be created for each job selected.
2. Select "Job Report" in the context-sensitive menu.



3. The "Job Report" dialog opens. Click "Browse" to open a browse dialog where you can look for a folder or create a new one.



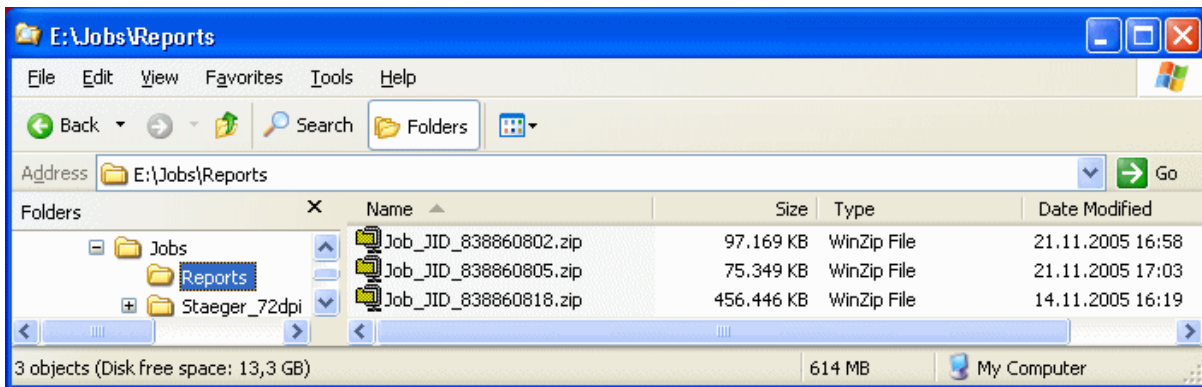
4. Confirm the dialog with "OK". Creation of the job report then starts. A progress bar displays at the same time. The progress bar shows you in percent when single jobs are completed. For example, if three jobs are selected, 33% displays when the first job is completed, 66% when the second job is completed and finally 100% . If you selected just one job, the progress bar jumps to 100% whenever the job report is created.



Jobs

The dialog can show this state for quite a while, depending on the volume of data in the job and the number of selected jobs. You may have to wait a while until the report data are created.

5. You can check that your job data were created in Windows Explorer:

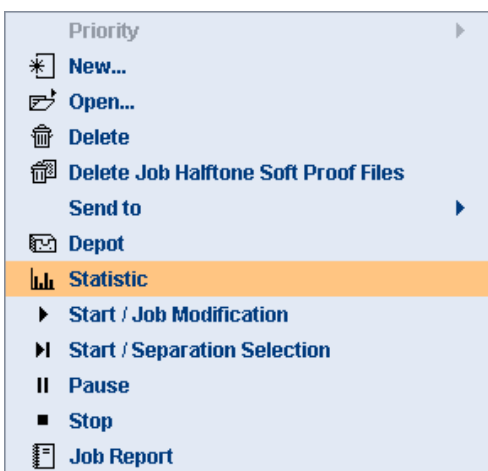


Statistics about Processed Jobs

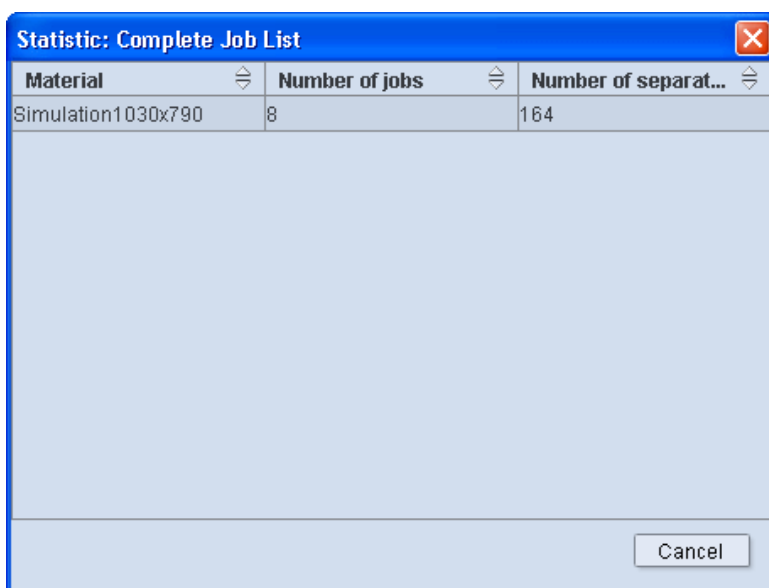
In the "Complete Job List", "In Process", "Requiring Attention", "Completed", "Depot" and "Find" tabs, you can view for every output material the number of jobs output with this material and the number of separations (plates/films). These statistics are generated for each of the jobs shown in the currently open tab. This lets you have a fast overall idea of the jobs to be output or already output, of how much plate material was used, etc. You can use this information, for example, to plan the material needed for a work shift.

Procedure:

1. Right-click any spot in the open tab.
2. Select "Statistics" in the context-sensitive menu.



3. The "Statistics" dialog opens. It displays a table with the plate materials used in the job list of the currently open tab, the respective number of jobs and separations.



Material	Number of jobs	Number of separat...
Simulation1030x790	8	164

Click "Cancel" to close the window.

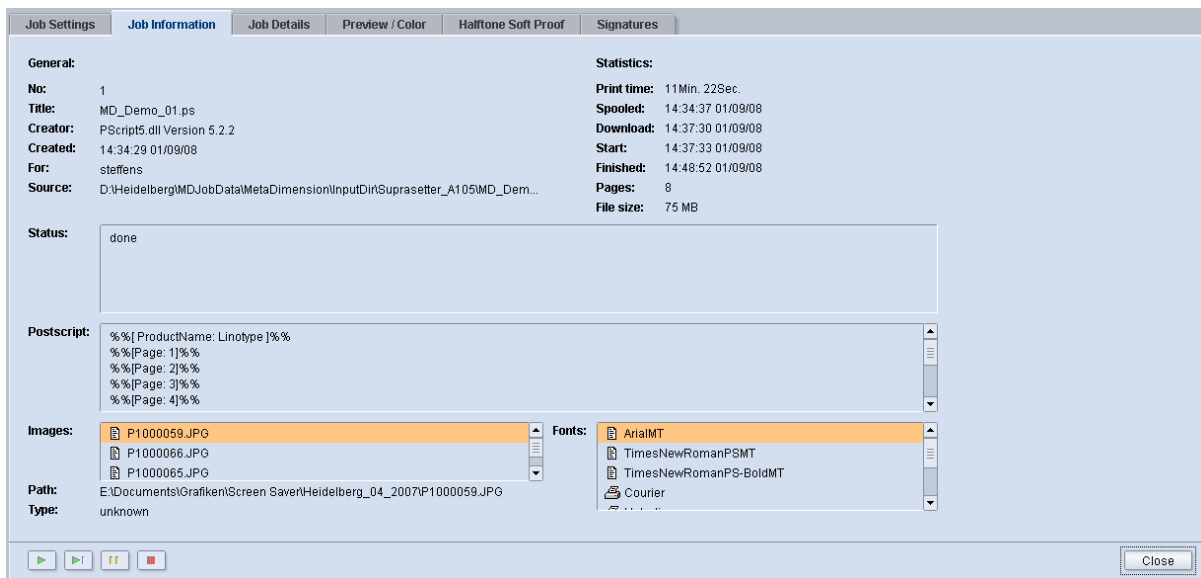
Viewing Job Information

After you opened the job information panel by double-clicking a job, you can choose between the "Job Settings", "Job Information", "Job Details", "Color" or "Preview / Color" (if set accordingly in the Output Plan), "Halftone Soft Proof" (if set accordingly in the Output Plan) and "Signatures" tabs.

Job Information tab

In this tab, you can view general information about the job selected. The job processing status is displayed in the "Status" box. In particular when jobs were aborted due to faults, the status or PostScript information can be helpful as detailed reasons why the job was aborted are displayed here.

Jobs



View of the Job-specific Output Plan Setup

The current Output Plan parameters for each job are displayed in the "Job Settings" tab. These settings that are only valid for the job in question are the result of the overlapping of all Output Plans used for the job. Up to three Output Plans can be used (see also [section "The Layer Model", page 220](#)).

- an Output Plan assigned to the job (in the Web UI or in Prinect Signa Station),
- an Output Plan linked to the virtual printer and
- the default Output Plan.

Normally, the parameterization can only be displayed but not changed. A change can only be made for restarted, paused jobs (see the [section "Reprint single separations with modified output options", page 58](#)).

Procedure:

1. Click a job in the job list to select it and click the "Open" button.
2. You can view the setup of the various Output Plan options for this job in the "Job Settings" tab and, if necessary, edit them (for restarted, paused jobs).

Job Details Tab

In the "Job Details" tab, you can view data about job-internal parameters such as screen, separation, color data or document information such as name, type (composite / separated), crop box, trim box, bleed box, media box. The linearization and calibration curves used for the job are also shown if they are set in the Output Plan. The paper stretch compensation parameters used for the job are also listed if the job is processed with paper stretch compensation.

No: 8 Name: MD_TwoPages_HD_Spotcol.ps

Parameter	Settings
Job Information	
Screens	
Separation	
Process Color	Black
Separation Parameter	
Diamond	off
Dotshape	Smooth Elliptical
Nominal Frequency (LPCM)	60
Nominal Angle	105
Screensystem	IS Classic
Separation	
Process Color	Cyan
Separation Parameter	
Diamond	off
Dotshape	Smooth Elliptical
Nominal Frequency (LPCM)	60
Nominal Angle	165
Screensystem	IS Classic
Separation	
Process Color	Magenta
Separation Parameter	
Diamond	off
Dotshape	Smooth Elliptical
Nominal Frequency (LPCM)	60
Nominal Angle	45
Screensystem	IS Classic
Separation	
Process Color	Yellow
Separation Parameter	
Diamond	off
Dotshape	Smooth Elliptical
Nominal Frequency (LPCM)	60
Nominal Angle	0
Screensystem	IS Classic
Document Information	
Color	

Close

Based on this information, you can check before a reprint, for example, whether the parameters shown match the specifications. If necessary, you can change single parameters in the "Job Settings" tab before the reprint or you can output the job again from your DTP application, this time with different settings.



Note: Remember that you can change the job settings only for restarted, paused jobs. You can find more details about changing the job settings subsequently in the section [Modification of the Job-specific Output Plan Setup, page 60](#).

You can use the "Job Details" tab in particular for jobs that are processed with process calibration or linearization (see the [section "Calibration with the Calibration Manager", page 321](#)) to obtain details about process calibration / linearization. You can set in the Output Plan that job processing is stopped and an error message displayed if errors occur during job processing where process calibration is enabled because, for example, the matching calibration data record is not found. You will find information about the type of error in the "Job Information" tab.

Jobs

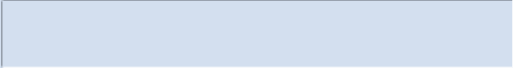
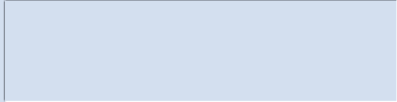
Job Settings | **Job Information** | Job Details | Color

General:
No: 3
Title: MD_Trap_Test_sep.ps
Creator: Pscript.dll Version 5.0
Created: 15:43:29 02/01/07
For: steffens
Source: D:\Main_Hotfolder\MD_Trap_Test_sep.ps

Statistics:
Print time: -
Spooled: 15:43:38 02/01/07
Download: -
Start: -
Finished: -
Pages: 8
File size: 52 MB

Status:
failed
An internal software error has occurred
JobTicketMerger: The source data is pre-separated. There will be no InRIP color management.

Postscript:
The Preflight reports a PostScript error for the command 'OPIEngine':
OPI Engine Unknown Error. Error Code = -503316479

Images:  **Fonts:** 

Path:
Type:

Close

Go to the "Job Details" tab if you wish more details about the error message.

Job Settings | **Job Information** | **Job Details** | Color | Signatures

No: 15 **Name:** MD_TwoPages_Spotcolor.ps (

Parameter	Settings
Job Information	
Document Information	
Color Management	
CMYK Graphics	
Black Point Compensation	off
Profile	ISOcoated.icc
Rendering Intent	Saturation
CMYK Image	
Black Point Compensation	off
Profile	ISOcoated.icc
Rendering Intent	Perceptual
RGB Graphics	
Black Point Compensation	off
Profile	ECL_RGB.icm
Rendering Intent	Saturation
RGB Image	
Black Point Compensation	off
Profile	ECL_RGB.icm
Rendering Intent	Perceptual
Grayscale Graphics	
Black Point Compensation	off
Profile	GenericGray.icm
Rendering Intent	Saturation

Close

Based on this information, you can make any necessary changes and output the job again. Depending on the output result you want, you can or must make the changes in the original document in the DTP application or you can, for example, set more "flexible" single policies in the Output Plan and reprint the job with the modified settings as described in the section [Modification of the Job-specific Output Plan Setup, page 60](#).

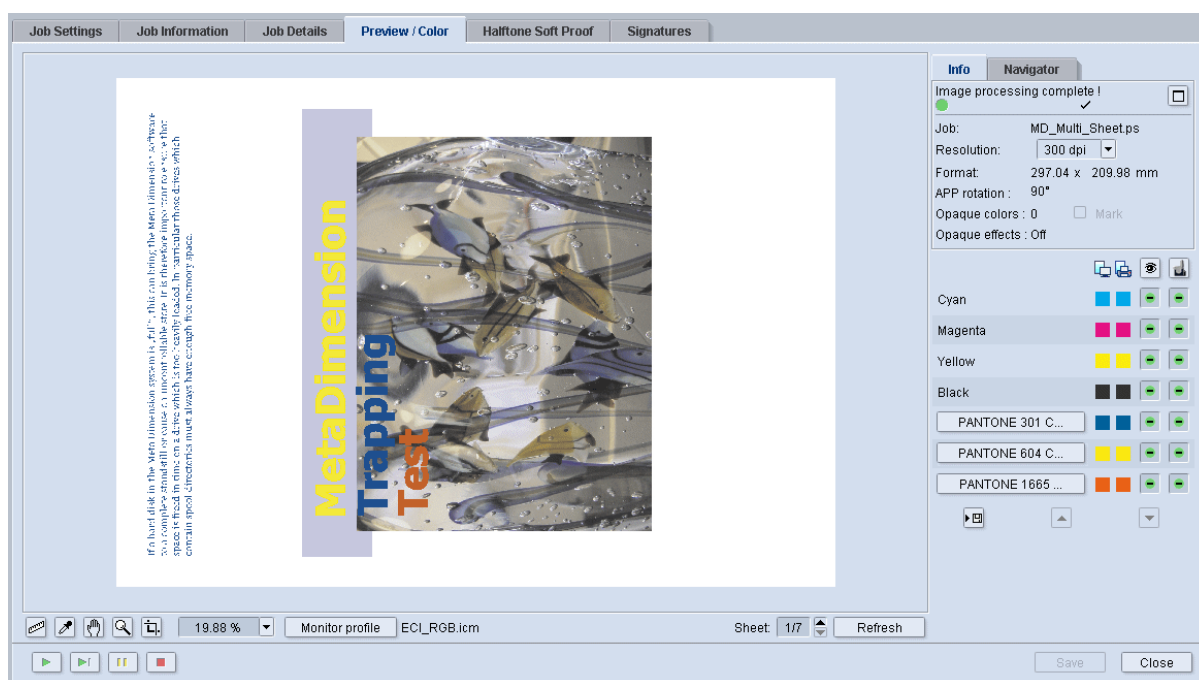
Preview / Color Tab

You can view a preview of the color properties of the contone data of a job in this tab.



Prerequisites: To be able to view the contone color preview, you must enable the "Preview" option in the Output Plan (see the [section "Preview", page 263](#)) and process the jobs with this setting.

When the job is completed, open the job and switch to the "Preview / Color" tab. You can view the individual pages or sheets of the job here.



This visual check (layout and quality check) means that you can check before printing whether all the image elements are present and correct and whether they have the right color (process and spot colors).

Various tools are available for viewing and measuring the preview images. You can use these tools for the following actions:

- view information about the page size and resolution of the preview and about opaque colors
- select single separations of process and/or spot colors or any combination of them.
- change the CMYK screen display of spot colors and save it in the job.

Jobs

- replace spot colors by process colors
- measure the geometry data (length and angle).
- measure colors (pixels or dot percentage of the current section).
- scale the preview infinitely up to 1600% .
- define a clipped area.
- use an ICC monitor profile for screen display (only for contones).

Structure of the "Preview / Color" tab

The sheets or pages are shown as contone images in a preview window on the left of the tab. Scroll bars appear if the image pane is too small for displaying the preview because of the set zoom factor. You will find a toolbar below the graphic.

The right part of the preview window contains the setup and display pane for the preview. You will find the following elements, from top to bottom:

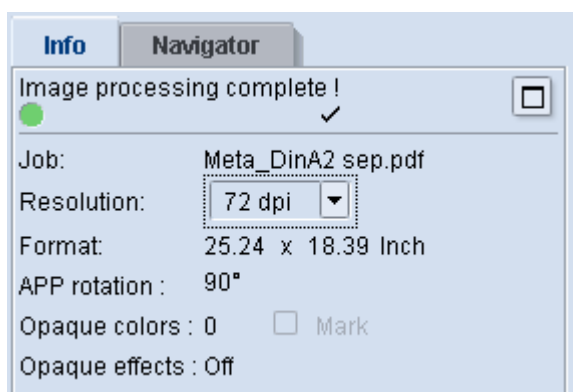
- The "Info" tab with a progress bar for image processing and details about the resolution and size of the display or
- the "Navigator" tab for defining a clipped area
- all the process color/spot color separations in the preview job with names and color boxes that you can show or hide as needed and
- a display pane for the parameters of tools in the toolbar.

Info Tab

You will find buttons for maximizing / restoring the Printmanager window in this tab:



Click "Maximize" or "Restore" to separate the preview window from the Printmanager and maximize the screen display or restore it again to the Printmanager.



A progress bar indicating how much of the image is already displayed is shown beside it:

- "Image processing": The image is in the process of being displayed on the screen.
- "Image processing complete !": The image is now fully displayed.
- "Image processing canceled !" (after you click "Cancel" to the right of the toolbar)

The job name and details about the resolution and size of the display are shown below this.

APP rotation

This parameter shows the angle by which the displayed document pages were rotated. These rotations are set with "Orientation" in "Layout and Marks" of the Output Plan used, namely in "Automatic Page Positioning: APP") (see the [section "Automatic Page Positioning", page 254](#)).

Opaque colors

This shows the number of opaque colors in the job (see the [section "Self-defined Color Tables", page 162](#)). You can use the "Mark" check box if the job has opaque colors. When "Mark" is checked, opaque colors are highlighted by a small frame around the color box and flash for a few seconds so that you can easily recognize them.



Opaque effects

The selected opaque effect is shown here.

- Off

The opaque effects are disabled and the preview doesn't show any opaque effect.

- Opaque shares

Only the parts of the image that are covered by opaque colors are shown.

- Resulting image

The image shown displays the way it appears when covered by the opaque colors.

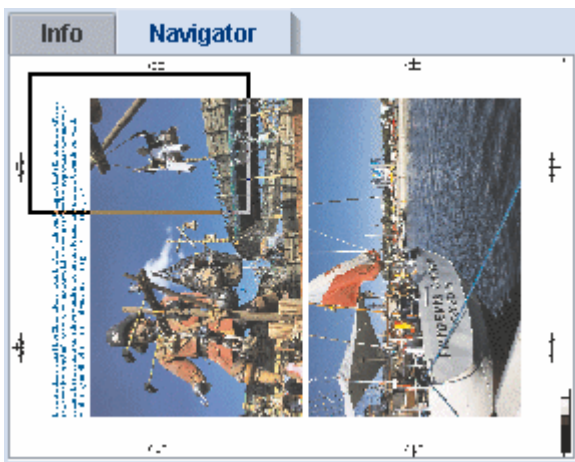
You set the opaque effects in the context-sensitive menu that you can display by right-clicking on top of the clipped area (see the [section "Context menu", page 83](#)).



Note: You can change the influence of the opaque colors by changing the color order in the separation list.

After clicking "ruler" or "clipped output" in the toolbar, you can switch this display to "pixels" or "dpi" and "inch" at the bottom right of the properties group.

Navigator tab



The Navigator window shows you an overview of the entire image that is loaded in the preview window. You can use the Navigator window as follows:

- If you set a zoom factor for viewing only a part of the preview image, the part you are viewing is highlighted by a frame in the Navigator window. When you shift this frame, you also shift the section shown in the preview window.
- If the entire image is displayed in the preview window, you can define the size and position of a clipped area by drawing a bounding box or making the outer frame smaller in the Navigator window.

Proceed as follows for a bounding box: The mouse pointer turns into a cross when you move it to the Navigator window. Holding down the mouse button, create a box over the part of the preview you want. When you release the mouse button, the marked section is shown zoomed up in the display pane in the left column. You can now change the size or position of the marked section in the Navigator window.

Even if there already is a clip mask in the Navigator window, you can define a new clipped area by drawing a new box outside the existing mask. You can also draw a new box within an existing clip mask if you hold down the Alt key.

- If the Navigator window has a box that is smaller than the full clipped area, you can move this box with the mouse. By doing so, you redefine your clipped area. To move the box, place the mouse pointer within the box and move it holding down the left mouse button.

You can also scale up the display in the preview window with the zoom tool (magnifying glass). The box in the Navigator window now also shows the section shown in the preview window.

To change the clipped area, place the mouse pointer on a border or corner of the box. The mouse pointer now appears as a double arrow. Holding down the left button, you can now change the size of the box.

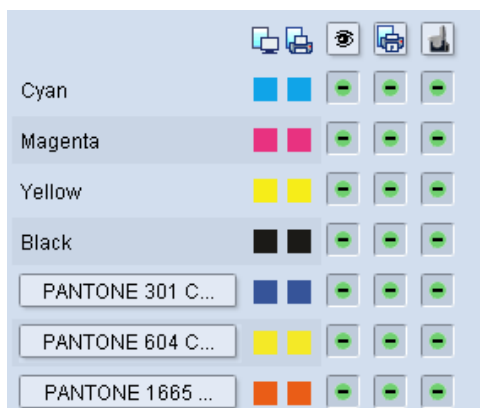
To move the clipped area, place the mouse pointer inside the box. The mouse pointer now appears as a hand. Holding down the left mouse button, you can now move the clipped area in the Navigator window.

It's quicker to move the mouse pointer to the position you want in the Navigator window and then click the left or right mouse button. The clip mask then moves to the position you clicked. The cross of the mouse pointer forms the center of the clipped area.



The toolbar also displays a rotating symbol while an image is being loaded to the screen because you cannot see the progress bar in the "Navigator" tab (see also the [section "Info Tab", page 92](#)).

Pane relating to color separations



This lists all the process color/spot color separations contained in the open job with names and two color boxes in each case. The color boxes show what the color looks like in the preview image on the monitor and when printed.

Besides the color names and the icons for display color, you will also find the following columns:



The buttons for showing/hiding separations,



The buttons for enabling proof output: This is where you can define for each color separation whether or not it will be proofed. This column is only available if the "Proof" option is enabled in the Output Plan (see the [section "Proof", page 264](#)).



The buttons for enabling high-resolution output: This is where you can define for each color separation whether or not it will be imaged.

Jobs

You enable or disable these functions by clicking the appropriate box in the each column. The boxes indicate their state as follows:



The option is enabled, e.g. the separation can be seen:



The option is disabled, e.g. the separation is hidden.

You can switch the boxes in a column to their opposite state by clicking the icon heading the column.

For example, a separation is used only for an imagesetter output if you check "High resolution output" and uncheck "Proof output" for this separation. This separation is ignored during a proof output.



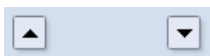
Note: If you press the Ctrl key at the same time you click the "Show/hide separations" button, the button you clicked changes to the state you want and all other buttons switch to the opposite state of the button you clicked. In other words, the button you clicked is enabled and all other ones disabled or vice versa.

The preview image is recalculated every time you switch from showing to hiding a separation or vice versa. The progress bar appears ("Image processing ...") while this is going on.



Spot colors in a job are shown below the process colors in the display pane for the separations on the right of the window. Spot colors are shown as CMYK values for the screen preview. The CMYK values that will replace a spot color can come from various sources. You can modify these values by clicking the button with the spot color name to display it in the "Preview/Color" dialog (see the [section "Changing the CMYK display of spot colors", page 75](#)). A spot color that does not have a valid CMYK representation is shown by a striking color (generally bright green). This striking color is highlighted by question marks in the display pane for the separations.

The modified color data are also used for output if the job is paused and if they are saved in the job. You cannot save these settings for a job that is completed.



The order in which the separations are listed corresponds to the order during imaging and with DI presses also to the order in printing. You can change the order by marking a color with the mouse and clicking one of the arrow buttons.

This lets you move the various separations up or down in the list. The changed order only becomes effective in the current job after you click "Save".

This function is suited to spot colors, for example, if the light colors are to be printed first and then the darker colors are to overprint them.



You can save this setting as a color template as well by clicking the disk icon.

An appropriate dialog then appears. The saved color handling template is then available in the resources as a new color handling template. For more details about color handling templates, please see the [Color handling, page 155](#).



Note: Color handling templates are not filed in the Master Data Store.

Changing the CMYK display of spot colors

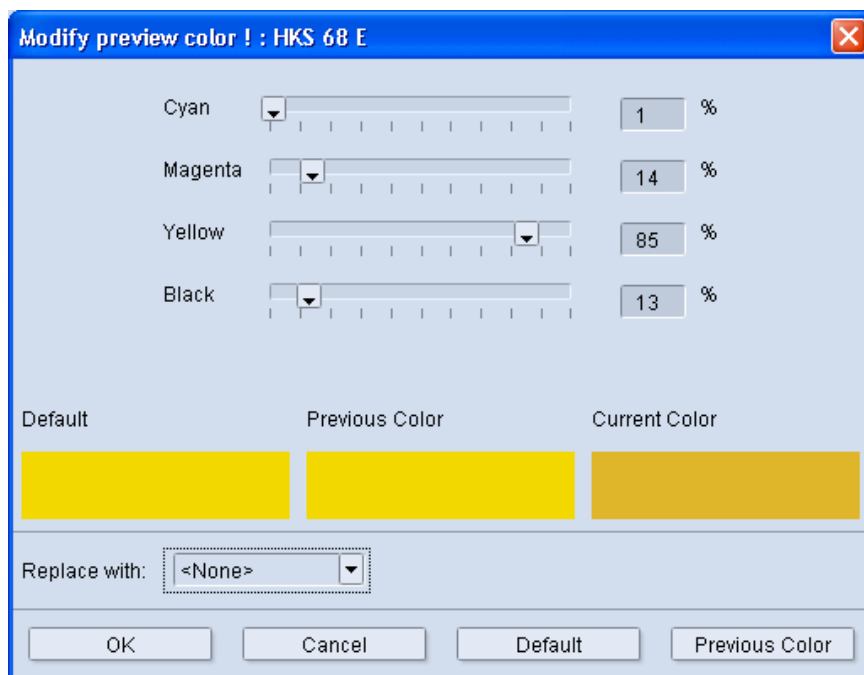
You have two ways of changing the display of spot colors:

- You can change the screen display
- You can replace a spot color by process colors, for example.



Note: The modified color data are also used for output if the job is paused and if they are saved in the job.

Click the spot color name, e.g. "HKS 68 E". A dialog opens where you can modify the screen display of the spot color.



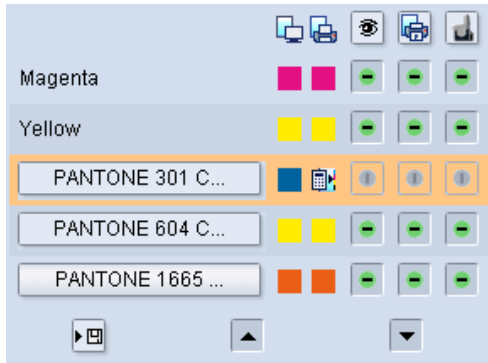
The values for the CMYK representation of the spot color can be changed by means of the sliders or the input boxes.

The color which is currently set is shown in the "Current Color" color field. The last color set is shown in the "Previous Color" patch and the color taken from the color table in the "Default" patch.

The "Reset" button is used to use the last color set and the "Default" button to use the color from the color table. The "OK" button is used to adopt the color which is currently set and "Cancel" is used to close the window without adopting the settings.

Jobs

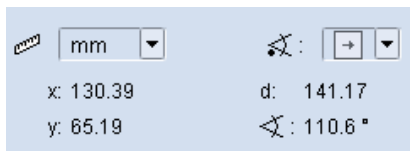
The "Replace by" list box (default = "None") contains all the available separation colors and the CMYK process color set. The spot color is replaced by the relevant color data when you select an item. Confirm your settings by clicking "OK". The dialog closes.



The buttons for "Show/hide separations", "Proofer" and/or "High resolution output" are dimmed and can no longer be used if you selected "Replace with". You can undo your change and enable the buttons again when you open the setup dialog again and select the "None" option in the "Replace with" list box.

Click "Save" to apply the separation changes you made to the job setup.

Dynamic setup and display pane

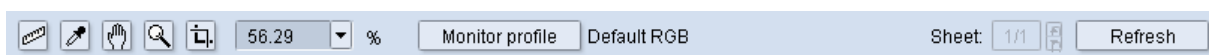


This pane shows settings or measurements. The setup and display panes vary depending on the tool you selected.

This example shows measured data.

Tool bar

You will find the toolbar at the lower edge of the preview window.



Some of the tools in the toolbar of the contone preview are different to those of the halftone softproof in the "Halftone Soft Proof" tab. You will find the following tools from left to right:

- Ruler for measuring geometry data
- Pipette for measuring colors
- Hand for shifting the image content

- Magnifying glass for zooming the preview
- Selection for defining a clipped output
- List box for setting the zoom, showing the current factor
- Button for opening an ICC monitor profile
- Box for setting the page displayed (enabled only if job has multiple pages)
- Button for refreshing/canceling the image preview

Tool for measuring geometry data

You can measure the geometry data (length and angle) in the job preview. For example, this function allows you to check the positioning and size of objects.

Procedure:

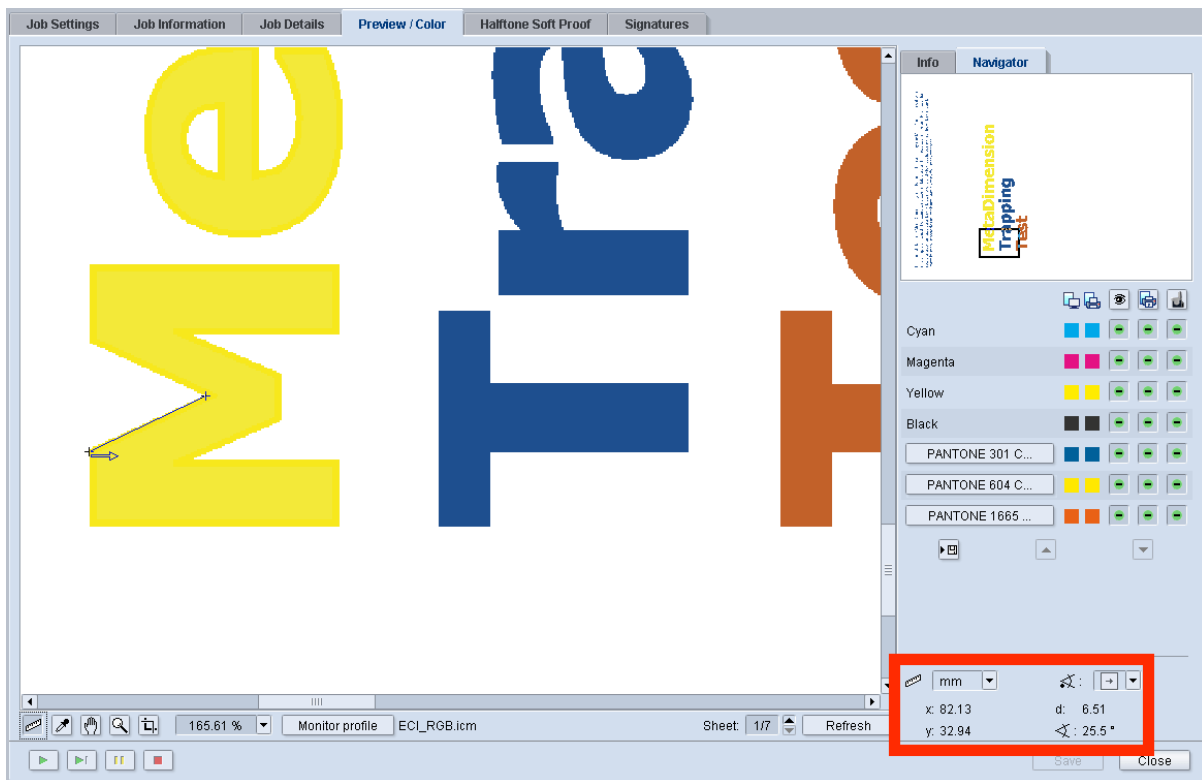
1. Click the measurement tool ("ruler") in the toolbar.



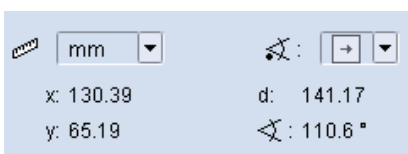
2. Set the unit of measure you want (pixel, inch or mm) in the list box in the setup and display pane.
3. Holding down the left mouse button, drag a line along the length which you want to measure. Let go of the mouse button at your target. The measured line is kept until you draw a new one or change tool.



Note: Creating horizontal, vertical or diagonal lines is easier if you hold down the Shift key at the same time. These lines are drawn in steps of 45° seen from the base line.



4. You can view the geometry data of the measured line at the bottom right of the preview window:



- the position data of the starting point of the measured line (x and y),
- the length of the measured line (d) and
- the angle of the measured line to the selected orientation, measured at positive angles up to 180° counter-clockwise and at negative angles clockwise up to -179.9°. You can select the orientation in the "Select angle origin" list box that is beside the angle symbol. For example, if you select an orientation with the down arrow, a measured line that points straight down will have an angle of 0°. Starting from this angle, angles that are measured counter-clockwise will have a positive sign, and vice versa. If you select an orientation with the right arrow, a measured line that goes perfectly level to the right represents the "reference line", etc.

You can select a unit of measure (pixel, inch or mm) in the list box above the measured data. The unit you select is also used for the image details (top right).

Color measurements

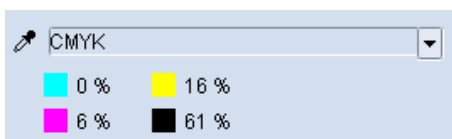
You can determine the color recipe of single pixels by means of the color data tool ("pipette").

Procedure:

1. Click the color data tool ("pipette") in the toolbar.



2. The color data at the position where the tip of the pipette is are measured.
3. At the bottom right, read the color data of the pixels marked by the mouse pointer.



If there are spot colors in the preview image, you can also measure the spot color portions. You can switch over between the CMYK and the spot color values in the list box above the measured data.

Shifting the Image Content

If you selected a scale-up factor in which only a part of the preview image can be seen, you can click the tool for shifting the image content ("hand").



You can then move the image section by positioning the mouse pointer over a part of the image and holding down the left mouse button. You can now move the image section.

Moving the image section with the "hand" tool in the preview window lets you position it a great deal more accurately than moving it in the Navigator window.

The display is constantly updated, for that reason, "jerky" movements are possible (depends on the data volume of your job and on the performance of your computer). High-resolution data can take quite some time for the display to be updated.

Zooming of the preview

You can scale up (to 1,600%) or down the display of the preview image by means of the zoom tool ("magnifying glass"). This function can help you check the register accuracy, for example, or assess critical points in the image or measure the length or angle.

You can select from several set zoom factors in the list box besides the zoom tool. You can also enter your own zoom factor in the box and confirm it with ENTER. Any factors that you set separately are added to this list.

A preview always displays as an overview when a page opens the first time. You can change this display in several ways:

Jobs

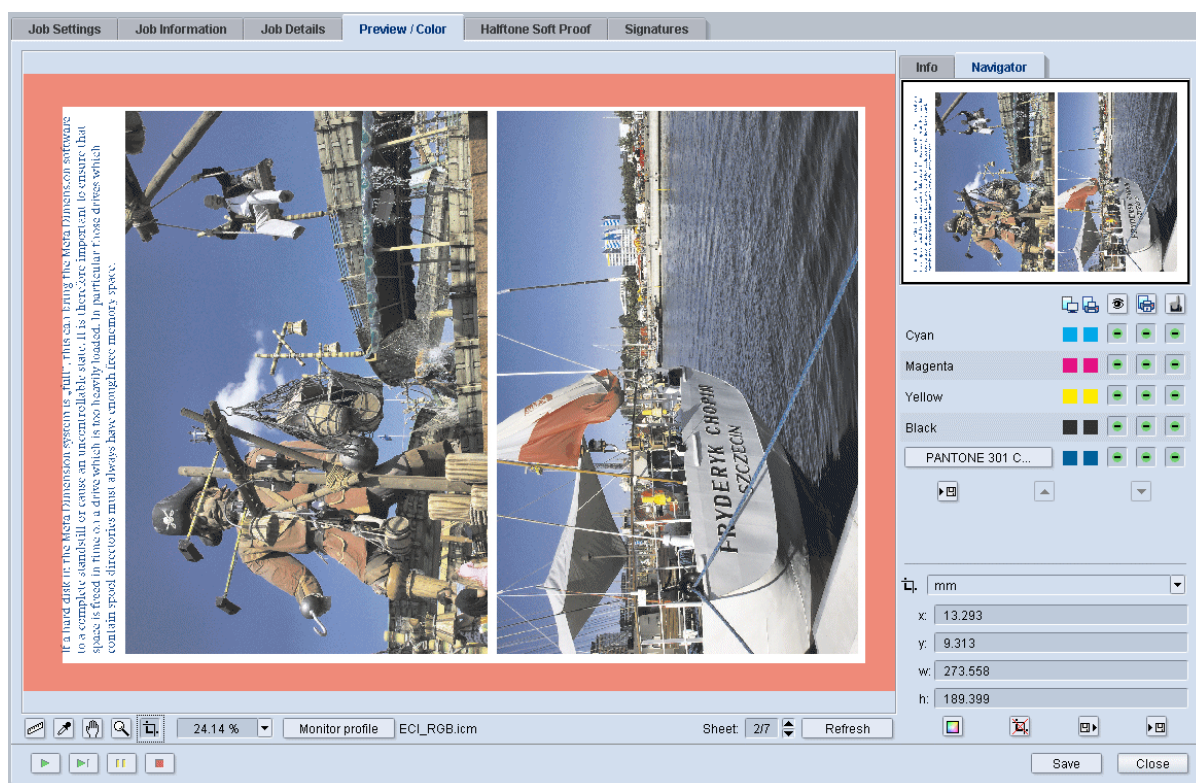
- By creating a box with the zoom tool and holding down the left mouse button. The defined clipped area appears scaled-up in the preview window.
- By selecting or entering a zoom factor in the list box.
- With the zoom tool and by clicking any spot in the preview image with the left mouse button. The next zoom factor up in the list box is set. Vice versa, you can also scale down the display to the next value lower down by holding down the ALT key when you click (the plus sign in the mouse pointer changes to a minus sign). Any custom zoom factors are ignored with this type of zooming.
- In the context-sensitive menu (right mouse button) by selecting
 - "Previous view" (zoom factor last set)
 - "Next view" (this function undoes a zoom factor that was reverted using "Previous view" in the context-sensitive menu) or
 - "Scale to fit" (entire page is displayed in the preview window)

Clipped output (selecting a clipped area)



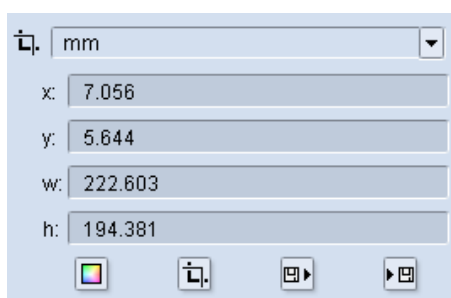
If you wish to output to a material that is smaller than the one set in "Printing Mode" in the Output Plan (see the [section "Output mode", page 245](#)), you can select a clipped area with this tool that redefines the output size. If the size that can be imaged is smaller than the image size, you can define a clipped area if the job is not canceled or fitted automatically to the size.

The maximum area available for imaging is shown by a "salmon-colored" mask (default). You can change this color as often as you want (see [section "Changing the color of the clipped mask", page 82](#)). Normally, the image and output area are exactly the same size.



Procedure:

Hold down the ALT key and, with the left mouse button held down, draw a box within the preview image. The background becomes semi-transparent and only the area you have drawn is still displayed in the original color. The size and position of the clipped area are shown on the right and can also be set by typing in values. You can select the unit of measure (pixel, inch or mm) above these boxes. After you defined a clipped area, you can also change its size by dragging the sides or corners.



You cannot define a clipped area if a "red cross" appears. In the context-sensitive menu of the right mouse button, you must enable clipped output and can then select a clipped area.

The clipped area appears automatically if crop marks are defined, for example, in a PDF job.

You will find four buttons below the size and position boxes. They have the following functions:



Change the color of the clipped mask (see [section "Changing the color of the clipped mask", page 82](#)).

Jobs



Delete clip mask

Click this button to delete the clip mask that is presently active.



Load clip mask

You can load an existing clip mask by clicking this button.

The clipped area selected is automatically positioned at the top left corner of the sheet for maximum paper utilization.

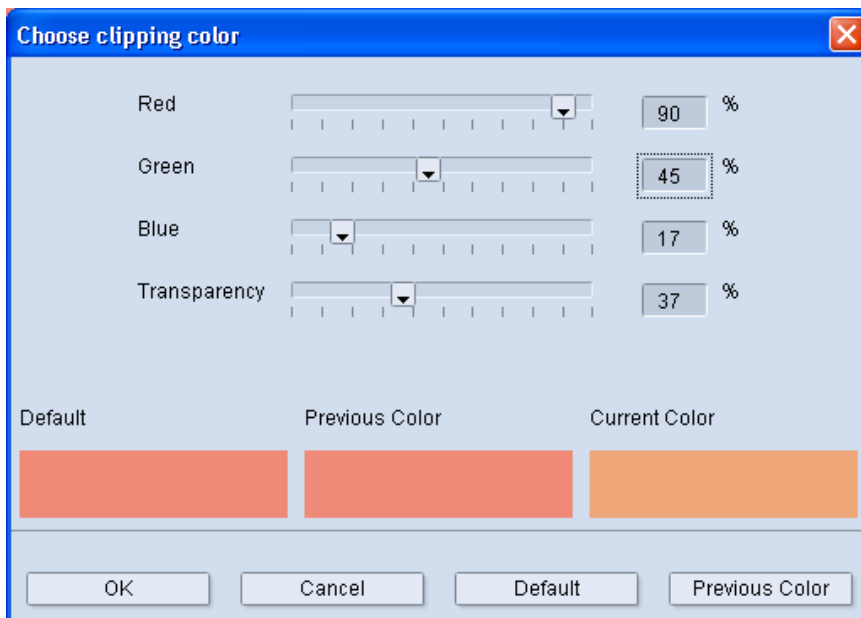


Save clip mask

Click this button to save the parameters of the active clipped area. The clipped area is saved as a global, device-dependent clip mask. You must save the job data with the "Save" button if you are going to use the clip mask on the current job. You can only do this if the job status is "paused".

Changing the color of the clipped mask

Click this button to open a dialog where you can change the screen display of the mask color. The procedure is the same as for modifying spot colors, but in this case RGB color data and transparency are set because the color is set only for screen display.



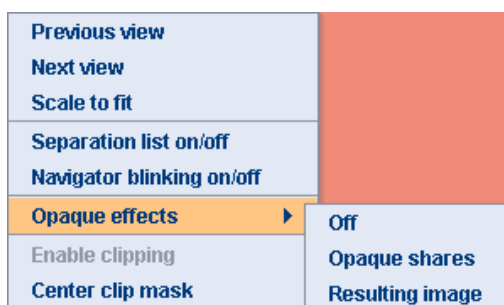
You can change the RGB data and the transparency of the mask color by means of the sliders or the input boxes.

The color which is currently set is shown in the "Current Color" color field. The last color set is shown in the "Previous Color" box and the color taken from the color table in the "Default" box.

The "Reset" button is used to use the last color set and the "Default" button to use the default color. The "OK" button is used to adopt the color which is currently set and "Cancel" is used to close the window without adopting the settings.

Context menu

A right-click on the preview image displays a context-sensitive menu.



You will find the following commands:

- Previous view:

You can use this command if you want to go back to the previous zoom factor for viewing the preview.

- Next view:

This command is only available if you first selected "Previous view". It undoes this command.

- Scale to fit:

The entire page is displayed in the preview.

- Separation list on/off:

Use this function to show or hide the setup and display pane.

- Navigator blinking on/off:

You can set that the frame of the clipped area flashes in the Navigator window when you are in the "Navigator" tab. This can be useful if the color of the frame is barely different from the image motif of the Navigator window.

- Opaque effects: You can use this command if there are opaque spot colors in the job (see the [section "Self-defined Color Tables", page 162](#)). You can set the following options:

- Off

The opaque effects are disabled and the preview doesn't show any opaque effect.

- Opaque shares

Only the parts of the image that are covered by opaque colors are shown.

Jobs

- Resulting image

The image shown displays the way it appears when covered by the opaque colors.

- Enable clipping:

This command unlocks a clip mask so that you can modify it for reprinting a job whose page size is bigger than the printing format (see the [section "Smaller clip mask for output of a canceled job because its size was too big", page 85](#)).

- Center clip mask:

This command lets you position a defined clip mask (see the [section "Clipped output \(selecting a clipped area\)", page 80](#)) in the center of the page. The size of the clip mask does not change during this.

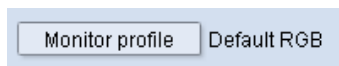
Using an ICC monitor profile

A true-color screen preview in softproof quality is not possible in the "Preview/Color" tab. If you enabled Color Management for the processed jobs, the preview automatically is roughly true-color.

You can use an ICC profile you created (monitor characterization) for the preview:

Characterize the monitor you will use and store the ICC profile in the "...\\UserDir\\ICCProfiles\\RGB" subfolder in the MetaDimension program folder.

Click the "Monitor profile" button in the "Preview/Color" tab.

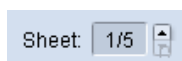


A browser dialog with the default path "...\\UserDir\\ICCProfiles\\RGB" appears. Select the ICC profile matching your monitor. This profile will be used for the screen preview.



Note: The monitor profile installed by default is set again when you click "Monitor profile" holding down the Ctrl key.

Changing the Page Displayed

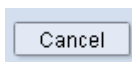


To view jobs with multiple pages, you can select the page you want in the list box or enter the page number in the text box.



Note: The page specified refers to one "sheet". You cannot select single pages on a signature or the front or back side with this function.

Cancel preview



Depending on your computer performance, it can take some time to calculate a preview with a large amount of data (large size and/or high resolution). You can stop a running image processing by clicking "Cancel". You can then recalculate the preview with other options.

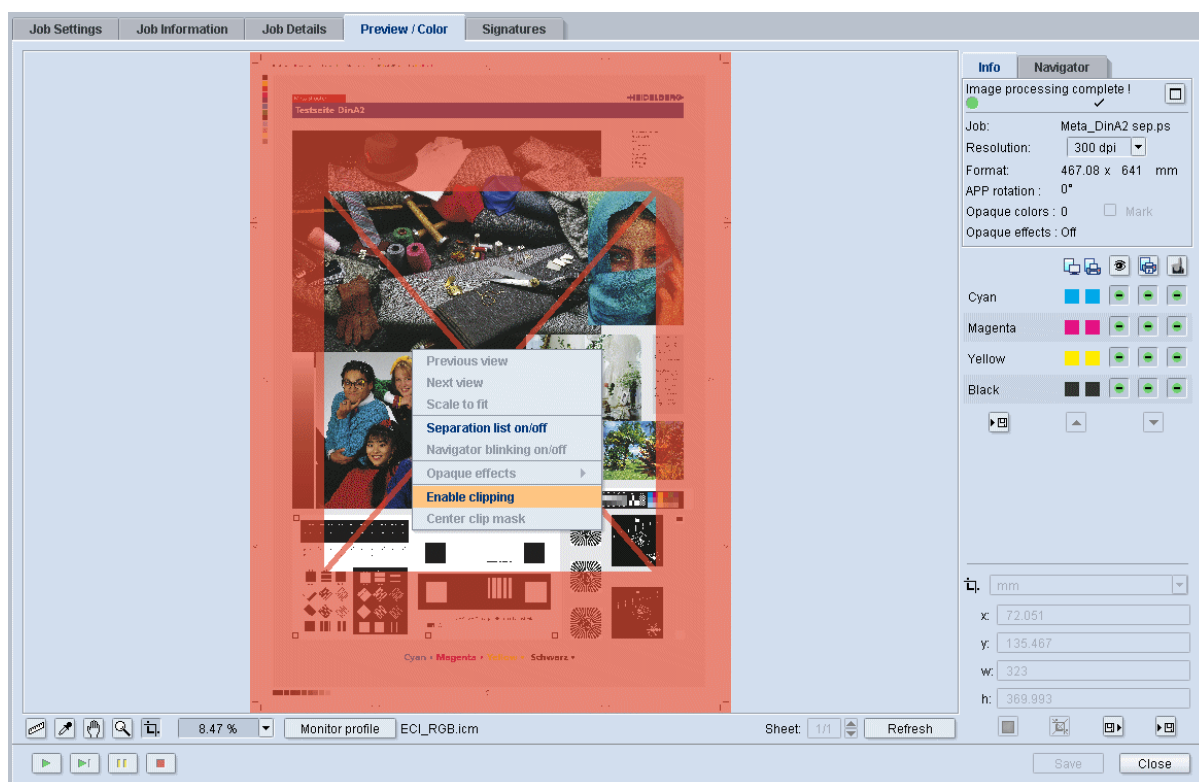
Smaller clip mask for output of a canceled job because its size was too big

A job will be canceled as "failed" if its size is too big for the output material used or for the output device. This will be done if you set the "Page Size Policy" to "Abort the Job" in your Output Plan (see the [section "Page Setup", page 307](#)).

If you want to output this job nevertheless, you can view the printable area in the "Preview/Color" tab and, if necessary, shift and/or make it smaller.

Procedure:

1. Reprint the failed job (see [section "Restarting, Pausing, Continuing and Reprinting Jobs", page 54](#)). The reprint job is in the "paused" state.
2. Open the job and go to the "Preview/Color" tab.
3. The preview displays as follows:



The entire page has a clip mask. The printable area is not covered and marked by a red cross.

Jobs

- Now select "Enable clipping" in the context-sensitive menu. You can now move the clipped area or make it smaller (with the mouse or by keying in values). By doing this, you define the section that will be output.
- After you saved your settings, close the job details and click the Start button.



- Processing of the job then resumes with the area you selected as the new output format. This job is not canceled because of its size and can be output. The red cross that marks the locked part in the job preview disappears. The selected clipped area is shown correctly if you enabled the halftone softproof.

Table with keyboard shortcuts



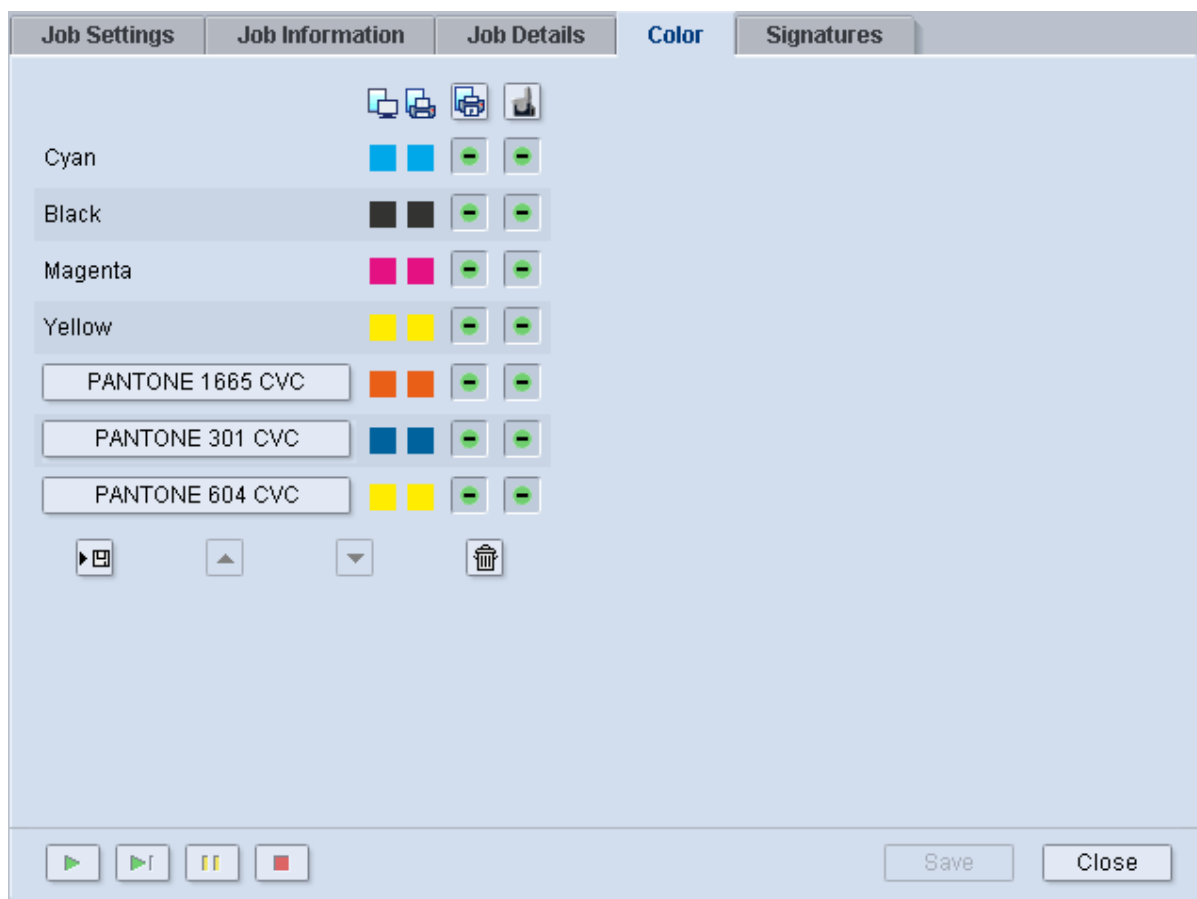
Note: Some keyboard shortcuts can only be used with certain user interface settings or job conditions (e.g. if there are spot colors).

Key Combination	Action
"Ctrl" + "+"	Select next scale up from the list.
"Ctrl" + "-"	Select next scale down from the list.
"Shift" + "+"	Show all process colors.
"Shift" + "-"	Hide all process colors.
"Alt" + "+"	Show all spot colors.
"Alt" + "-"	Hide all spot colors. All the colors on the back are hidden if the back is shown at the same time.
"Alt" + "F"	Show all colors on the front and hide all those on the back.
"Shift" + "mouse click" on "visible"/"invisible" buttons in the list of color separations	Showing/hiding of several separations If you hold down the Shift key and click two "visible/invisible" buttons one after the other, the separations you selected and all those lying between them in the list are switched to the opposite state.
"Ctrl" + "mouse click" on "visible"/"invisible" buttons in the list of color components	Showing/hiding single separations If you hold down the Ctrl key and click several "visible/invisible" buttons one after the other, the clicked separations are switched to the opposite state.

The Color Tab

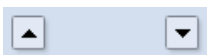
The "Color" tab displays instead of the "Preview/Color" tab if the "Preview" option is not enabled in the Output Plan of the processed job (see the [section "Preview", page 263](#)).

You can view the color settings for the job in the "Color" tab. The settings in this tab correspond to the general settings for color handling (see the [section "Color handling", page 155](#)), but the settings here only affect the current job.



Defining the Separation Order

Select a color whose position you wish to change. Now click the up or down arrow to move the color accordingly.



You define the order in which the separations are output with the order in this list.

Icons in the Color Handling List

The first two columns beside the separation items show you the preview colors i.e. the output colors. The two columns with the device icons show you that the colors will be output with the device shown (proofing and/or imagesetter).

- A green point shows that the option is activated; a red point stands for a deactivated option. Click on the options to change them.

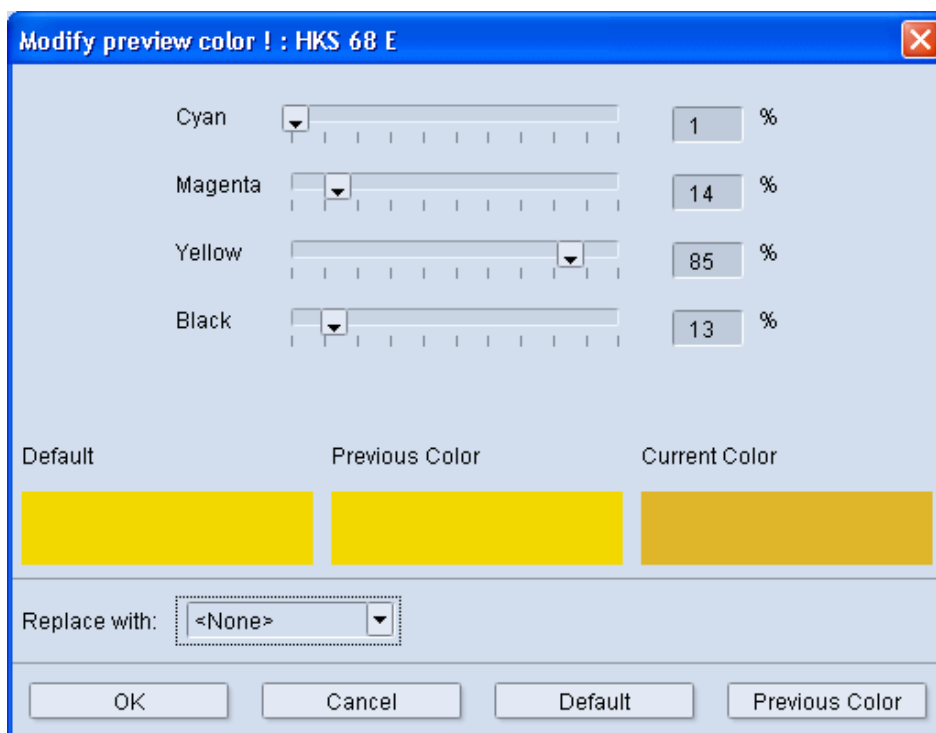
Jobs

- An appropriate icon also appears if a spot color or "All other spot colors" will be replaced by CMYK. If the spot color is replaced, the corresponding color is shown in the "Output color" column. If no replacement is set, a black box with two question marks is displayed.

You can find more details about these settings in the section [Pane relating to color separations, page 73](#).

Setup for replacing spot colors by process colors

You can replace spot colors by single process colors or by a CMYK representation. You cannot replace process colors. Click on the spot color in the color management list that is to be replaced (the list entry is shown as a button). A test window opens in which you can parameterize the spot color replacement.



Select the desired option in the "Replace with" list. You can choose between:

- "None": The spot color is not replaced.
- "CMYK": The spot color is replaced by a CMYK representation.

If you select this option and confirm the dialog an icon will appear beside the selected spot color entry. The check boxes in the "Show/hide separations", "Proofer" and "High resolution output" columns are dimmed because the spot color will be replaced by process colors.

- A process or spot color replacing the spot color.

An icon for one of the listed colors appears beside the selected spot color entry, indicating that this option is selected. You cannot use the check boxes in the "Show/hide separations", "Proo-

fer" and "High resolution output" columns because the spot color will be replaced by another color.

Save Settings as a Color Template



Click "Save as color template" to save the settings as a "color template". This color template can be managed and used like the color templates set up as "Color Handling Resources" (see the [section "Color handling", page 155](#)).



Note: Color handling templates are not filed in the Master Data Store.

Halftone Soft Proof tab

The Halftone Soft Proof option lets you preview the screened data of a job on the screen. This visual check means that you can check before printing whether all the image elements are present, whether the page assignments match and whether the correct colors (process and spot colors) are assigned. You can create a halftone softproof of a complete signature (front and back printing), of single pages or even of just one image in the separated TIFF format. The screened preview is in TIFF-B format but with a maximum resolution of 300 dpi or 600 dpi, depending on your Output Plan setting (see the [section "Halftone Soft Proof", page 263](#)).

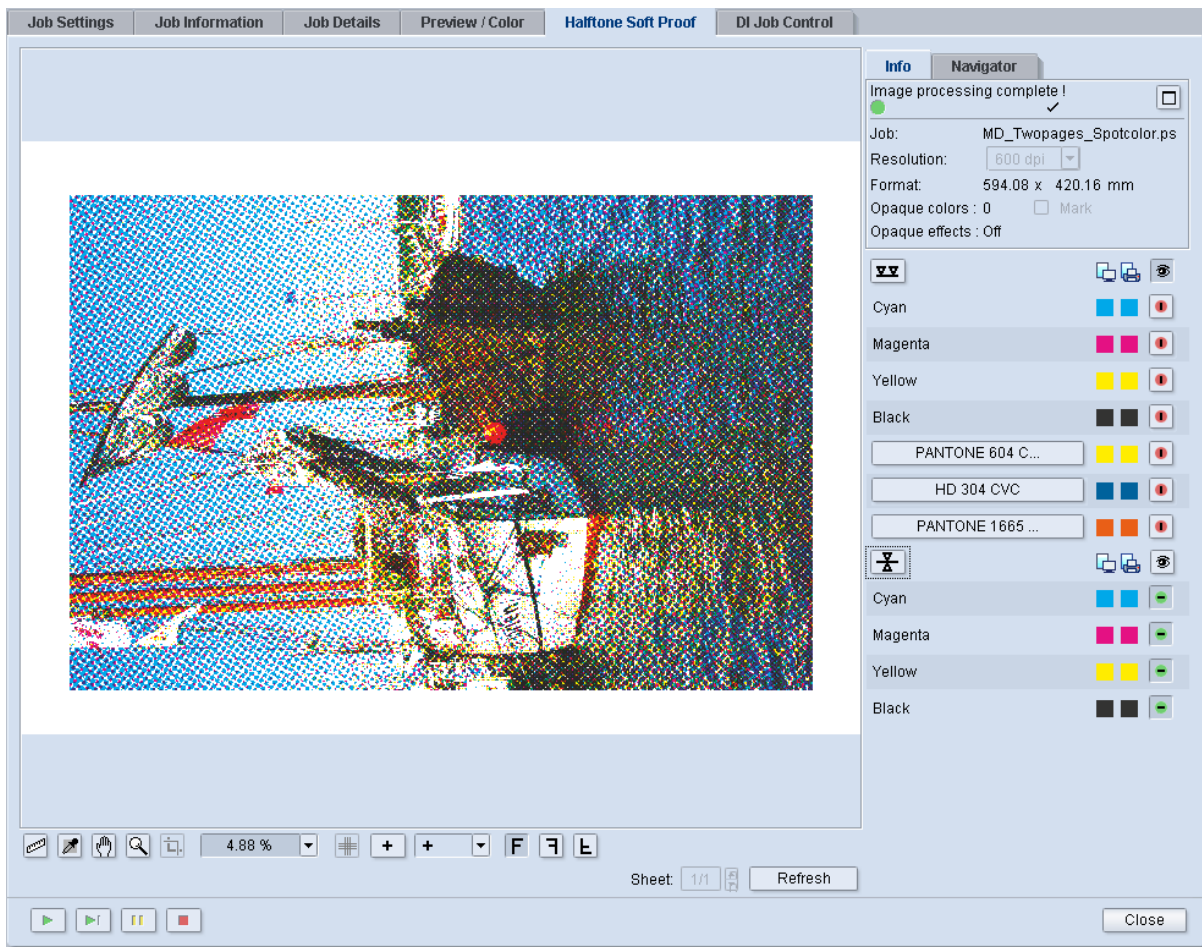


Note: For halftone softproof with 300 dpi or 600 dpi, the dot sizes and screen frequencies are approximated to the values of the higher resolutions (imagesetter resolution). As a result, there may be deviations between the resolution shown in the halftone softproof and the resolution actually used for imaging. You can determine which resolution was actually used in the "Job Information" tab (see the [section "Job Information tab", page 65](#)).



Prerequisites: To be able to view the halftone softproof, you must enable the "Halftone softproof" option in the Output Plan (see the [section "Halftone Soft Proof", page 263](#)).

When the job is finished, open the job and switch to the "Halftone Soft Proof" tab. You can view the individual pages or sheets of the job here.



Various tools are available for viewing and measuring the preview images. You can use these tools to:

- view information about the page size and resolution of the preview and about opaque colors
- select single separations of process and/or spot colors or any combination of them.
- change the CMYK screen display of spot colors and save it in the job.
- measure the geometry data (length and angle).
- measure colors (dot percentage in a freely definable area of the sheet displayed)
- zoom the preview
- view the front and back of a sheet at the same time (with turn or tumble), for example, to check register accuracy

Structure of the "Halftone Soft Proof" tab

The sheets or pages are shown as screened images in a preview window on the left of the tab. You will find a toolbar below the graphic. The right part of the tab contains not only the "Info" and "Navigator" tabs but also parameters for the color and geometry data of the pages/sheets shown and for the selected tools.

Scroll bars appear if the image pane is too small for displaying the preview because of the set zoom factor.

The right part of the preview window contains the setup and display pane for the preview. You will find the following elements, from top to bottom:

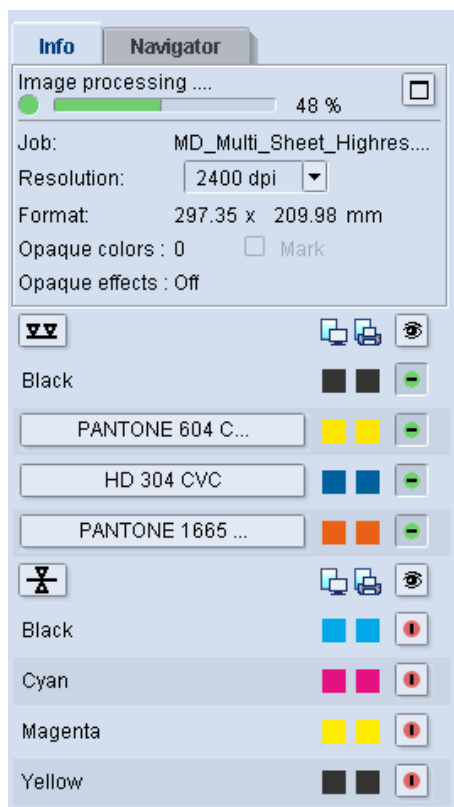
- The "Info" tab with a progress bar for image processing and details about the resolution and size of the display or
- the "Navigator" tab for defining a clipped area
- all the color/spot color separations contained in the preview job with names and color boxes,
- a setup pane for displaying the separations and
- a display pane for the parameters of tools in the toolbar.

Image Pane

A signature, a page or a separated TIFF image is displayed in the image pane. You can select settings for viewing your preview in the [Setup and Display Pane](#) and/or in the [Tool bar](#).

Setup and Display Pane

The right column of the preview window contains the setup and display pane for the preview. This contains the "Info" and "Navigator" tabs as well as the display pane for the separations and the dynamic setup and display pane.



Jobs

This contains, from top to bottom:

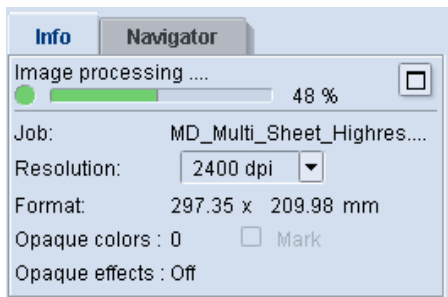
- if the "Info" tab is selected
 - a status display for image processing
 - details about the job name, the resolution and size of the display
- if the "Navigator" tab is selected
 - an overview of the halftone bitmap shown in the preview that you can navigate
 - all the color/spot color separations contained in the preview job with names and color boxes and a button for modifying the preview color and separation color of spot colors
 - properties of functions in the toolbar

Info Tab



You will find buttons for maximizing / restoring the Printmanager window in this tab:

Click "Maximize" or "Restore" to separate the Halftone Softproof Viewer from the Printmanager and maximize the screen display or restore it again to the Printmanager.



A progress bar indicating how much of the image is already displayed is shown beside it:

- "Image processing": The image is in the process of being displayed on the screen.
- "Image processing complete !": The image is now fully displayed.
- "Image processing canceled !" (after you click "Cancel" to the right of the toolbar)

The job name and details about the size of the display are shown below this.



Note: Remember that it may take a long time to calculate the preview images of jobs with very large output formats



While an image is being loaded to the screen, a rotating symbol also appears in the toolbar for that length of time.

Resolution setting

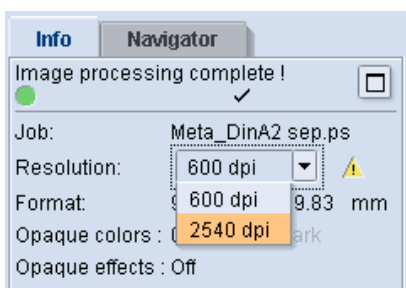
You can set the resolution of the screened data (300 dpi or 600 dpi) in the Output Plan if you enabled the "Halftone Soft Proof" option in the Output Plan (see the [section "Halftone Soft Proof", page 263](#)). This resolution is shown in "Resolution". The Halftone Soft Proof option lets you preview the bitmaps in the resolution of the imagesetter or DI press:



Prerequisites: The following requirements must be met for halftone softproof in imagesetter resolution:

- You must have a license for the option for viewing high-res halftone bitmaps and the option must be enabled.
- The job must have been created with the TIFF-B Engine Manager, in other words for a TIFF-B export device.
- The "Keep local Tiff-B copy (for fast reprint)" option must be enabled in "Tiff-B Export device settings" in the Output Plan (see the [section "TIFF-B Export Settings", page 227](#)).
- High-resolution TIFF-B bitmaps must have been created. This means that the TIFF-B files must be in the output directory.

You can select the imagesetter resolution in the "Resolution" list box if these requirements are met.



The bitmaps are now loaded in the imagesetter resolution to the halftone softproof.



Note: You can compare bitmaps that are on the Prinect MetaDimension system, for example, after one or more separations of the same job are reprinted, by loading them to the halftone softproof. The format of these bitmaps must match that of the open job exactly (see [Adding separations to the front or back](#)).

Opaque colors

This shows the number of opaque colors in the job (see the [section "Self-defined Color Tables", page 162](#)). You can use the "Mark" check box if the job has opaque colors. When "Mark" is checked, opaque colors are highlighted by a small frame around the color box and flash for a few seconds so that you can easily recognize them.



Jobs

Opaque effects

The selected opaque effect is shown here.

- Off

The opaque effects are disabled and the preview doesn't show any opaque effect.

- Opaque shares

Only the parts of the image that are covered by opaque colors are shown.

- Resulting image

The image shown displays the way it appears when covered by the opaque colors.

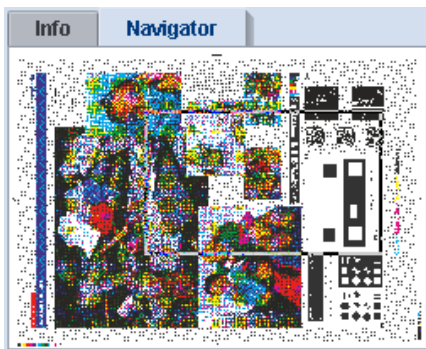
You set the opaque effects in the context-sensitive menu that you can display by right-clicking on top of the preview image (see the [section "Context-sensitive Menu in the Image Pane", page 103](#)).



Note: You can change the influence of the opaque colors by changing the color order in the separation list.

After clicking "ruler" or "clipped output" in the toolbar, you can switch the unit of measure to "pixels" or "dpi" and "inch" at the bottom right of the properties group.

Navigator tab



The Navigator tab shows you an overview of the entire image that is loaded in the preview window. You can use the Navigator window as follows:

- If you set a zoom factor for viewing only a part of the preview image, the part you are viewing is highlighted by a frame in the Navigator window. When you shift this frame, you also shift the section shown in the preview window.
- If the entire image is displayed in the preview window, you can define the size and position of a clipped area in the Navigator window with a bounding box.

Proceed as follows for a bounding box: The mouse pointer turns into a cross when you move it to the Navigator window. Holding down the mouse button, create a box over the part of the preview you want. When you release the mouse button, the marked section is shown zoomed up in

the display pane in the left column. You can now change the size or position of the marked section in the Navigator window.

Even if there already is a clip mask in the Navigator window, you can define a new clipped area by drawing a new box outside the existing area. You can also draw a new box within an existing clip mask if you hold down the Alt key.

You can also change the zoom factor in the preview window with the zoom tool (magnifying glass). The box in the Navigator window now also shows the section shown in the preview window.

To change the clipped area, place the mouse pointer on a border or corner of the box. The mouse pointer now appears as a double arrow. Holding down the left button, you can now change the size of the box.

To move the clipped area, place the mouse pointer inside the box. The mouse pointer now appears as a hand. Holding down the left mouse button, you can now move the box in the Navigator window.

It's quicker to move the mouse pointer to the position you want in the Navigator window and then click the left or right mouse button. The box then moves to the position of the mouse pointer. The cross of the mouse pointer forms the center of the box.



The toolbar also displays a rotating symbol while an image is being loaded to the screen because you cannot see the progress bar in the "Navigator" tab.

Pane relating to color separations

If you edit a job that has front and back pages, the colors for the front and back are shown separately one below the other:

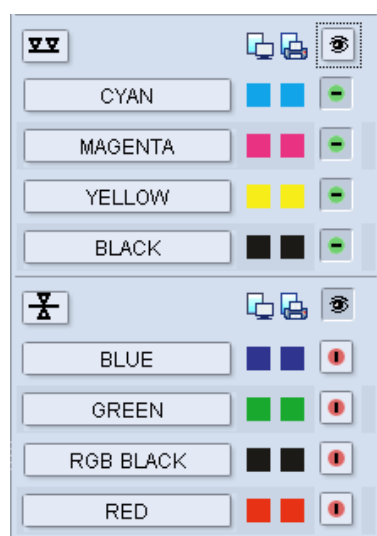


The upper part shows the colors of the front.



The lower part shows the colors of the back.

Only one section will be shown if a job has just front or just back pages.



Jobs

These sections list all the color/spot color separations contained in the job with names and two color boxes each. The color boxes show what the color looks like in the preview image on the monitor and when printed.

The settings for this section are for the most part identical to those in the "Preview/Color" tab. You can find more details about this in the [section "Pane relating to color separations", page 73](#). The same applies to the [section "Dynamic setup and display pane", page 76](#).

Tool bar

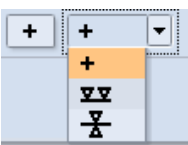
You will find the toolbar at the lower edge of the preview window. Some of the tools in the toolbar of the halftone softproof are different to those of the contone preview in the "Preview / Color" tab. You will find the following tools from left to right:



- Ruler for measuring geometry data (see [section "Measuring geometry data", page 97](#))
- Pipette for calculating the dot percentage (see [section "Dot percentage", page 98](#))
- Hand for shifting the image content (see [section "Shifting the Image Content", page 100](#))
- Magnifying glass for zooming the preview and a list box for setting the zoom, showing the current factor in percentage and the tagged original scale (see [section "Zooming of the preview", page 101](#))
- Button for showing a pixel matrix (see [section "Showing a pixel matrix", page 101](#))



- Adding separations to the front or back (see [section "Adding separations to the front or back", page 101](#)):

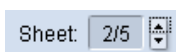


- Flip signature back Page orientation of the back compared to the front in front and back printing. The orientation options only affect the back (see [section "Flip signature back", page 102](#)):



- right reading (sheetwise)
- flipped horizontally (turn)
- flipped vertically (tumble)

- Switch to different page (enabled only if job has multiple pages) (see [section "Changing the Page Displayed", page 103](#)):



- Button for canceling the image display (see [section "Cancel preview", page 103](#)).

When the image is fully displayed, this button changes to a button for refreshing the image display.

- Button for closing the job settings.

Measuring geometry data

You can measure the geometry data (length and angle) in the job preview. For example, this function allows you to check the positioning and size of objects. For screened previews in the appropriate scale-up, you can measure the screen angle, registration marks or color bars. You can check errors in print to see whether they were already there in the original.

Procedure:

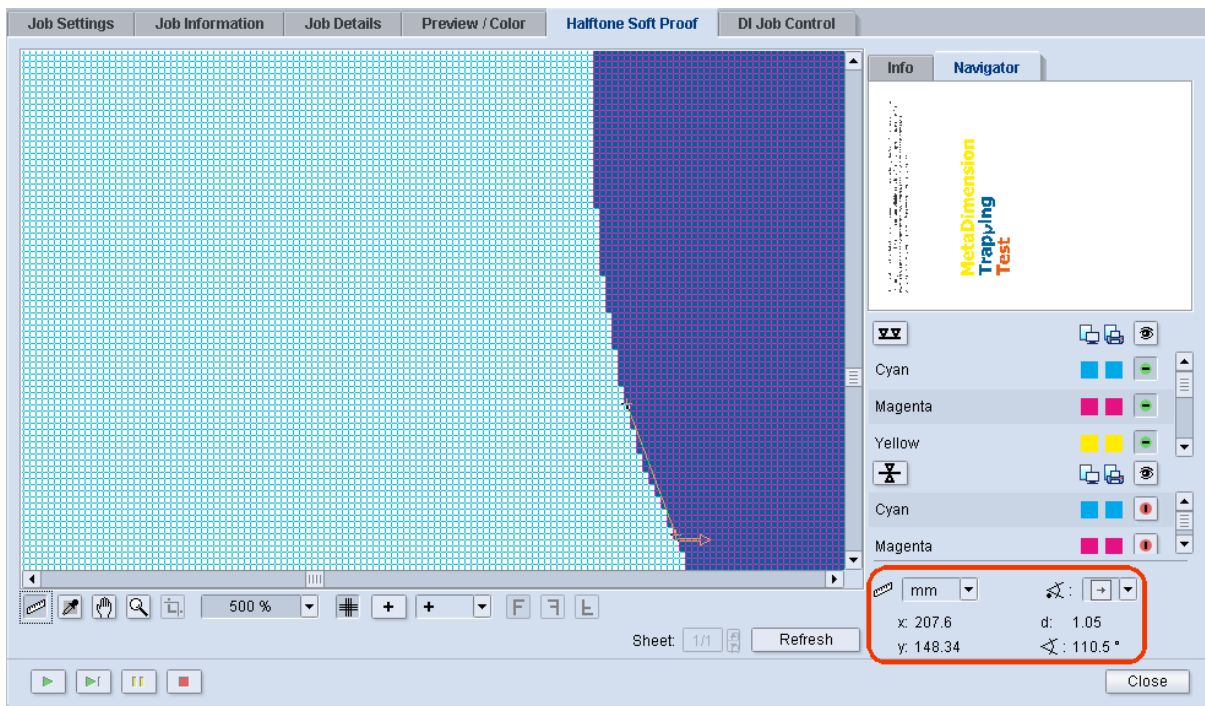
1. Click the geometry tool ("ruler") in the toolbar.



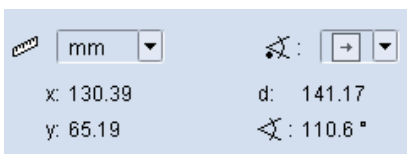
2. Select the unit of measure you want (pixel, inch or mm) in the list box in the setup and display pane.
3. Select the angle origin to the right of the unit of measure (i.e. the direction of the base line from where the angle will be measured).
4. Holding down the left mouse button, drag a line along the length which you want to measure.



Note: Creating horizontal, vertical or diagonal lines is easier if you hold down the Shift key at the same time. These lines are drawn in steps of 45° seen from the base line.



5. You can view the geometry data of the measured line at the bottom right of the preview window:



- the position data of the starting point of the measured line (x and y),
- the length of the measured line (d) and
- the angle of the measured line to the selected orientation, measured at positive angles up to 180° counter-clockwise and at negative angles clockwise up to -179.9°. You can select the orientation in the "Select angle origin" list box that is beside the angle symbol. For example, if you select an orientation with the down arrow, a measured line that points straight down will have an angle of 0°. Starting from this angle, angles that are measured counter-clockwise will have a positive sign, and vice versa. If you select an orientation with the right arrow, a measured line that goes perfectly level to the right represents the "reference line", etc.

You can select a unit of measure (pixel, inch or mm) in the list box above the measured data. The unit you select is also used for the image details (top right).

Dot percentage

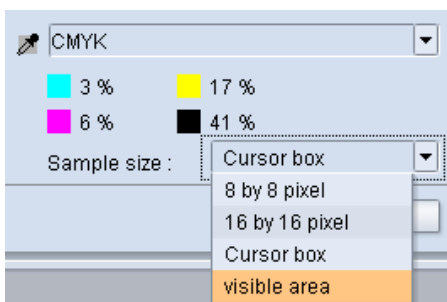
You can read the dot percentage of the current clipping region with the dot percentage tool ("pipette").

Procedure:

1. Click the dot percentage tool ("pipette") in the toolbar.



2. The controls and displays you need for measuring the dot percentage are located at the bottom right of the preview window.



In the "Sample size" list box, you define how the dot percentage will be measured:

- 8 by 8 pixel:

A square of 8 x 8 pixels is used to measure the dot percentage. The tip of the mouse cursor is the center of this sample. You measure by clicking the preview.

- 16 by 16 pixel:

A square of 16 x 16 pixels is used to measure the dot percentage. The tip of the mouse cursor is the center of this sample. You measure by clicking the preview.

- Cursor box:

You can draw a box with the mouse cursor within the document preview. The dot percentage is calculated in this "cursor box".

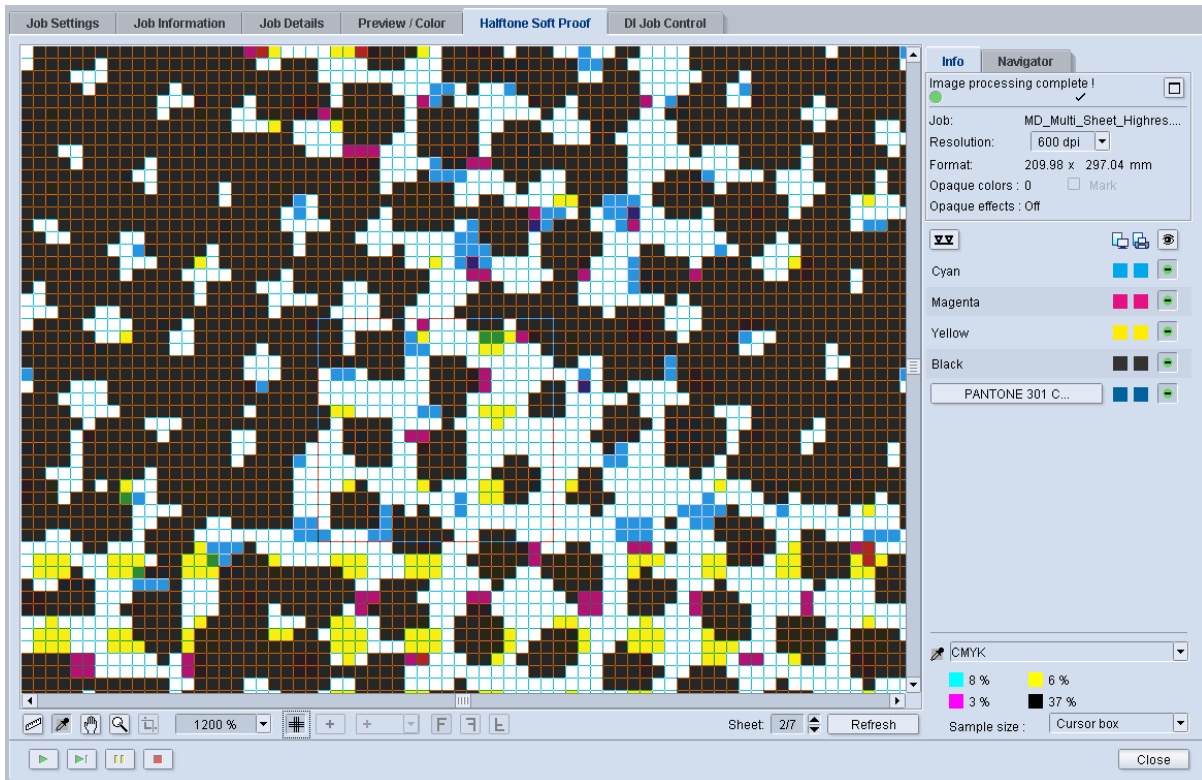
You can perform the following actions to define the area you will measure:

- You can move the patch to any position on the preview page.
- You can change the size of the patch by moving the outlines of the box.
- Click a patch or an outline of the patch. The dot percentage is measured when you release the left mouse button.
- The patch is always aligned to the pixel matrix. You can enable the pixel matrix and see it on the screen as of scale-ups of 500% (see the [section "Showing a pixel matrix", page 101](#)).

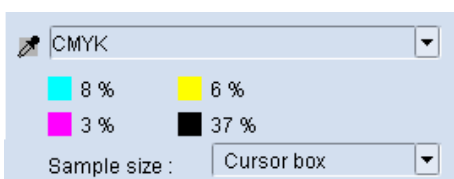
Jobs

- visible area:

The document section shown is used for measuring. The entire page is measured if you set a zoom factor that shows the whole page. If only a certain part of the page is shown, measuring is confined to this area. You measure by clicking the area that is shown.



3. You can view the dot percentage data of each separation to the right of the color boxes:



If there are spot colors in the preview image, you can also measure the spot color portions. You can switch between CMYK, the single process colors and the spot color values in the list box above the measured data.

Shifting the Image Content

If you selected a scale-up factor in which only a part of the preview image can be seen, you can click the tool for shifting the image content ("hand").



You can then move the image section by positioning the mouse pointer over a part of the image and holding down the left mouse button. You can now move the image section.

The display is constantly updated, for that reason, jerky movements are possible (depends on your data). High-resolution data can take quite some time for the display to be updated.

Showing a pixel matrix

You can show a pixel matrix, for example, for an analysis of screen problems. (for zooms of 500% and higher).

Zooming of the preview



You can scale up (to 16,000%) or down the display of the preview image by means of the zoom tool ("magnifying glass"). This function can help you check the register accuracy, for example, or assess critical points in the image or measure the length or angle.

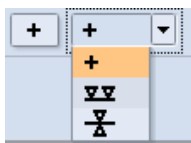
You can select from several set zoom factors in the list box besides the zoom tool. Any factors that you set separately are added to this list.

A preview always displays as an overview when it opens the first time. You can change this display in several ways:

- By creating a box with the zoom tool and holding down the left mouse button. This selection is then shown in the available image pane.
- By selecting or entering a zoom factor in the list box.
- With the zoom tool and by clicking any spot in the preview image with the left mouse button (the next zoom factor in the list box is used).
- With the Navigator window (see ["Navigator tab", page 94](#)).

Adding separations to the front or back

The screened data (as 300 dpi or 600 dpi) are saved as TIFF bitmaps in a subfolder of the spool directory if you enabled the "Halftone Soft Proof" option in the Output Plan. A Tiff file is created for every separation. The Halftone Soft Proof option lets you preview the bitmaps in the resolution of the imagesetter (see the [section "Resolution setting", page 93](#)). You can also load halftone bitmaps whose format matches that of the open job exactly to the halftone softproof. You can use this option, for example, to compare the halftone bitmap of a new separation with the original separation after a reprint.

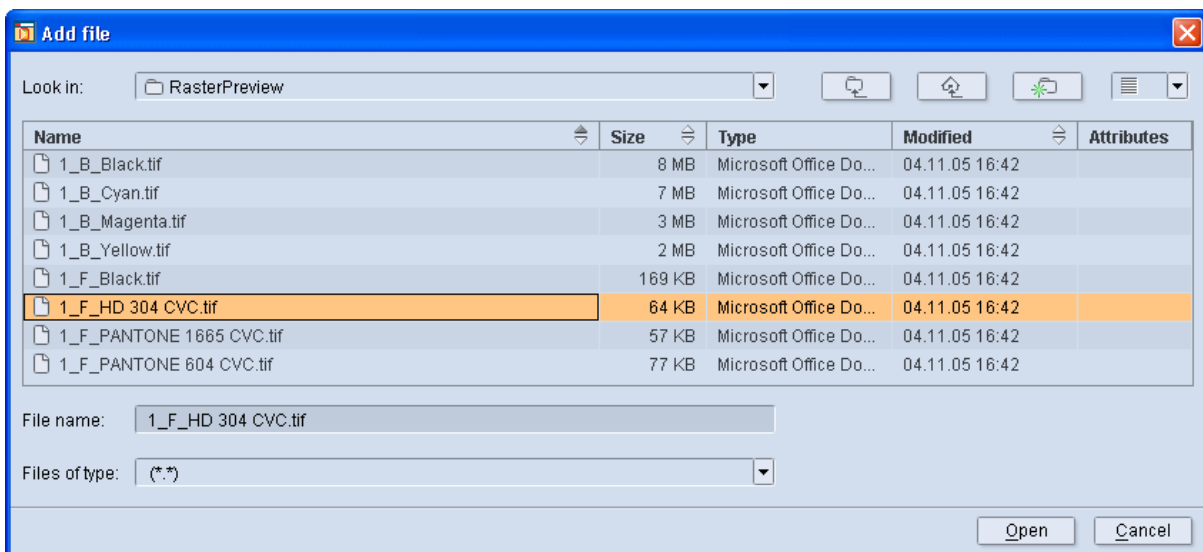


Jobs

In the list box, first select the page the bitmap will be loaded to. The following options are available:

- Automatic front/back recognition ("plus sign"): Because of the properties saved in the bitmap file, Prinect MetaDimension automatically recognizes whether the separation is assigned to the front or the back.
- Add to front
- Add to back

A dialog appears when you click the "Add separation" button to the left of the list box. This dialog lets you load single bitmaps to the preview.



If necessary, you can use "Look in" to go to the folder where the bitmap file you want is filed. Select the bitmap file and click "Open". You can select several files at the same time by holding down the Shift or Ctrl key and clicking the various items. If the format of the bitmap matches the open job, the separation is loaded to the halftone softproof. It is assigned to the front or back as set in the list box.

Flip signature back



These three buttons are only enabled if the front and back of a signature are loaded. These buttons let you control the orientation of the back without rotating the front. At least one separation on the back must be visible for this. The pixels on the front are shown together with those on the back so that you think that the back is "shining through".

Registration problems can occur if the page orientation or gripper edge are changed when the front and back of a signature are printed with the same form. To check this, you can change the orientation of the signature.

This function allows you to flip the back of the signature, depending on how the signature is used in the press (turn or tumble):

- The orientation of the back of the signature remains unchanged, i.e. it is not flipped (sheetwise).



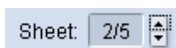
- The back of the signature is flipped horizontally (Turn: from left to right).



- The back of the signature is flipped vertically (Tumble: turn from top to bottom).



Changing the Page Displayed



To view jobs with multiple pages, you can select the page you want in the list box or enter it in the text box.

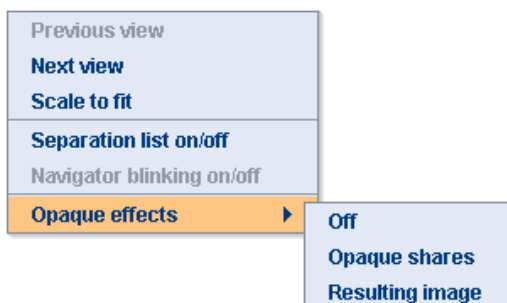


Note: The page specified refers to one "sheet". You cannot select single pages on a signature or the front or back side with this function.

Cancel preview

It can take some time to display a preview with a large amount of data (large size and/or high resolution), depending on your computer performance. You can stop the image from being displayed by clicking "Cancel". You can then select a new display (select in the toolbar, show or hide separations, switch between front and back or with the context-sensitive menu).

Context-sensitive Menu in the Image Pane



A click with the right mouse button in the preview area displays a context-sensitive menu. The following commands are available:

- Previous view:

You can use this command if you want to go back to the previous zoom factor for viewing the preview.

- Next view:

This command is only available if you first selected "Previous view". It undoes this command.

- Scale to fit:

The entire page is displayed in the preview.

- Separation list on/off:

Use this function to show or hide the setup and display pane for the separations.

- Navigator blinking on/off:

You can set that the frame of the clipped area flashes in the Navigator window when you are in the "Navigator" tab. This can be useful if the color of the frame is barely different from the image motif of the Navigator window.

- Opaque effects:

You can use this command if there are opaque spot colors in the job (see the [section "Self-defined Color Tables", page 162](#)). You can set the following options:

- Off

The opaque effects are disabled and the preview doesn't show any opaque effect.

- Opaque shares

Only the parts of the image that are covered by opaque colors are shown.

- Resulting image

The preview image is displayed taking into account the overprint behavior of the opaque shares.

Table with keyboard shortcuts



Note: Some keyboard shortcuts can only be used if certain tools (e.g. clip tool) were selected beforehand. The "+" and "-" keys only work on the main keypad and not on the numeric keypad.

If you show the front and back of a sheet at the same time, only the process colors on the front are treated as process colors by the keyboard shortcuts. All colors on the back are treated as spot colors.

Key Combination	Action
"Ctrl" + "+"	Select next scale up from the list.
"Ctrl" + "-"	Select next scale down from the list.
"Shift" + "+"	Show all process colors.
"Shift" + "-"	Hide all process colors.
"Alt" + "+"	Show all spot colors.
"Alt" + "-"	Hide all spot colors. All the colors on the back are hidden if the back is shown at the same time.
"Alt" + "F"	Show all colors on the front and hide all those on the back.
"Shift" + "mouse click" on "visible"/"invisible" buttons in the list of color separations	Showing/hiding of several separations If you hold down the Shift key and click two "visible/invisible" buttons one after the other, the separations you selected and all those lying between them in the list are switched to the opposite state.
"Ctrl" + "mouse click" on "visible"/"invisible" buttons in the list of color components	Showing/hiding single separations If you hold down the Ctrl key and click several "visible/invisible" buttons one after the other, the clicked separations are switched to the opposite state.

Example of use

The Halftone Softproof option allows you to check your data on the screen before proofing or output to film or plate. For example, check the screen angle, dot shape, register accuracy and critical image elements (e.g. in packaging printing, front and back printing).

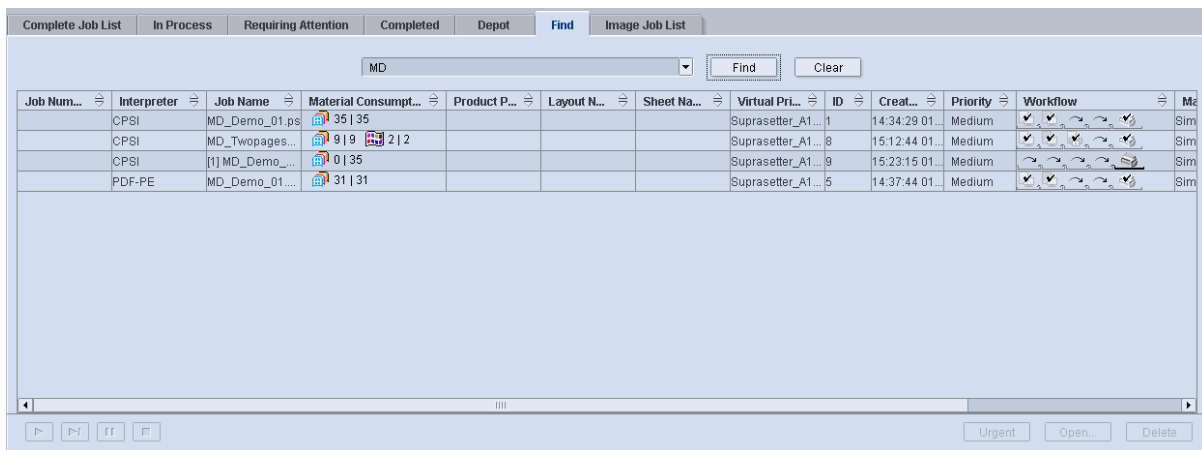
Use the various tools or combination of tools to set the display optimally for checking.

Example: Spreading and screen angle measurement.

Searching for jobs

The "Find" tab lets you search the whole job list for jobs.

Jobs



Job Num...	Interpreter	Job Name	Material Consumpt...	Product P...	Layout N...	Sheet Na...	Virtual Pri...	ID	Creat...	Priority	Workflow	Me
	CPSI	MD_Demo_01.ps	35 35				Suprasetter_A1...	1	14:34:29 01...	Medium		Sim
	CPSI	MD_TwoPages...	9 9	2 2			Suprasetter_A1...	8	15:12:44 01...	Medium		Sim
	CPSI	[1] MD_Demo_...	0 35				Suprasetter_A1...	9	15:23:15 01...	Medium		Sim
	PDF-PE	MD_Demo_01....	31 31				Suprasetter_A1...	5	14:37:44 01...	Medium		Sim

The Find function lets you filter single jobs fast out of the entire job list. You can use different job features as search criteria and enter them in the box, for example, job name, creation date, status, etc.

In principle, the search function acts as a full text search for all job properties. For that reason, it is generally enough to enter a part of a search term to filter all jobs with this wording. If you do not enter enough information in the search term, too many jobs may be filtered out (like in any full text search). You can also enter special characters if they occur in the columns of the job list.



Note: You cannot use variables such as "*" or "?", i.e. wildcards, for your search.

The text box for the search term is designed as a list box. Expand the list box to display the search terms entered to date and to select one again if you wish.

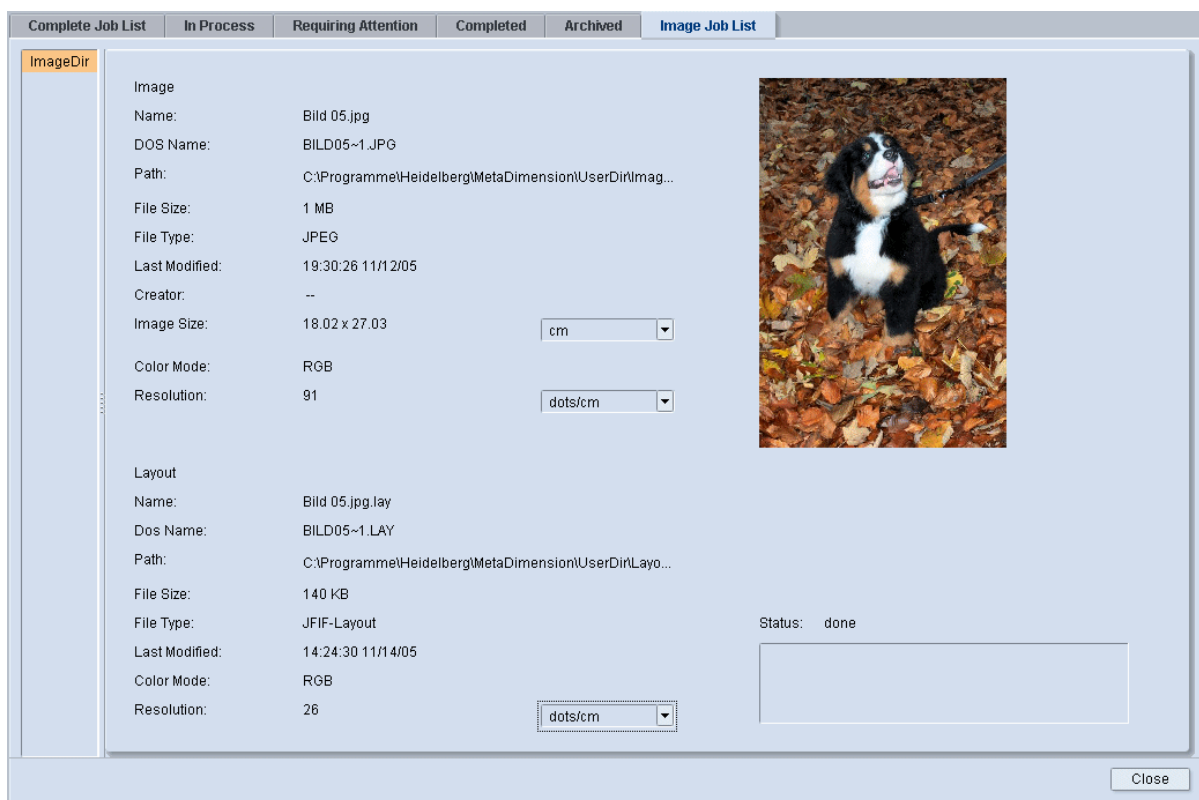
When you have typed in your search term, hit the ENTER key or click "Find".

Click "Clear" to clear the list of jobs there were found if you wish to find a new term.

You can open or delete jobs that are listed in the "Find" tab just like in the complete job list. You can also mark them as "urgent". Use the buttons below the list or the commands in the context-sensitive menu for this.

Image Job Details

You can also view the details of image jobs that were processed with the Imagemanager. In the "Jobs" section, go to the "Image Job List" tab and open a completed image job.



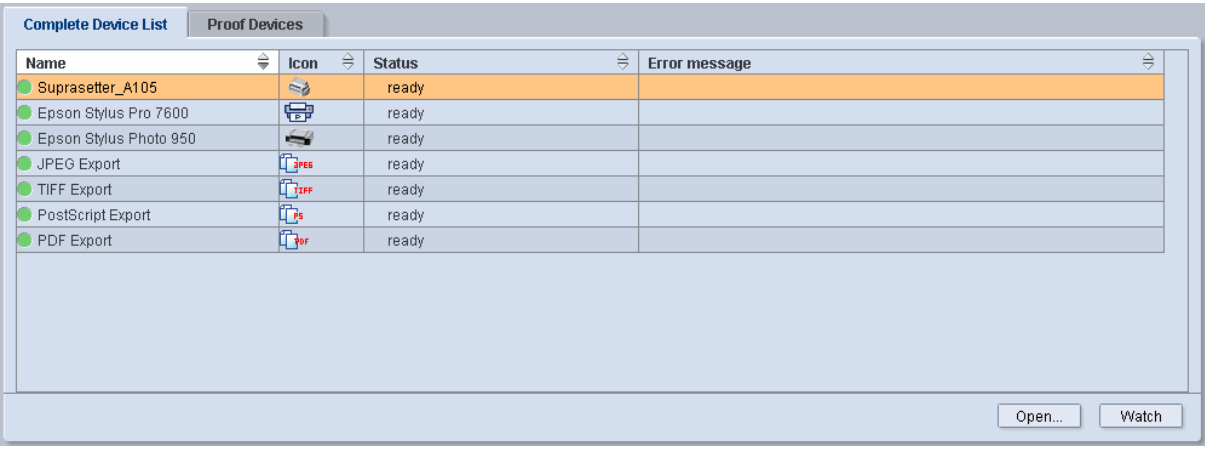
The details display a small preview and various data about the original high-res image and the generated layout file. You can toggle the unit of measure for the geometric data and resolutions.








Device Lists

In this section, you will find two tabs. They list the connected output devices.

Complete device list

The "Complete Device List" tab shows you all connected output devices. If one or more proofers are also configured, these are listed as well.



Name	Icon	Status	Error message
Suprasetter_A105		ready	
Epson Stylus Pro 7600		ready	
Epson Stylus Photo 950		ready	
JPEG Export		ready	
TIFF Export		ready	
PostScript Export		ready	
PDF Export		ready	

You can see the following columns in the "Complete Device List" tab:

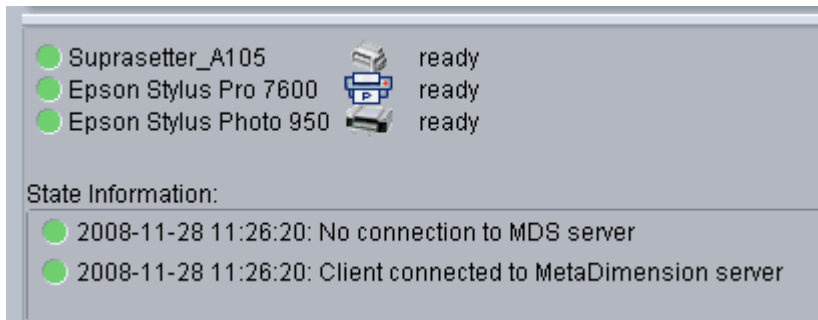
- "Name": Name of the device
- "Icon": A symbol representing the output device.
- "Status" Information of the operation status of the output device.
- "Error message": If an error occurs in the output device, a short text is displayed here indicating the type of the error.

Buttons

You will find "Open" and "Watch" buttons in the lower part of the "Devices" tab. The buttons affect a selected device as follows:

- "Open": Click "Open" or double-click a device item to open the Engine Manager that matches the output device.
- "Watch": Click "Watch" to display the selected output device in the status panel so that you can keep an eye on it. You can check the status of the monitored device at any time because the status panel is always displayed in the MetaDimension Printmanager. You can monitor three devices.

Devices

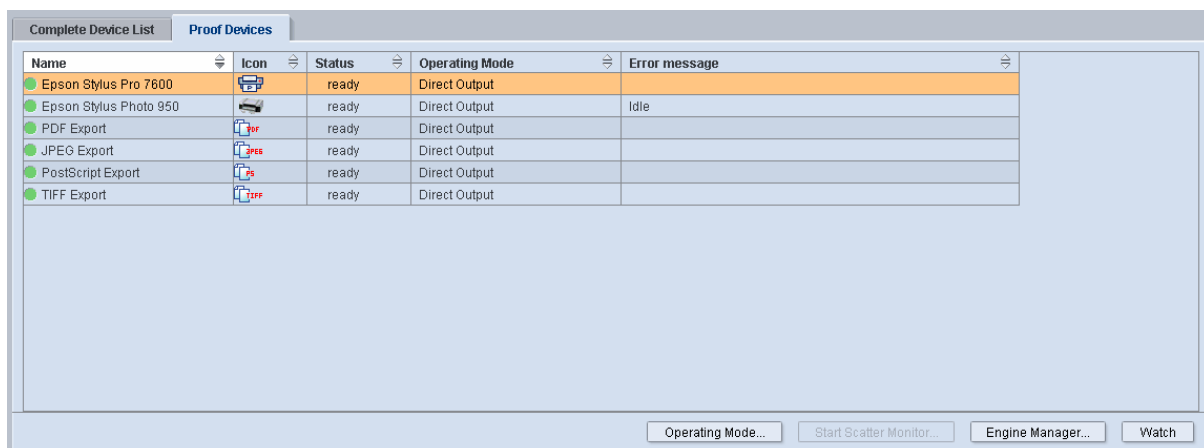


Spectacles in the status column in the device list also indicate that the device is being watched.



Proof devices

In the "Proof Devices" section, you can see a list of the installed proof output devices.



The following columns are displayed in this tab:

- "Name": Name of the proofer
- "Icon": A symbol representing the proofer.
- "Status" Information on the operational status of the proofer.
- "Operating Mode": Information on the output mode of the proofer.
- "Error message": If an error occurs in the proofer, a short text is displayed here indicating the type of the error.

The user interface switches to the editing mode when you double-click a device item (see [section "Operating Mode", page 111](#)).

Buttons

The following buttons are located in the lower part of the "Proof Devices" tab:

- "Operating Mode":

Click this button or double-click a device item in the list to switch the "Proof Devices" tab to the operating mode. You can now define settings for scatter proof or step-and-repeat (refer to [section Scatter Proof](#) or [section Step and Repeat Mode](#)).

- "Start Scatter Monitor":

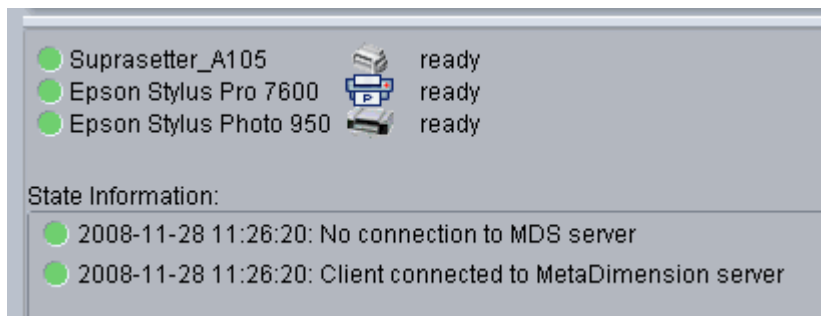
Click this button to open the "Scatter Proof" window (see [section Operating Mode](#)).

- "Engine Manager":

Click "Engine Manager" to open the "Proofing Engine Manager" or "Color Proof Pro" program with the settings matching the proofer you selected (see also the "MetaDimension - Proofing Engine Manager" or "MetaDimension Color Proof Pro" documentation).

- "Watch":

Click "Watch" to display the selected proofer in the status panel so that you can keep an eye on it. You can check the status of the monitored device at any time because the status panel is always displayed in the MetaDimension Printmanager. You can monitor three devices.



Operating Mode

You can enable the operating mode as follows:

1. Click the "Operating Mode" button.
2. The "Proof Devices" tab changes to the operating mode for setting the scatter proof or step-and-repeat functions.

Devices

Complete Device List **Proof Devices**

Name: Epson Stylus Pro 7600

Settings:

Operating Mode: Direct output

Type: Area, optimized

Repeats per Image

Horizontal: 2 Vertical: 2

☒ Allow Rotation

☒ Automatic output

Max. paper coverage: 80 %

Output after: 30 minutes

Sheet:

☐ Title Sheet

☐ Paperwhite simulation

Copies: 1

Output area:

Output width: 615.60 mm

Output length: 870.59 mm

Horizontal image spacing: 10.00 mm

Vertical image spacing: 10.00 mm

Temp. data:

Folder: Browse...

Save Close

3. Define your settings and click "Save" or "Close".

"Settings" Group

You can set the following parameters in "Settings":

Complete Device List **Proof Devices**

Name: Epson Stylus Pro 7600

Settings:

Operating Mode: Scatter Proof

Type: Area, optimized

Repeats per Image

Horizontal: 2 Vertical: 2

☒ Allow Rotation

☒ Automatic output

Max. paper coverage: 80 %

Output after: 30 minutes

Sheet:

☐ Title Sheet

☐ Paperwhite simulation

Copies: 1

Output area:

Output width: 24.23 inch

Output length: 34.27 inch

Horizontal image spacing: 0.39 inch

Vertical image spacing: 0.39 inch

Save Close

Operating Mode list box

You can choose between three options in the "Operating Mode" list box.

- Direct output

The incoming job is sent directly to the output device and output.

- Scatter Proof:

The Scatter Proof mode is enabled (see [section "Scatter Proof", page 113](#))

- Step and Repeat mode:

The Step and Repeat mode is enabled (see [section "Step and Repeat Mode", page 116](#))

Scatter Proof

In the "Scatter Proof" mode, the pages of several jobs are gathered for output and are positioned in one of several economic ways on a sheet and output.



Note: The settings refer only to the proofers set up in the User's Guide and not to the hardware itself, in other words, hardware (printer) can be set up several times in the User's Guide with different settings. These settings are independent of each other although the driven hardware is the same.

This means that one printer can run normally in one mode and gathers jobs in another until a sheet is full and then outputs the sheet in one go.

If you have a printer that is enabled for scatter proof, you can set that jobs processed with the Output Plan are output without a scatter proof. To do this, select the "Proof Directly Without Scattering" option in "Device Settings" in the Output Plan (see [section "General Settings", page 229](#)).

It is up to the user to decide which page is sent to which printer.

Special Features

Jobs on a sheet must have identical output properties. For example, only one resolution can be used on a sheet. Jobs also may not be in different color spaces even if the output device supports color spaces such as CMYK and RGB.

"Allow Rotation" option

The following is valid for all types listed below: When this option is checked, pages may be rotated to utilize the sheet better. Rotation is not used in the case of an asymmetric resolution of the output device.

Devices

Type

You can select between three scatter proof modes in "Type".

Area, optimized

Settings:

Operating Mode: Scatter Proof

Type: Area, optimized

Repeats per Image

Horizontal 2 Vertical 2

☒ Allow Rotation

☒ Automatic output

Max. paper coverage: 80 %

Output after: 30 minutes

Preview: A sheet layout showing pages 1, 2, 3, 4, 5, and 6 arranged in an optimized area.

In this option, jobs are gathered and positioned on the sheet until optimal use is made of the sheet (see [Max. paper coverage](#)).



Note: An accurate calculation would involve considerable computing time because of the complex mathematical nature of this option. For that reason, a heuristic method is applied with this type of distribution.

Line, first in - first out

Settings:

Operating Mode: Scatter Proof

Type: Line, first in - first out

Repeats per Image

Horizontal 2 Vertical 2

☒ Allow Rotation

☒ Automatic output

Max. paper coverage: 80 %

Output after: 30 minutes

Preview: A sheet layout showing pages 1, 2, 3, 4, 5, and 6 arranged in a line, first in - first out.

In this mode, pages are gathered and positioned on the sheet in the order they come until optimal use is made of the sheet (see [Max. paper coverage](#)).

The pages are aligned to the upper edge in this positioning option. For that reason, any subsequent pages are aligned to the biggest page of the previous row so that a line can be drawn again.

Line, optimized

Settings:

Operating Mode: Scatter Proof

Type: Line, optimized

Repeats per Image
Horizontal 2 Vertical 2

☒ Allow Rotation

☒ Automatic output

Max. paper coverage: 80 %

Output after: 30 minutes

In this option, pages are gathered and the images are swapped to try to make better use of the sheet (see [Max. paper coverage](#)).

The pages are aligned to the upper edge in this positioning option. For that reason, any subsequent pages are aligned to the biggest page of the previous row so that a line can be drawn again.



Note: An accurate calculation would involve considerable computing time because of the complex mathematical nature of this option. For that reason, a heuristic method is applied with this type of distribution.

Automatic output

If "Automatic output" is enabled, output starts automatically when maximum utilization of the sheet or the set time is reached.

If "Automatic output" is disabled, the pages are gathered until you manually start the output (see [section Operating Mode](#)).



Note: Pages that are already gathered are always output immediately if a new page and these gathered pages do not match (e.g. because the resolution has changed).

Max. paper coverage

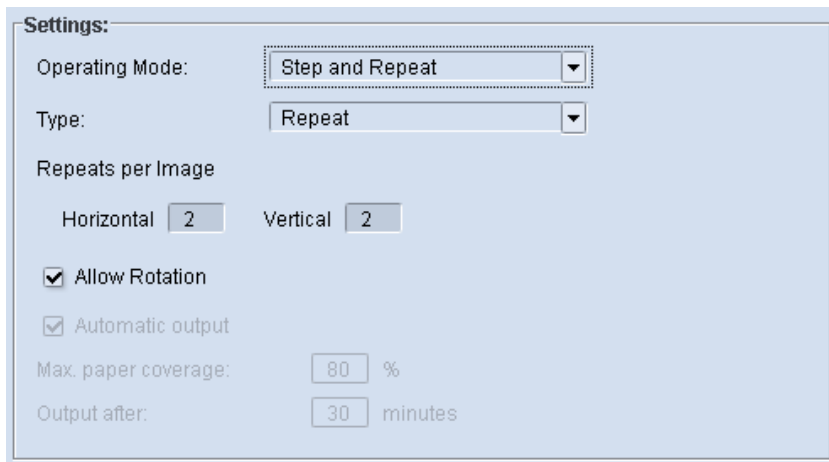
This is where you set by what percentage a sheet must be full for it to be output automatically.

Output after

This is where you set when (in minutes) the sheet will be output if maximum utilization was not reached. The oldest job in the buffer is used as the reference.

Step and Repeat Mode

If you select the "Step and Repeat mode", a document is distributed several times on the output medium or fills the sheet, depending on what is set.



The screenshot shows a 'Settings' dialog box with the following options:

- Operating Mode:** A dropdown menu set to 'Step and Repeat'.
- Type:** A dropdown menu set to 'Repeat'.
- Repeats per Image:** Two input fields: 'Horizontal' set to '2' and 'Vertical' set to '2'.
- Allow Rotation:** A checked checkbox.
- Automatic output:** A checked checkbox.
- Max. paper coverage:** An input field set to '80' followed by a '%' symbol.
- Output after:** An input field set to '30' followed by the text 'minutes'.

Selection for "Type"

You can choose between the following options in the "Type" list box:

- Repeat

This option positions each page of the job optimally several times on the sheet.

If "Allow Rotation" is enabled in addition, the job is positioned optimally several times on the sheet and, if necessary, rotated for better utilization of the space.

- Fill sheet

This option repeats the job until the sheet is filled optimally.

If "Allow Rotation" is enabled in addition, the job is repeated until the sheet is filled optimally and, if necessary, rotated for better utilization of the space.

Repeats per Image

- horizontal

Define how many times the job will be output horizontally on the sheet (a value of "1" means no repeat, the job appears once).

- Vertical

Define how many times the job will be output vertically on the sheet (a value of "1" means no repeat, the job appears once).



Note: These two functions are not required and cannot be selected if you select "Fill sheet". The system determines the maximum number of components if you enter too great a number for repeats.

Sheet Group

The screenshot shows a dialog box titled 'Sheet:'. Inside, there are two checkboxes: 'Title Sheet' and 'Paperwhite simulation'. Below these checkboxes is a 'Copies:' label followed by a text input field containing the number '1'.

Title Sheet

When you select "Title Sheet", you can enter text in the box that will appear as a title on the sheet. This is positioned where possible along the top horizontal edge.

You can also position the title vertically on the left edge if a page should no longer fit on the sheet because of the top position of the title.

The "Title Sheet" is not printed if the left position also means that the page doesn't fit on the sheet.

Paper white simulation

This setting allows colors to be rendered taking into account the light source and the medium illuminant (e.g. the color of the unprinted paper). For example, the illuminant of a newsprint paper which is shifted from illustration printing paper towards yellow compared to the illuminant of paper is rendered with a yellowish cast. For this reason, output with paper white simulation should be the default setting for proofing. All colors that lie outside the proofer output color space are displayed on the margin of the output color space. The advantage of this rendering intent is that the exact color values are retained when switching from one output medium to another. The disadvantage is that any colors that lie outside of the output color space cannot be distinguished. This rendering intent is especially suitable for logos or monochrome objects which must be reproduced exactly the same way on different output media.



Note: Paper white simulation is applied only if it is also set and enabled in the Proof Color Management options of the Output Plan used.

For paper white simulation in scatter proof, the system uses the setting of the oldest job in the buffer to be positioned on the sheet.



Note: Paper white simulation works, for example, also in the gaps of the user-defined spacing between images. As a result, the homogeneous impression of the printing material hue may be disturbed in certain cases: If the placed elements have a slugline, this area is knocked out because sluglines are marks.

For that reason, you should not place elements with a slugline in the case of scatter proof with media white simulation.

Devices

Copies

Enter how many copies of a sheet you want output in this box.

To get a copy, you must enter "2" (one original and one copy).

The default is "1".

Output area Group

This is where you define the area on the press sheet on which you will place the single pages.

Output area:		
Output width:	<input type="text" value="615.60"/>	mm
Output length:	<input type="text" value="870.59"/>	mm
Horizontal image spacing:	<input type="text" value="10.00"/>	mm
Vertical image spacing:	<input type="text" value="10.00"/>	mm

Output width

This is where you enter the maximum output width that will be permitted (or is possible) for this device. The output width you set in this box must never be greater than the material width set in the Output Plan (see [section "Proofer Parameters", page 229](#)).

Output length

This is where you enter the maximum output length that will be permitted (or is possible) for this device. The output width you set in this box must never be greater than the material width set in the Output Plan (see [section "Proofer Parameters", page 229](#)).



Note: This limit also affects new jobs in the "Scatter Proof" and "Step and Repeat" modes. Avoiding these modes in the Output Plan doesn't override this limit.



Note: The entire sheet is used if you do not specify width/length. The length (and width) of the sheet or the output area is used to calculate the percentage of the maximum utilization of the area.

Horizontal image spacing

This is where you set how much spacing there will be horizontally between the pages.

Vertical image spacing

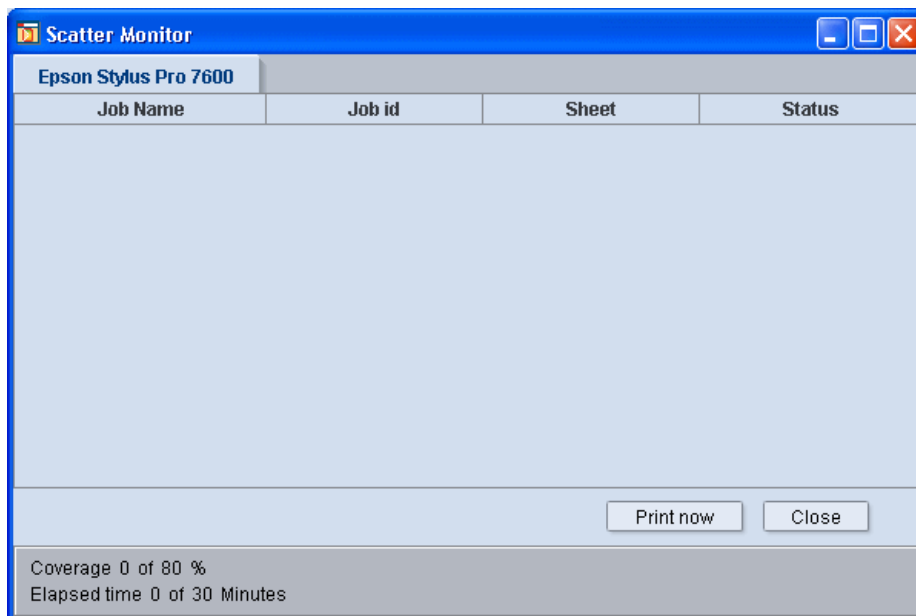
This is where you set how much spacing there will be vertically between the pages.



Note: Orientation of the image spacing always refers to the printed sheet and not to the top/side edge of the rotated page. The spaces are also added to each page when sheet utilization is calculated.

Watching Scatter Proof

The "Scatter Monitor" window opens when you click the "Start Scatter Monitor" button. You can only select this button if a proofer is selected for which scatter proof was set up.



This is where you can view which job (Job Name) and number (Job id) is positioned on which sheet (Sheet). You can also view the status (Status).

The lower part of the dialog displays what percentage of the activated sheet is covered and how much time still remains before automatic printing starts.

When you click "Print now", printing of the selected sheet starts before the shown time elapses and perhaps also before maximum utilization of the sheet is reached. Coverage refers to the part of the output area that is filled with pages. This buttons starts the output if "Automatic output" was not checked.

Engine Managers

The parameters for the output devices supported by Prinect MetaDimension are set using a special software tool known as an Engine Manager. Different Engine Managers are available for various output devices:

- Speedway Engine Manager

For all output devices connected via a Speedway interface (Heidelberg platesetters or imagesetters).

Devices

- Proofing Engine Manager

For proofers controlled by Windows drivers (Concept Proof) and for the output of contone data (bytemap proof files, PDF, TIFF or JPEG proof files).

- Color Proof Pro

For proofers with a special driver support for high-quality proofing.

- TIFF-B Export Engine Manager:

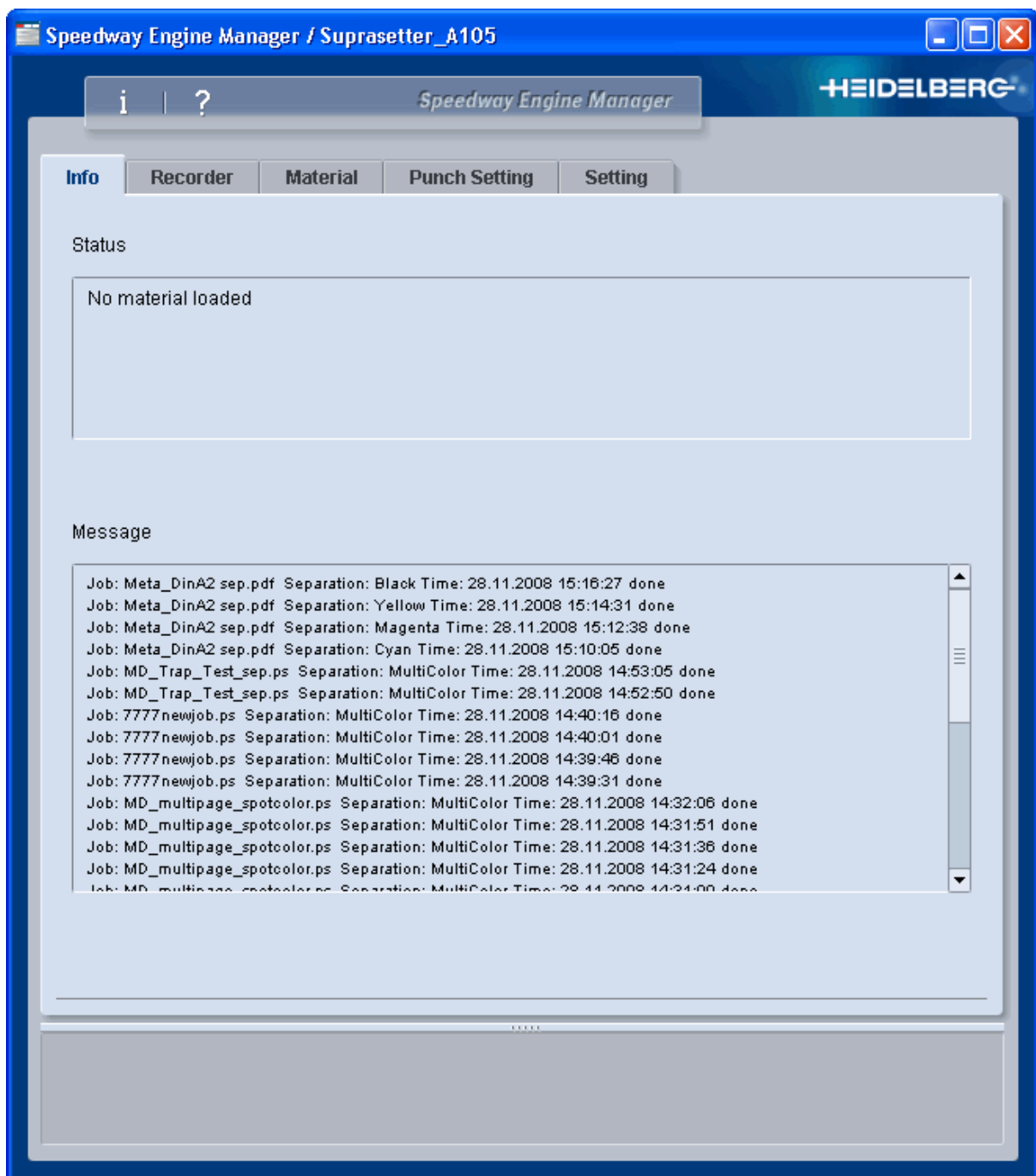
For exporting output data in TIFF-B format. In addition to the general TIFF-B export, you can also configure TIFF-B export for the Quickmaster DI or Speedmaster DI presses in the TIFF-B Engine Manager.



Note: DI presses must be configured for use during installation of the Prinect MetaDimension software. It is not possible to run an imagesetter and a DI press at the same time.

In the following description, it is assumed that the Engine Managers required for the connected output devices (imagesetters and, if necessary, a proofer) are installed.

When you double-click a device in the device list or when you mark a device and then click the "Open" button, the Engine Manager associated with the output device is opened.



You can trigger the following actions with the Speedway Engine Manager, for example:

- monitor the status of the imagesetter
- create templates, with regard to punching and offset settings, for the output workflow
- trigger manual cutting and/or advance of the film
- adapt different materials to the imagesetter
- run different tests (filter, light, focus) and enter the results in the material properties.

Devices

Further details can be found in the respective Engine Manager Online Help.



Note: You can also launch the TIFF-B Engine Manager, Color Proof Pro and the Proofing Engine Manager from the Windows Start menu in the Prinect MetaDimension startup group. You can open the Engine Managers for the imagesetters and TIFF-B export only from Prinect MetaDimension's Printmanager.

Resources

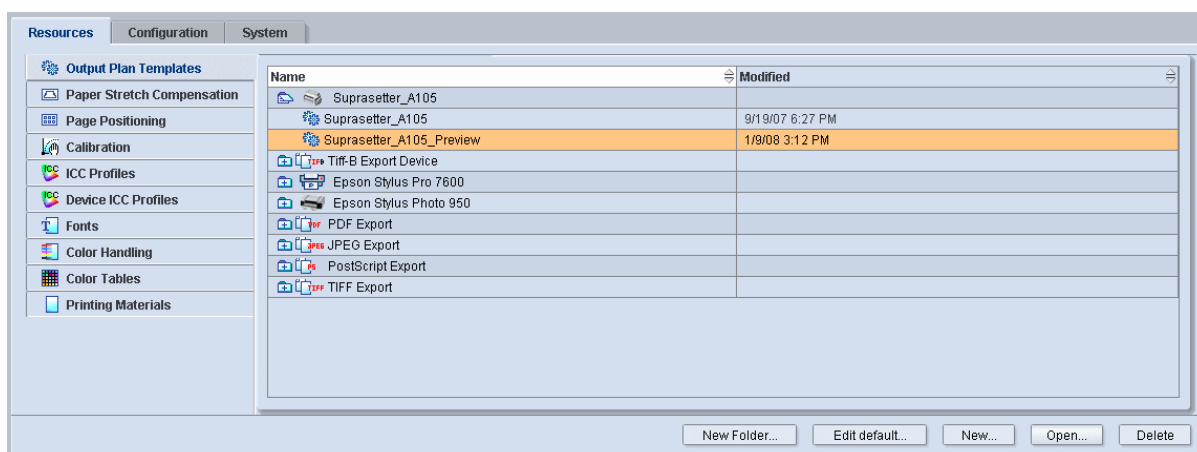
In "Administration > Resources", you can manage important Prinect MetaDimension elements:

- [Output Plan Templates](#) ,
- [Paper stretch compensation](#)
- [Page Positioning](#) ,
- [Calibration](#) ,
- [ICC Profiles](#) ,
- [Device ICC Profiles](#) ,
- [Fonts](#) ,
- [Color handling](#) ,
- [Color Tables](#) ,
- [Printing Materials](#).

Output Plan Templates

Use "Output Plan Templates" to open the Output Plan Editor. You can use the Output Plan Editor to create or modify device-specific Output Plan templates. You set job processing options in Output Plan templates. You can find details about editing Output Plan templates in the [section "Prinect MetaDimension Output Plan Editor", page 217](#).

You can save the settings you make here as a template (Output Plan Template) which you can then assign to virtual printers or individual jobs. You can find details about organizing, creating or opening Output Plan templates in the [section "Creating an Output Plan Template", page 224](#).



Administration - Resources

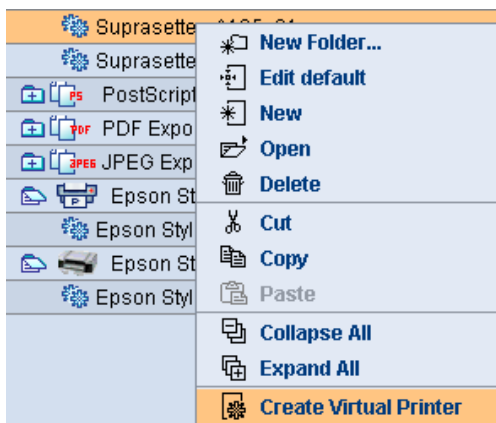
You can assign an Output Plan template to a virtual printer or to a job within the Prinect MetaDimension Printmanager as follows:

- In "Administration > Configuration > Virtual Printers":

Select a virtual printer and open it by clicking the "Open" button. Here you can assign an Output Plan to the virtual printer by activating the "Output Plan" option and selecting an Output Plan template. All jobs printed out on this virtual printer will be processed using the Output Plan assigned to it.

- In "Administration" > System > Resources":

Select an Output Plan in the list of Output Plan templates, right-click to display the context-sensitive menu and select "Create Virtual Printer" there.



A new virtual printer is generated and opens to which the selected Output Plan template will be assigned. You can set up this virtual printer (see the [section "Virtual Printers", page 171](#)) and then give it a new name when you save it.

You can modify the Output Plan of a job in the case of restarted "Reprint" jobs whose status is "paused" (see also the [section "Modification of the Job-specific Output Plan Setup", page 60](#)):

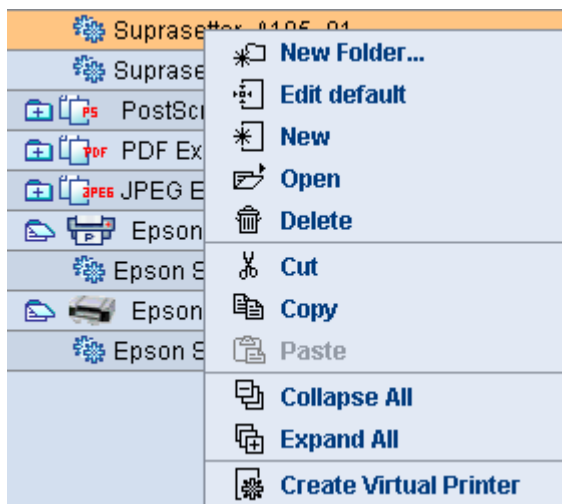
1. Go to the "Jobs" section, select a job from the job list and click "Open...".
2. Then change to the "Job Settings" tab. This shows the Output Plan settings of the current job. You can change the parameters.
3. When you click "Save", the changed parameters are assigned to the current job and can be seen at once. These changes only affect the current job.
4. When you close the job information screen and then mark the paused job and click the "Start" button, the job is output again with the changed Output Plan parameters.

Buttons in "Administration > Resources > Output Plan Templates"

- "New Folder": Use this button to create a new folder to organize your Output Plan templates. The new folder is created below the device or folder you marked beforehand.
- "Edit default": Here you can view the default Output Plan template relating to the selected device and modify it as required. The default Output Plan is used when a virtual printer has not had an Output Plan assigned to it. The default Output Plan contains predefined values for the individual output parameters. You can find information about controlling the priority of default templates compared to user-defined templates in the [section "Priorities for the Setup of Output Settings", page 219](#).
- "New": Here you can create a new Output Plan template.
- "Open": Here you can open an existing Output Plan template and modify it. First select your Output Plan template from the list and then click "Open".
- "Delete": Here you can delete an Output Plan template. First select your Output Plan template from the list and then click "Delete".

Context-sensitive Menu in "Administration > Resources > Output Plan Templates"

You can select one or more Output Plan templates for a device and display a context-sensitive menu with a right click:



This context-sensitive menu lists functions that you can use on the selected Output Plans. You can also trigger these functions with buttons. In addition, you can copy, cut and paste Output Plans.



Note: Copying, cutting and then pasting Output Plans only works if the following conditions are met:

- An Output Plan template that you copied to the clipboard can only be pasted to a device context that matches the original device context (the one you copied the Output Plan template from) exactly. This means that a copied/cut Output Plan can be pasted only to another subfolder of the same device or to another totally identical device.
- You must paste a copied Output Plan template that you wish to paste to the folder of the same device to a different subfolder there because a naming conflict will occur if you don't.
- You must paste Output Plan templates immediately after you copied or cut them.
- Make sure that the Output Plan template you are about to cut is not assigned to a virtual printer.

Cut (Output Plan templates)

You can use this command to move one or more selected Output Plans to another folder or another, totally identical device.

1. Select the Output Plan you want and select "Cut" in the context-sensitive menu or use the short-cut Ctrl + x.
2. Select the folder to which you will move the Output Plan. This can be the folder of another, totally identical device or another subfolder of the same device.
3. Select "Paste" in the context-sensitive menu or use the shortcut Ctrl + v. If you cannot use this command when pasting to the folder of another device, then there are illegal differences in the context of the device that you copied the Output Plan template from. Paste the cut Output Plan template back to the original device folder, if necessary.

Copy (Output Plan templates)

You can use this command to copy one or more selected Output Plan templates to the folder of another, totally identical device or to another subfolder of the same device. This allows you to modify a copied Output Plan template to match a new output process without having to set all the parameters again. If two identical devices are connected, e.g. two imposition proofers, you can set up the second device simply by copying an Output Plan template.

1. Select the Output Plan you want and select "Copy" in the context-sensitive menu or use the shortcut Ctrl + c.
2. Select the folder to which you will copy the Output Plan. This can be the folder of another, totally identical device or another subfolder of the same device.
3. Select "Paste" in the context-sensitive menu or use the shortcut Ctrl + v. If you cannot use this command when pasting to the folder of another device, then there are illegal differences in the context of the device that you copied the Output Plan template from.

Paper stretch compensation

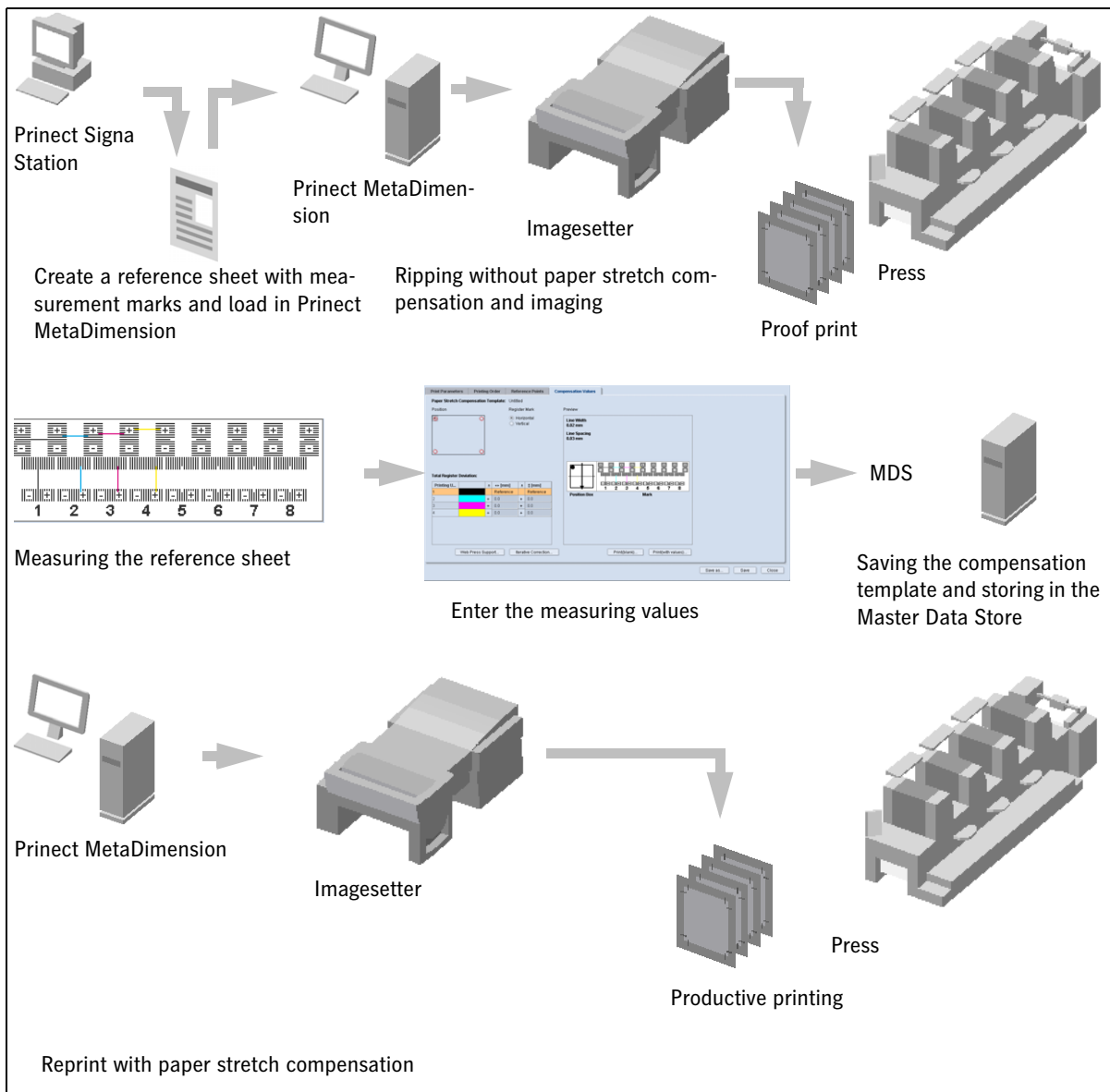
In web printing and large-format sheetfed printing, paper may stretch as it passes through the press from one printing unit to the next. The result of this is that the register between the single separations is no longer accurate. "Paper Stretch Compensation" compensates this stretch through a digital distortion of the bitmap by the same factor that the paper stretched when reaching the printing unit concerned. In this process, not only does the motif shrink but also the screened bitmap is made smaller so that the rosette appears neatly again as it should in the overprint. As a result, this function increases the print quality.

Function description

You can create a template for every press involved and for different paper qualities as well as for different print jobs (different color distribution). This template describes the compensation required for each printing unit in the press.

The compensation parameters are determined by comparing the dimensions of a press proof with the nominal size (absolute print accuracy) or actual size of the first printing unit (only register compensation). This is done by positioning special measuring marks on a reference sheet at the Prinect Signa Station. After printing, these special measuring marks allow you to measure the deviations caused by paper stretch. The measuring marks consist of a scale (the "reference") that is normally printed on the darkest color separation and single line marks that are printed in the other colors beside the scale. The line marks deviate from the reference line of the scale according to the extent the paper stretches. These deviations are read off the printed sheet and entered in the relevant table in the "Compensation Values" tab. In the "Reference Points" tab, you also have to specify where the single measuring marks are located on the press sheet.

After you entered the compensation values, you can save the measured data as a template giving it a name of your choice. The template is set in the Output Plan in "Printing Mode" in "Paper Stretch Compensation for Front" or "Paper Stretch Compensation for Back" if you wish to print with paper stretch compensation (see the [section "Output mode", page 245](#)).



The procedure for determining the compensation values and for setting up paper stretch compensation in the MetaDimension Printmanager comprises the following steps:

1. Create a reference sheet at the Princt Signa Station. The reference sheet must contain the special measuring marks for paper stretch compensation. The measuring marks must be aligned horizontally and vertically to each other. It is not absolutely necessary that the reference sheet has the original content of the job that will be printed with compensation. However, the sheet must be the same size as the sheet of the print job and should have the colors that will also be used later in printing. In addition, the process colors on the reference sheet should each have a dot percentage that is comparable to the one in the original print job. Each deviation in dot percentage between the reference sheet and the original print job impairs the results of your measured data.

You can achieve even greater accuracy if you insert the measuring marks onto the signatures of the original print job so that paper stretch compensation is measured based on the original data.

2. We recommend that you create a color handling template for printing if you are going to print a job with spot colors to determine the paper stretch (see the [section "Color handling", page 155](#)). This color handling template must have all the colors used for printing the reference sheet. Furthermore, the order of colors in the color handling template must correspond exactly to the order of colors at the press.

As an alternative, you can also create a color handling template in the job preview if the "Soft Proof" license option is enabled. To be able to do this, you must first enable the "Job Preview" option in the Output Plan and select "wait after preview" in "Action after preview" (see the [section "Preview", page 263](#)). In the Printmanager, create a new job of the reference sheet or of the original document with the measuring marks. A preview image is generated so that you can edit the job. You can view the image in the open job in the "Preview/Color" tab (see the [section "Preview / Color Tab", page 69](#)). The print job is paused after the preview data are generated. The colors in the job display in the "Preview/Color" tab. If the order of the colors does not match the order that will be used on the press, change the order to match the order in printing. Save this combination of colors as a color handling template with the "Save as color template" button. Use this color handling template also to set up paper stretch compensation (see the [section "Printing Order Tab", page 131](#)). You can also change the order of the process colors in the "Color" tab in the open job and save it as a color handling template if you do not have the "Soft Proof" option (see the [section "The Color Tab", page 86](#)). In this case, processing of the job must be fully completed because the "wait after Halftone Soft Proof" option is not available.

The advantage of this second way of creating a color handling template is that the "Preview/Color" tab displays exactly those colors that are found in the document to be printed.

3. Now enable this color handling template in "Color Handling" in the Output Plan and save your Output Plan.
4. In the Printmanager, create a job of the reference sheet or of the original document with the measuring marks. Use the Output Plan with the color handling template you just created and image your plates. Make sure that no paper stretch compensation is set in "Printing Mode" in the Output Plan.
5. Print the reference sheet or the original document with the measuring marks on the designated press. The production sheets must be running through the press before the sheet can be removed for measuring.
6. In the Printmanager go to "Resources > Paper Stretch Compensation". Click "New in the ["Print Parameters Tab", page 130](#) and enter the size of the plate template (the dimensions of the plates used). You can now use the other tabs to set up paper stretch compensation.
7. In the ["Printing Order Tab", page 131](#), open the color handling template you created beforehand (see step 2.). If you are not using a color handling template, i.e. only printing in CMYK, match the order of colors to the order that is on the press. With "Reference" set the process color in which the scale for measuring paper stretch will be printed (defined at Signa Station). The reference color is generally the darkest process color (e.g. black in CMYK).
8. In the ["Reference Points Tab", page 135](#) enter the reference points, i.e. the positions on the sheet where the measuring marks will be printed.

9. Go to the ["Compensation Values Tab", page 136](#). At each measuring mark, now measure the deviations of the process colors from the reference line in the reference scale and enter the data measured for each reference point into the "Total Register Deviation" table. If necessary, you can print an empty table for each reference point and enter the measured data manually. Afterwards, you must transfer these handwritten values to the "Total Register Deviation" table.
10. Save the paper stretch compensation template you just produced. To apply the paper stretch compensation template later to a job, assign it in "Printing Mode" to the Output Plan that you will use to process the job (see the [section "Output mode", page 245](#)).
11. You can repeat imaging and printing of the reference sheet to increase the accuracy of paper stretch compensation. This time use the compensation parameters that were determined. Open the compensation template you just saved. In the "Compensation Values" tab, you can now add the deviations of the second measurement to the existing deviations with the ["Iterative Correction", page 137](#) button.



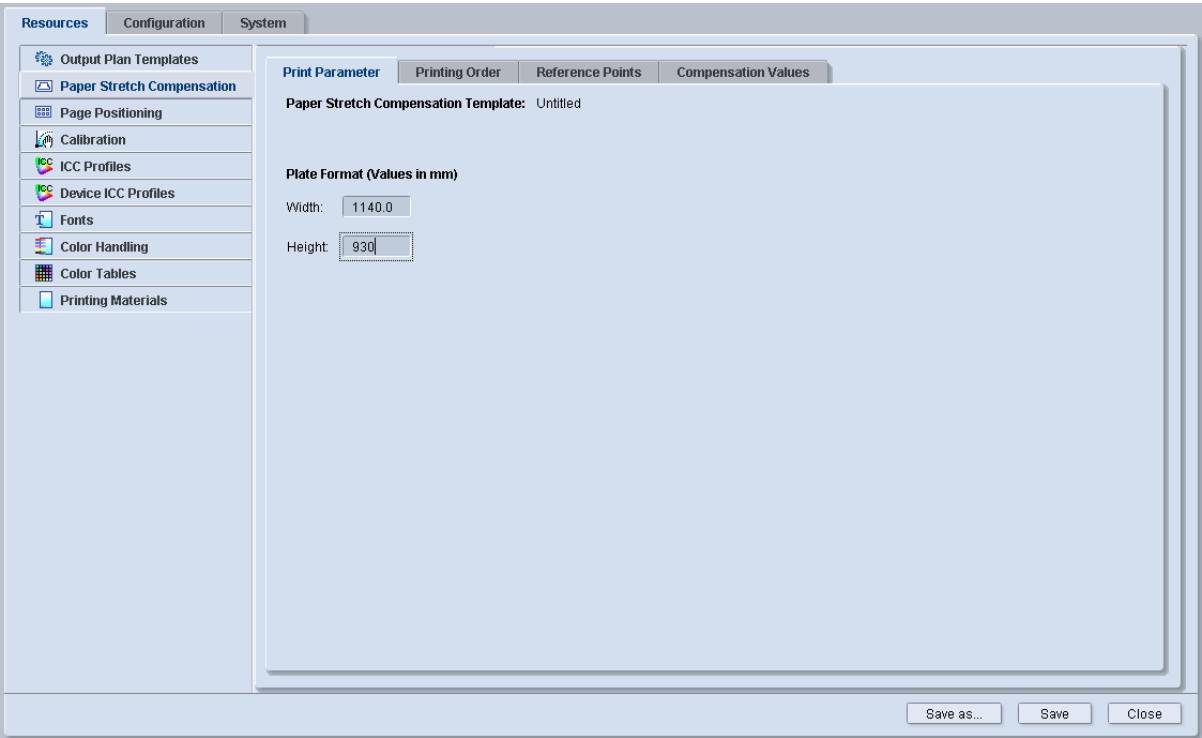
Note: You can assign paper stretch compensation templates to the output parameters of jobs in Prinect MetaDimension Output Plans and in the output sequences of the Prinect Pre-press Manager.

Paper stretch compensation templates are also automatically filed to the Master Data Store (MDS) if one is used in your system environment.

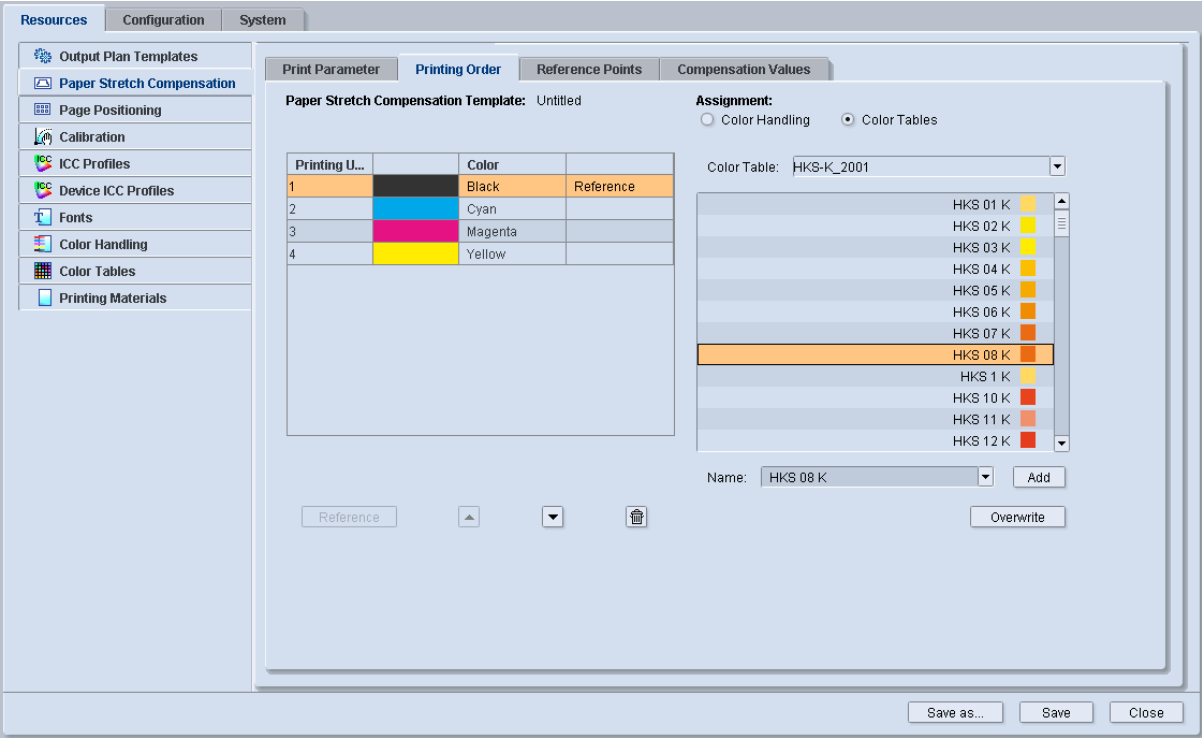
Calculation of paper stretch compensation is on-the-fly during imaging (if a Prinect Shooter is used). Alternatively, you can write the compensation parameters to TIFF-B files when you are exporting TIFF-B bitmaps.

Print Parameters Tab

First of all, in the "Print Parameters" tab you must specify the size of the reference press sheet that will be used to measure compensation. After that, you can use the "Printing Order", "Reference Points" and "Compensation Values" tabs. After you entered the sheet size, you can save the template and give it a name.



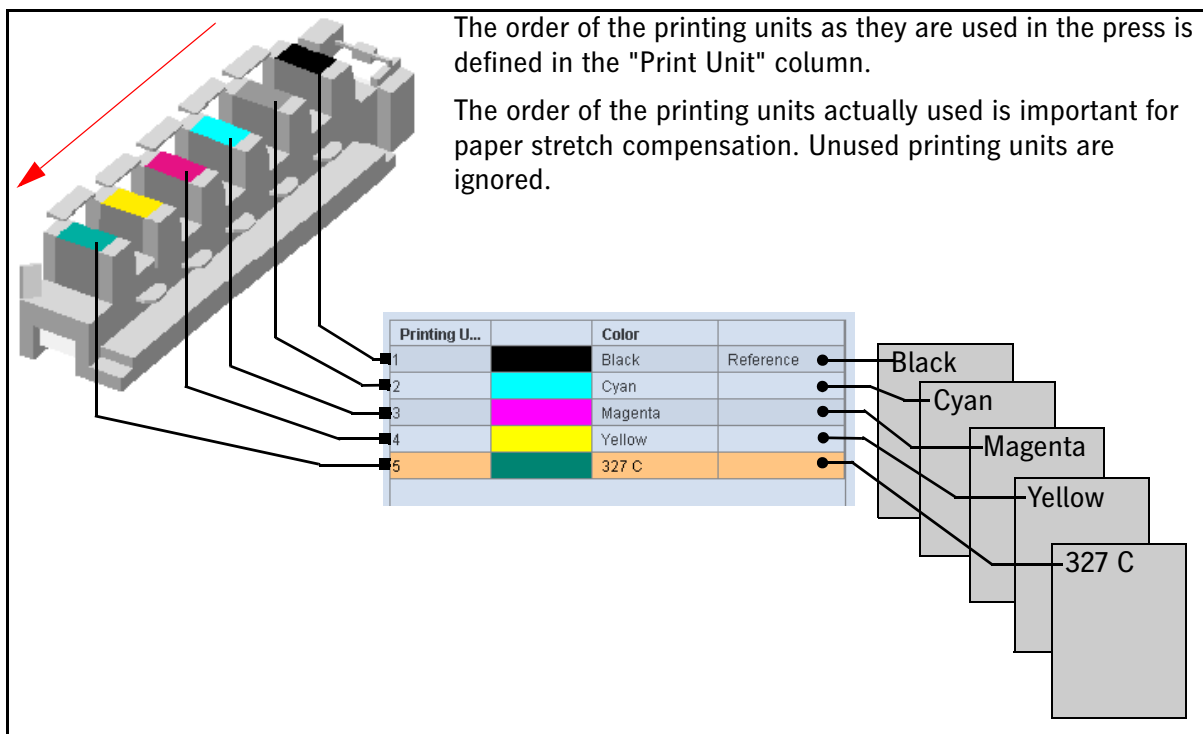
Printing Order Tab



You set the number and order of the process colors in this tab, exactly as they will be printed on the press. A table on the left of the window lists the process colors that are taken into account in the paper stretch compensation template. The "Print Unit" column indicates the order in which the paper sheets will run through the single printing units. The "Color" column must contain the placeholders for the process colors in the order they will be used in printing.



Note: The items entered in the "Print Unit" column do not have to correspond exactly to the "real" printing units on the press, for example, if only the last four printing units are used on an 8-color machine. What is important is the correct order of the process colors.



To change the order, you can select a color and move it up or down by clicking one of the "arrow buttons". You can delete a color from the list by clicking the "trashcan" icon. These operations let you match the color scheme to specific needs. "Reference" in the right column denotes the color or printing unit with which the reference marks with the scale are printed. You can define a color as a reference color by marking it and clicking "Reference".



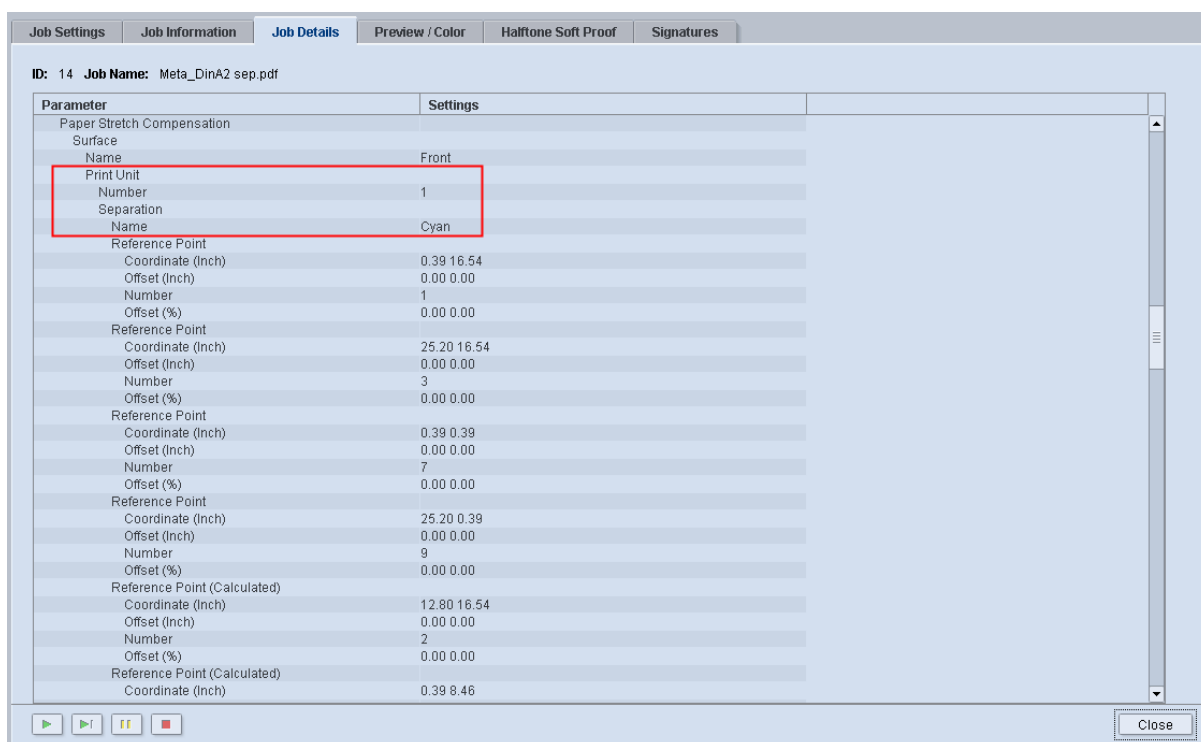
Note: To make sure that you don't get the order of colors mixed up, we strongly recommend that you always match the order or keep to the same order at the following points in the entire printing process:

- in the "Printing Order" and "Compensation Values" tabs in "Resources > Paper Stretch Compensation",
- when defining the imaging order of plates/films in the "Color" or "Preview/Color" tab of an open job and
- in the order of colors when printing on the press.

We recommend that you work with color handling templates in order to have consistency in the order of colors in the MetaDimension Printmanager.



Note: If you processed a print job with paper stretch compensation in MetaDimension, you can check the assignment of color to printing unit in the "Job Details" tab in "Paper Stretch Compensation" to see that it matches the setting in the "Printing Order" tab.



The right part of the "Printing Order" tab lets you select which process colors will be taken into account in paper stretch compensation. In "Assignment" you can define how the colors will be assigned to the table on the left:

- using a defined color handling template or
- through single spot colors selected from the color tables available in MetaDimension.

You can enable the "Color Handling" option if you use color handling templates for output (see the [section "Color handling", page 155](#)) and have already defined and saved some templates. The color handling templates are then available in the "Color Handling" list box.

1. The colors defined in the template display in the order set for printing when you select a color handling template.
2. Now click "Overwrite All". The order of colors set in the template fully overwrites the colors in the left table in exactly the order they are in the template.
3. If necessary, you can change the order of colors or delete colors you do not need.
4. You can switch to "Color Tables" in "Assignment" if you need colors that are not defined in the color handling template and add single colors to the color list.

5. Mark the color that you will use as the reference color and then click the "Reference" button.

You can then match the number and order of colors in the color table as described above.

Select the "Color Tables" option if you do not wish to use a color handling template or if you wish to add other spot colors to an existing template. The "Color Table" list box provides you with all the color tables that are defined in the color table resources (see the [section "Color Tables", page 159](#)).



Note: You will also find color tables from the Master Data Store (MDS) if you use an MDS in your system environment.



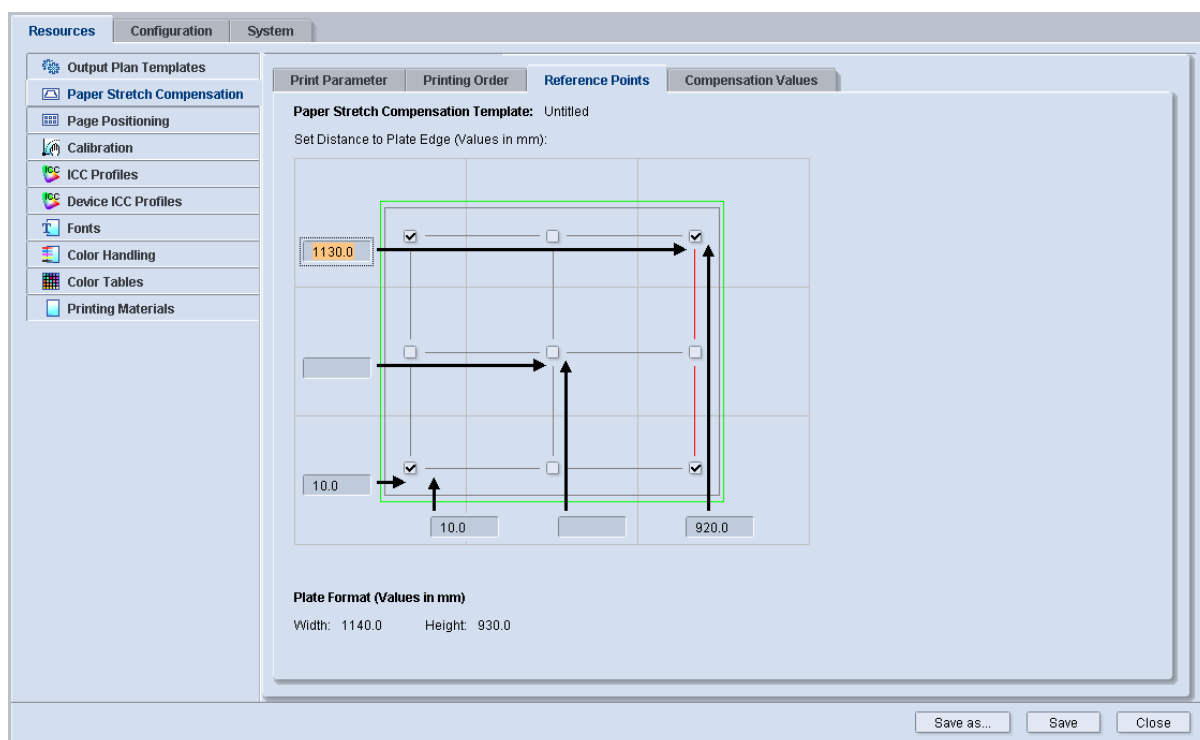
Note: Color handling templates are not filed in the Master Data Store.

Proceed as follows:

1. Select the color table you want in the "Color Table" list box.
2. Select the spot color you want. The name of the selected color displays in the "Name" list box. You can type the name of a (process or) spot color that you wish to add directly into the "Name" box if you know its name. You can also expand the "Name" box and select a process color if necessary. You should not use "All other spot colors" for paper stretch compensation.
3. The selected spot color is added to the end of the paper stretch compensation color table when you click "Add". To replace a color in the left table, mark the color concerned and click "Over-write".
4. You can add other colors in the same way.

You can then match the number and order of colors in the color table as described above.

Reference Points Tab



Enter the reference points for paper stretch compensation in this tab. The reference points are the positions on the reference sheet where the compensation marks are positioned. The diagram represents the reference sheet. Mark where the position marks are placed in the reference sheet by clicking the position boxes. You must enter the distance from the left or lower sheet edge for every active position. You can take the position values from the Signa Station layout of the reference sheet or you can measure the printed reference sheet.



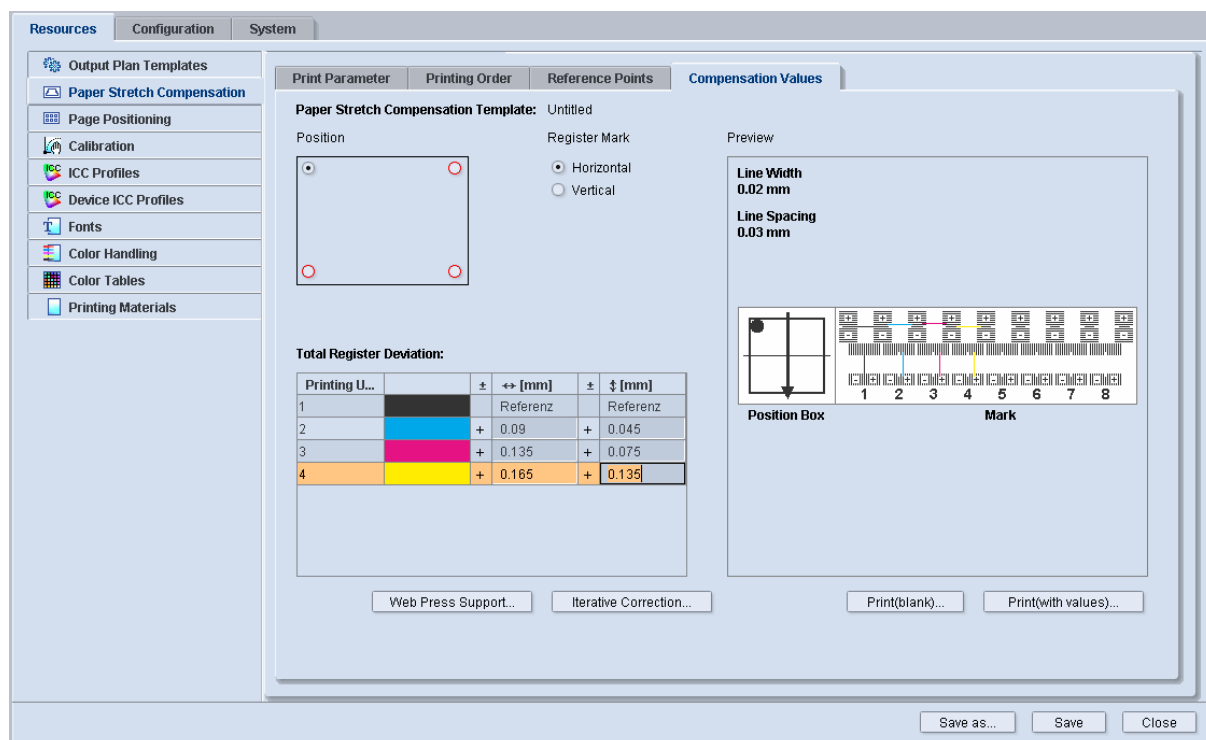
Note: You do not have to specify the positions of the measuring marks down to the last digit. Deviations of a few millimeters generally have no adverse effect on the compensation accuracy.

The unit of measure for the sheet size and for spacing is millimeters.



Note: For web offset printing, you must comply with special defaults for the positions of the measuring marks. Take note of the instructions in the [section "WEB Press Support", page 139](#).

Compensation Values Tab

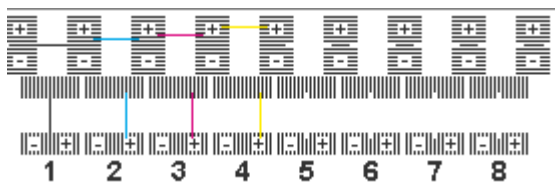


After you defined the reference points, you must enter the measured data for each reference point into the "Total Register Deviation" table.

Read off compensation values

To be able to read the compensation values accurately, you may need a magnifying glass or a control microscope. You can print a table with the "Print(blank)" button if a (Office) printer is connected to your MetaDimension PC. You can then jot down the values you read into this table. This lets you record the values without constantly having to enter the data on the MetaDimension PC.

The measuring marks are basically set up as shown in the preview graphic:



Note: You will find a detailed description of the measuring marks and instructions on how to determine the measured data in the documentation that is shipped with the marks.

The measuring mark has a horizontal and a vertical scale with positive and negative values for presses with up to eight inking units. In our example, four colors (K,C,M,Y) were printed and black is the reference color. The black measuring line is always at the "reference line" because the scales and

the black measuring line are printed in the same printing unit. In the example shown, the measuring lines of the other colors have always shifted towards positive values. Negative values can also occur, depending on where the reference color is located in the press. The number of black marks that a measuring line deviates from the reference line produces the reading value as an integer. A measuring line lying between two marks on the scale results in a reading value with one digit after the decimal point.

All current Heidelberg measuring marks have the following scale division:

- Line width 0.02 mm
- Grid Spacing 0.03 mm.



Note: You can run an iterative correction if the compensation you get is not enough (see the [section "Iterative Correction", page 137](#)).

Enter the measuring values

Proceed as follows to enter the measured data:

1. First, mark the position of the measuring mark that is currently being read in the "Position" graphic.
2. Then click the appropriate option in "Register Mark" to specify whether the measuring mark is oriented horizontally or vertically (relative to the orientation of the sheet in printing). These parameters are shown in the preview image.
3. Enter the value determined (see the [section "Read off compensation values", page 136](#)) into the "Total Register Deviation" table. The reference color is highlighted automatically in the table preventing you from inadvertently entering values in this position. Enter the horizontal and the vertical value for every other process color. Make sure that you enter the horizontal and vertical values as they are shown in the preview graphic. You can change the sign by clicking the sign column.
4. Now mark the position of the next measuring mark and enter the relevant measured data.
5. Repeat these steps until you have entered the data of all the measuring marks.

After you entered all your data, you can print the table with the compensation values to check it by clicking the "Print(with values)" button. This requires that a suitable printer is connected to the MetaDimension PC.

Iterative Correction

You can increase the accuracy of the compensation you measured by one (or more) iterative measurements if you are not satisfied with the accuracy of a simple compensation measurement. Proceed as follows:

1. Measure compensation and save the compensation template.
2. Assign this paper stretch compensation template to an Output Plan in "Printing Mode" and save this Output Plan.
3. Output the reference sheet again using this Output Plan and print it until you have a production sheet.

4. Open "Resources > Paper Stretch Compensation" in the Printmanager and open the compensation template you saved beforehand.
5. Go to the "Compensation Values" tab and click the "Iterative Correction" button. The "Iterative Correction" window displays:

Paper Stretch Compensation Template: Demo_Sheet

Position

Register Mark

☒ Horizontal
☐ Vertical

Preview

Line Width
0.02 mm

Line Spacing
0.03 mm

Total Register Deviation:

Printing U...	±	↔ [mm]	±	± [mm]
1		Referenz		Referenz
2		+ 0.09	+	0.045
3		+ 0.149500...	+	0.09
4		+ 0.225000...	+	0.135

Iterative Register Deviation:

±	↔ [mm]	±	± [mm]
	Referenz		Referenz
+	0.0	+	0.0
+	0.0145	+	0.015
+	0.06	+	0.03

Position Box

Mark

1 2 3 4 5 6 7 8

Apply Cancel

6. Now type in the measured data into the "Iterative Register Deviation" table as described in the [section "Enter the measuring values", page 137](#). The total values of the measurement(s) saved beforehand and the iterative correction display in the "Total Register Deviation" table for checking purposes.
7. Click "Apply" to apply the data you entered. The "Iterative Correction" window closes. The "Total Register Deviation" table in the "Compensation Values" tab now shows the values that result from iterative correction.
8. Click "Save". The compensation template now corrects using the values determined with iterative correction.
9. Assign the compensation template to your Output Plan in "Printing Mode" in order to use it for printing.

WEB Press Support

Compensation values are needed only in X and Y direction for web presses. You can enter the paper stretch compensation values either in percent or in absolute percent.



Prerequisites: Only measuring marks that are positioned in the outermost corners of the reference sheet may be used for web offset printing. The horizontal spacing for marks positioned on the left margin is zero; the horizontal spacing for marks on the right margin is equivalent to the full sheet width. The vertical spacing for the upper marks is equivalent to the full sheet height; the vertical spacing for the lower marks is zero. Only if the positions of the measuring marks meet these requirements can you open the "Web Press Support" window with the "Web Press Support" button in the "Compensation Values" tab.

Print Parameter **Printing Order** **Reference Points** **Compensation Values**

Paper Stretch Compensation Template: Demo_WEB

Set Distance to Plate Edge (Values in mm):

Mark Position	X (mm)	Y (mm)
Top-Left	0.0	1140.0
Top-Right	930.0	1140.0
Bottom-Left	0.0	0.0
Bottom-Right	930.0	0.0

Plate Format (Values in mm)

Width: 1140.0 Height: 930.0

Buttons: Save as... Save Close

You can use the "Web Press Support" button in the "Compensation Values" tab if you specified the mark positions correctly. You can enter your measured data when you click the button.

Web Press Support

Paper Stretch Compensation Template: Untitled

Print Unit	Delta-X [%]	Delta-Y [%]
1	0.0	0.0
2	0.0	0.0
3	0.0	0.0
4	0.0	0.0

Print Unit 1

Y

X

Unit:

☐ mm

☒ Percent

☐ Percent (Absolute)

Plate Format (Values in mm)

Width: 1140.0 Height: 930.0

Apply Cancel

In paper stretch compensation for web offset printing, compensation values are specified frequently in percent and not in mm. You can choose between the following units of measure in "Unit":

- mm

Compensation values are determined as described in the [section "Read off compensation values", page 136](#).

- Percent

Compensation values are entered as "Delta percentages". If you set this option, a value of "Delta 0%" means that there is no paper stretch. For example, a value of 0.05% measured for paper stretch in the second printing unit is entered as the measured value.

- Percent (Absolute)

If you set this option, a value of "100%" means that there is no paper stretch. For example, a value of 0.05% measured for paper stretch in the second printing unit is entered as "100.05% absolute".

Page Positioning

In this section, you can create a device-specific page positioning scheme to a certain extent.

The basic functions include:

- definition of the pages, their size, orientation and the distances from one another.
- assignment of pre-defined punch parameter sets to a page positioning scheme.
- positioning of fixed and freely definable marks.

Although page positioning schemes can be defined in Prinect MetaDimension, you cannot dispense with imposition software. The scope of functions is not sufficient. The page sequence, in particular, cannot be influenced and no right/left page can be defined.

The finished page positioning is assigned to a job via an Output Plan template. Remember that the page positioning setup is device-specific and that you must select an output device before you open an Output Plan template.

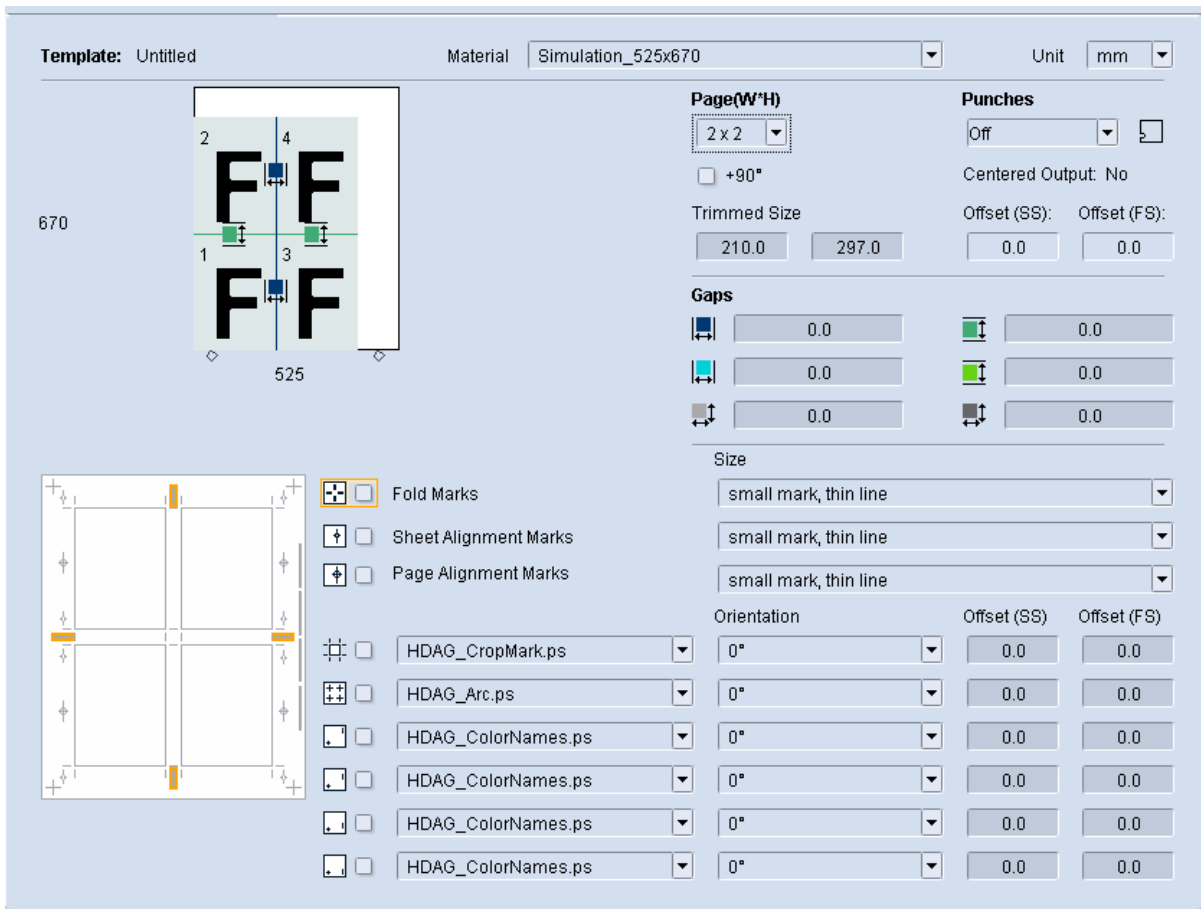
The option of selecting material is for viewing it on the screen only. The material that is set in the Output Plan or in the default Output Plan will be used for output.

In "Unit", you can set the unit of measure to "mm" or "Inch" for the geometric data displayed in the graphic and text boxes.

Creating or Editing a Page Positioning Scheme

First click the "Page Positioning" tab. The dynamic window lists the page positioning schemes available for all the installed devices. You can edit a marked scheme after clicking the "Open" button. You can delete a marked scheme by clicking the "Delete" button. You can also select several schemes (with the Ctrl or Shift key) and delete them.

If you want to create a new scheme, select the desired output device in the dynamic window in the device list. If there are already page positioning schemes for a device, you will see a small plus sign in the folder symbol in front of the device name. Click on the folder symbol to see the scheme for this device. You can mark an item in this window and edit or delete the scheme, or you can create a new scheme with the "New" button. The page positioning editor now appears:



In the top area of the window, you can create and parameterize a page positioning scheme under visual supervision.

The scheme, e.g. 2x2, is selected with "Page (W*H)" and is displayed in proportion to the other current settings.

With the "+90°" option, all pages of the scheme can be turned 90° counter-clockwise so that portrait pages are turned to landscape and vice versa. You can rotate single pages by 180° by clicking the page icons in the graphic with the left mouse button.

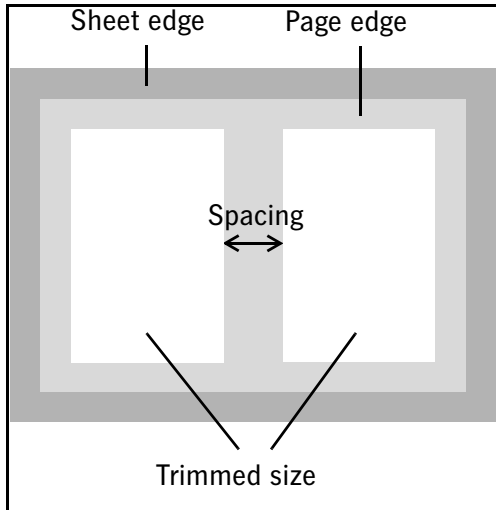
Punches

The punch parameter sets are selected in "Punches". These are sets of parameters that were generated by the Speedway Engine Manager and saved as F1, F2, etc. Depending on the punch parameter set selected, information as to whether the sheet will be centered when output and which offset will be used is displayed below the "Punches" box. For a more detailed explanation of how centered and non-centered output, with and without reference punches and offset settings work, please refer to the online help of the Speedway Engine Manager. "Punches" is disabled for proofing devices and, for example, for Topsetter platesetters.

Trimmed size

The page size is set in the "Trimmed Size" box. In this case we are dealing with the net page format without trimming. That means a potential trimming will go beyond the area of the "trim size". The page is always centered on the trimmed area.

Each page is surrounded by border. The marks belonging to each page are placed within this border. Marks which overlap into a neighboring page are suppressed. The whole scheme is surrounded by a sheet edge. The sheet-specific marks are placed here.

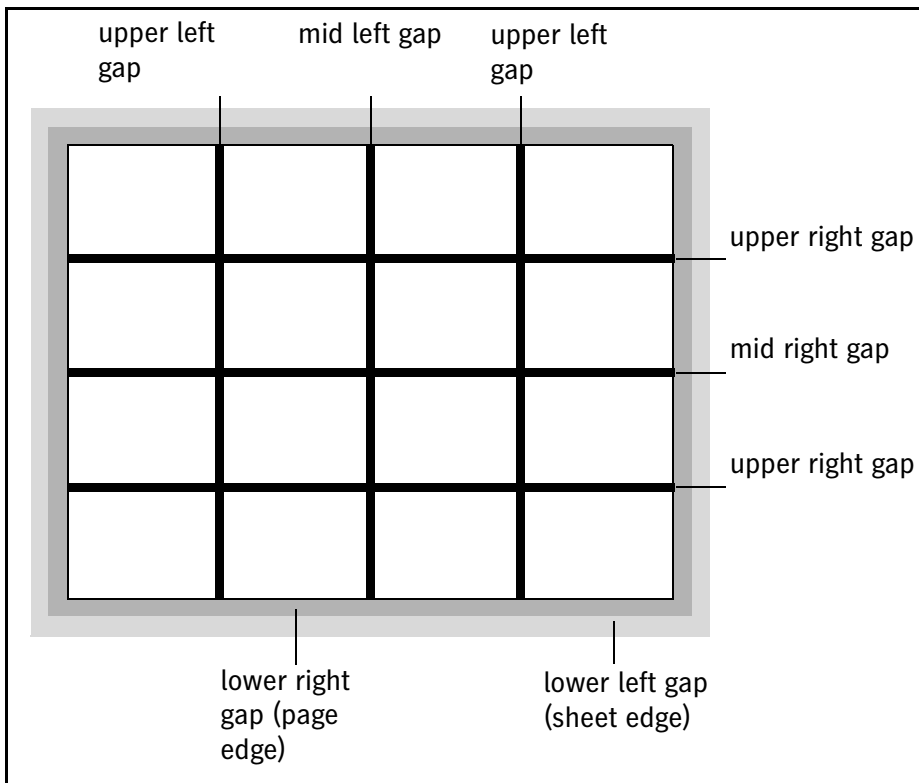


Pages which are bigger than the size set in "Trimmed Size" overlap the page and sheet margin. For 2-ups, the maximum page area which can be displayed is half a sheet, so that the pages have direct contact with each other. For a 4up sheet, the maximum page area that can be displayed corresponds to one quadrant of the sheet, etc. The corresponding marks of the page and sheet margin are still displayed in their respective positions and overwrite the page content.

Spacing

"Gaps" denotes the spaces between the trimmed areas.

In the boxes below "Gaps", you can set the gaps between the single pages as well as between the page and the sheet margin. The illustration below shows which value in the "Gaps" input field defines which page gap or which edge. The set "Gaps" value is displayed in the graphic when you click another parameter box.



Positioning Marks

In the lower part of the window, marks are set and adjusted under visual supervision. Because of a lack of space, only a 4-up scheme is displayed as an example in the graphic area. For bigger schemes, you must imagine the marks placement as an extended version of the example displayed.

Two groups of marks are available: fixed marks and freely definable marks.

Folding marks, page alignment marks and sheet alignment marks are included in the fixed marks. The position of these marks is fixed in relation to the page or arrow size. They can easily be enabled or disabled and their size and line thickness can be varied ("Size" input field). Three mark sizes and two line thicknesses are available, which give the following six possible combinations:

- small mark, thin line
- small mark, bold line
- mid-sized mark, thin line
- mid-sized mark, bold line
- big mark, thin line
- big mark, bold line

Marks for the page trimming, sheet register marks and customer-specific marks, e.g. process control bars or gray areas are included in the freely parameterizable marks. These marks can be activated and de-activated. Contrary to fixed marks, their position can be changed in relation to the pages.

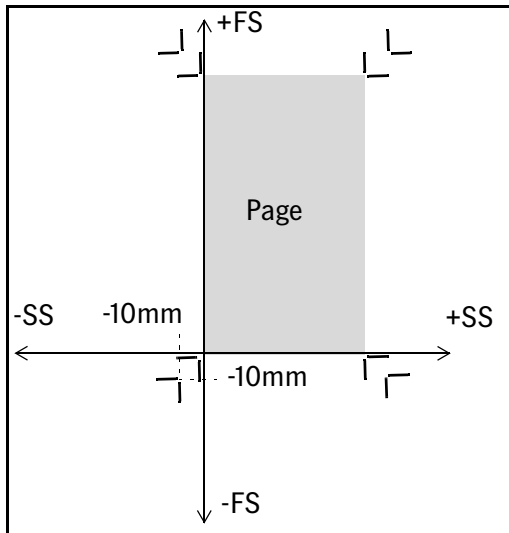


Note: Because of the variety of customer-specific marks, it cannot be guaranteed that every mark is output according to expectations.

Orientation and Offset of Marks

Orientation and offset of the marks can be set in the "Orientation" and "Offset (SS)/Offset (FS)" boxes ("SS" is slow scan direction and "FS" is fast scan direction). A mark can be turned by 0°, 90°, 180° or 270° around its reference point. Rotation is carried out in 90°, counter-clockwise, steps.

The reference point of the offset value is normally the lower left corner of the lower left page in the template. Only for sheet register marks is the reference point at the bottom left of the sheet margin. In general, a positive offset value moves the mark into the page area and a negative offset value moves the mark out of the page area. The reference mark for the parameterization is the lower left mark. The parameterization is performed symmetrically from the reference mark and transferred to other marks of the same type. In the example below, the offset for the lower left mark is set to -10 mm in the slow scan and fast scan directions.



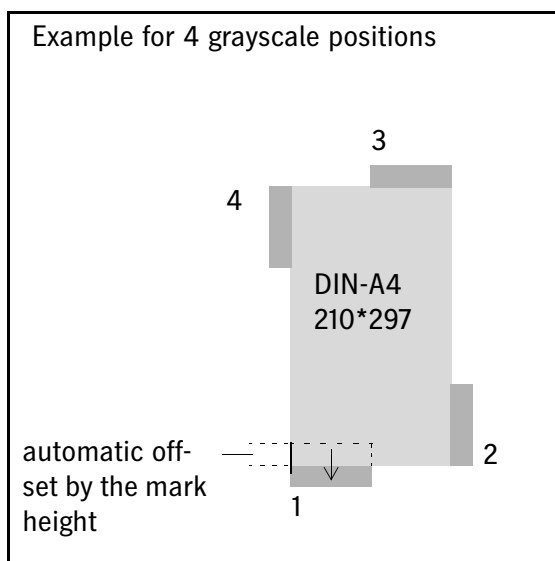
For non-centered marks, the reference point is positioned in the lower left-hand corner of the mark, so that the output of the mark is normally within the page area. Because of this, all non-centered Heidelberg marks are automatically offset on the mark level in the fast scan direction. This ensures that these marks are automatically positioned outside the page area when the offset is interactively set to "zero" (see graphic below). When centered marks are used (e.g. sheet register marks), the offset must always be explicitly set up, i.e. the marks are not moved automatically.



Note: Automatic positioning does not influence the display of the marks in the Prinect MetaDimension user interface. Make sure that you leave enough space for the marks when you are creating the page layout.

In the following illustration, an example gray area is schematically displayed in the following four different positions:

Position	Rotation	Offset(SS)	Offset(FS)
1	0°	0 mm	0 mm
2	90°	210 mm	0 mm
3	180°	210 mm	297 mm
4	270°	0 mm	297 mm



Calibration

You can use the "Calibration" system resource to manage calibration data for process calibration and linearization. Process calibration and linearization are performed using an independent tool, the Calibration Manager. Different calibration groups can be created for each imagesetter or TIFF-B export device. If a device has calibration groups for process calibration, these are shown in "Calibration". You can show or hide the list of calibration groups by clicking the device name.

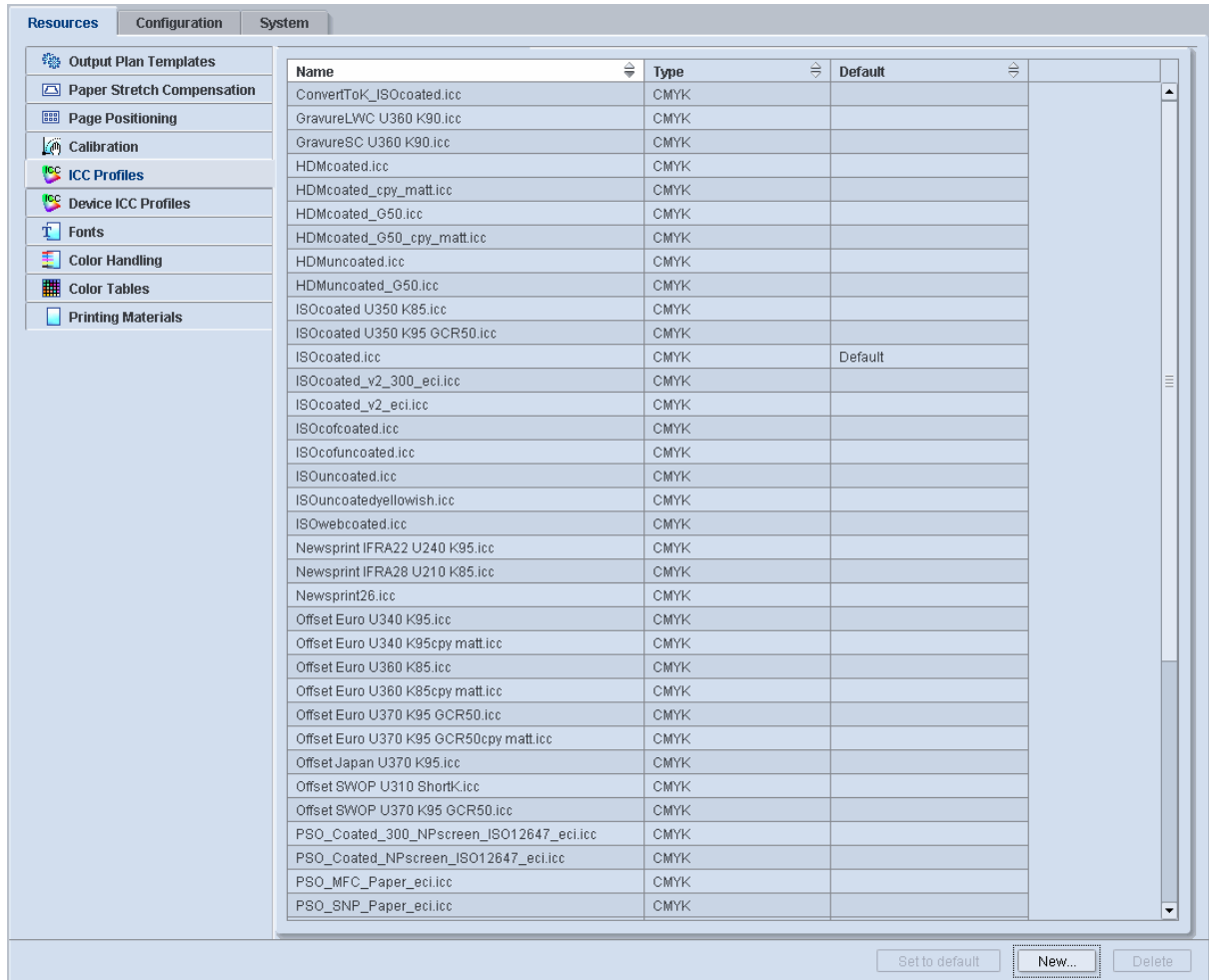
To edit calibration groups, double-click the one you want. The Calibration Manager opens with the group you selected so that you can edit it directly. The Calibration Manager launches and doesn't display a group if you click the "Start" button.



Note: Information about process calibration, linearization and operation of the Calibration Manager can be found in the "Calibration Manager / Calibration Tool - Operating Manual" or in the Calibration Manager Online Help. You can find information about process calibration and linearization in Prinect MetaDimension in the section [Calibration with the Calibration Manager, page 321](#).

ICC Profiles

So-called "ICC profiles" are required for color management in Prinect MetaDimension.

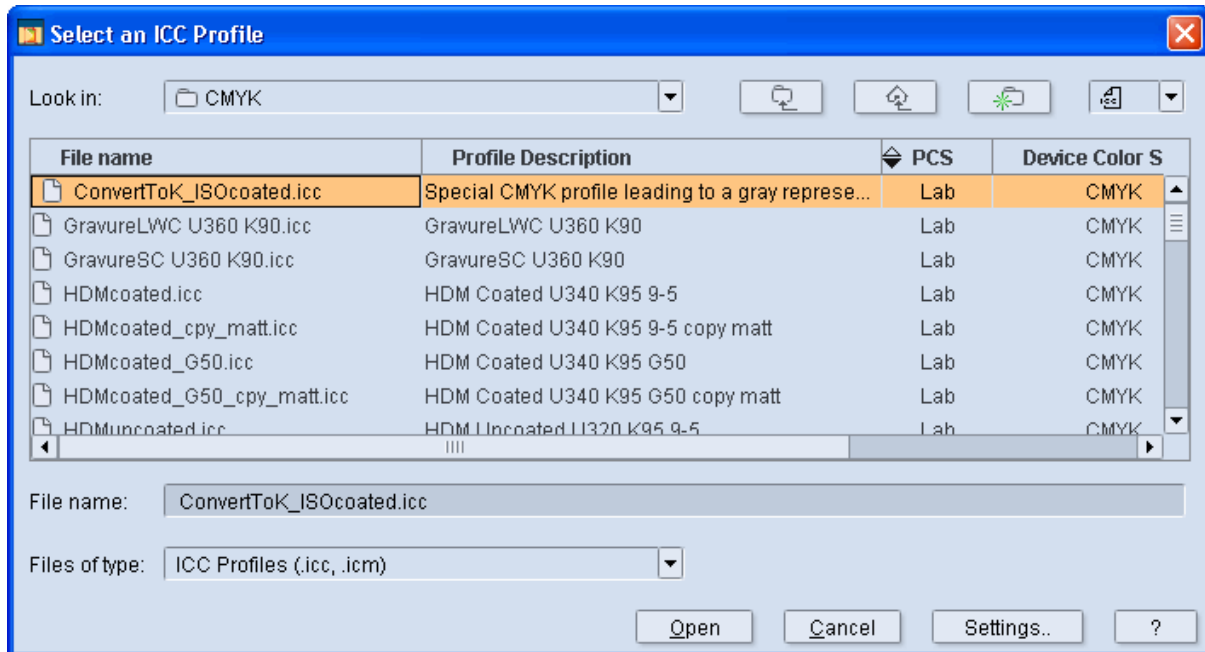


When you click "Administration > Resources > ICC Profiles", a view displays showing the ICC profiles available in Prinect MetaDimension. After installing Prinect MetaDimension a number of ICC profiles are already available. These profiles from Prinect Profile toolbox are intended as examples or a rough approximation to a true-color output and should only be used if it is not possible to create your own ICC color profiles. You can find a description of this profile as a text file in the profile folder (e.g. "D:\MetaDimension\SystemData\Resources\ICCProfiles\CMYK\ReadMe... .pdf" or "D:\MetaDimension\SystemData\Resources\ICCProfiles\RGB\ReadMe... .pdf").

If you wish to make real use of Color Management you should create your own ICC profiles. You can find more detailed information on Color Management – in general and specially in connection with Prinect MetaDimension - in the section [Basics of Color Management, page 313](#).

Adding ICC Profiles

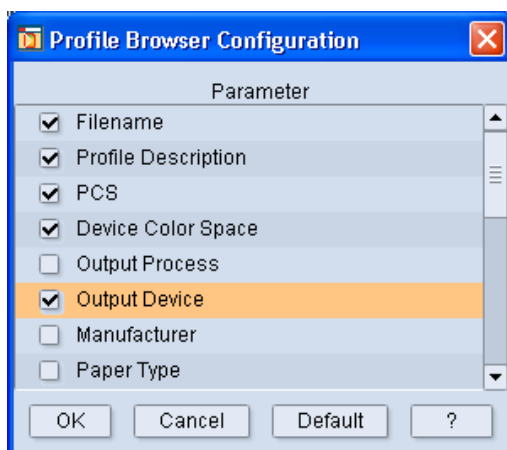
Select "New" to add new ICC profiles to the system that you created with the "Princt Profile Toolbox" software, for example. You can load ICC profiles from another computer if networked, import them from data media or you can copy the files to a folder on your Prinect MetaDimension PC beforehand and then load them from this folder.



In "Look in" select the folder with the ICC profiles that you wish to install. The ICC profiles installed with Prinect MetaDimension in a standard setup are located in "D:\MetaDimension\Ressources\ICC-Profiles". You can also load ICC profiles from a mapped folder or external data media.

Profile Browser Configuration

The "Select an ICC Profile" dialog shows you information about the ICC profiles such as a profile description to help you select a suitable ICC profile. You can set which information will be shown by clicking the "Settings" button.



In this dialog, you can select which information will be shown in the "Select an ICC Profile" dialog. The contents shown vary according to the information in the ICC profiles. Information such as "Profile Description", "Output Process" or "Paper Type" are defined when the profile is created with the software designed for this. "Default" restores the default settings (as shown).

Assigning ICC Profiles

Use "Administration > Resources > Output Plan Templates > New" to open the Output Plan Editor with the default Output Plan template (see the [section "Buttons in "Administration > Resources > Output Plan Templates""](#), page 125). In the "Color Management" section, you can enable Color Management and assign the input ICC profiles in "ICC Profiles" in the "Device Dependent Color" group. In the "Output" group, you can assign an output ICC profile in "Press Profile".

You can find details about working with the Output Plan Editor in the section [Prinect MetaDimension Output Plan Editor](#), page 217.



Note: The terms "input ICC profile" and "output ICC profile" refer to data processing in Prinect MetaDimension. For the RIP, input ICC profiles are profiles that are used when interpreting job data for color space transformation into the device-independent CIEL*a*b* color space. This should not be confused with ICC profiles which are used when digitizing image data, e.g. when scanning. For the RIP, output ICC profiles are profiles that convert the data from the device-independent CIEL*a*b* color space to the color space of the output device connected to the RIP (this is usually the CMYK color space). This color matching takes printing materials into account, for instance. For more details about this subject, please see the section [Basics of Color Management](#), page 313.

You can create ICC profiles for pixel images and for vector graphics in RGB and CMYK formats.

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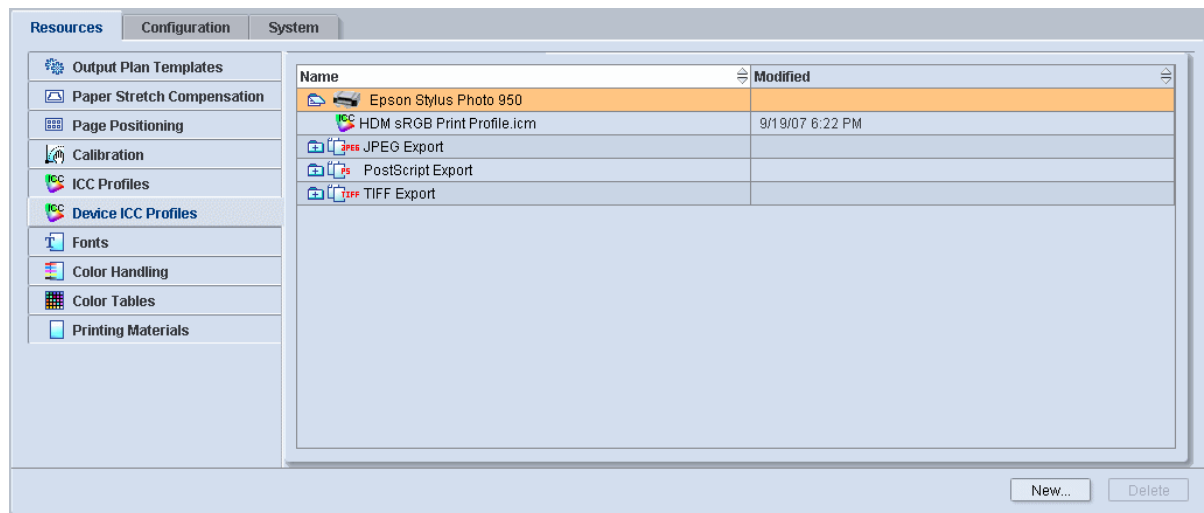
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In the "Press Profile" box, you can set a CMYK output profile that is then used for color matching to the connected output device or for the planned printing process.

You can find detailed information about setting options in the "Color Management" group in the sections [Color Management, page 269](#) or [Color Management in Prinect MetaDimension, page 319](#).

Device ICC Profiles

"Device ICC Profiles" is especially designed for proofer ICC profiles that are controlled by the Proofing Engine Manager, in other words, for concept proofers or proofers that are installed with the "Proof Open" option. This group is available only if suitable proofers are installed. ICC profiles for these proofers have their own administration section for reasons of clarity.



A list of installed proofing devices is shown in the dynamic area. If there is a plus sign in the folder symbol in front of the device name, there is already an ICC profile for this device and you can open the list of ICC profiles for this device by clicking on the folder symbol. Management and embedding of these ICC profiles into Output Plan templates is the same as for the other ICC profiles (see the [section "ICC Profiles", page 147](#)).



Note: ICC profiles are assigned to all proofers driven by the Color Proof Pro Engine Manager solely through the Color Proof Pro software and not in the "Device ICC Profiles" group.

Fonts

Prinect MetaDimension handles the following font types:

- fonts that are installed on the Prinect MetaDimension PC and are available for all jobs if required. The following font types are supported: Adobe Type 1, Adobe Type 3, Adobe Type 0 and CID Fonts (with the relevant installation software)
- fonts that are sent together with the document from the DTP workstation to Prinect MetaDimension. The following font types are supported: Adobe Type 1, Adobe Type 3, Adobe Type 0, TrueType, CID Fonts, OCF Fonts, NewCID Fonts and MultipleMaster Fonts.

Font handling in Prinect MetaDimension ensures that the outputs are correctly exposed and enables a high data throughput, whilst at the same time not overtaxing the network. It is, however, important to know that certain font handling functions only work trouble-free, when the corresponding fringe conditions are fulfilled.

The use of fonts handled centrally by Prinect MetaDimension requires that the code of the print job (PostScript or PDF) indicates which fonts are required for the print job and which fonts are available on the DTP workstation. This identification, especially with older versions of applications, is not always very clear since the PostScript code created often does not have information on the type of fonts.

It may happen that an application integrates certain fonts into the job as bitmap fonts that cannot be recognized as such by Prinect MetaDimension. This means that such jobs are output with bitmap fonts and not with the fonts installed in the RIP. Enabling the "Check Fonts" option (see the [section "Handling missing fonts", page 154](#)) cannot always prevent bitmaps fonts from being output. Bitmap fonts may be output despite the enabled "Check Fonts" option if the generated PostScript code does not clearly indicate whether they are PostScript fonts or bitmap fonts.

Fonts installed in Prinect MetaDimension

Prinect MetaDimension is delivered with a number of Adobe Type 1 fonts. These standard fonts are installed together with the Prinect MetaDimension software. These fonts are automatically used for job processing if a job has one or more of these installed fonts, i.e. they are by reference in the job.

In "Administration > Resources > Fonts", you can view a list of the fonts installed. These fonts constitute a "fonts pool" which is generally available for all jobs processed by Prinect MetaDimension. The list also contains the fonts that are added by the user. If, for example, one of these fonts is used in a document and is not embedded in the code of the job, Prinect MetaDimension can use this font for output.

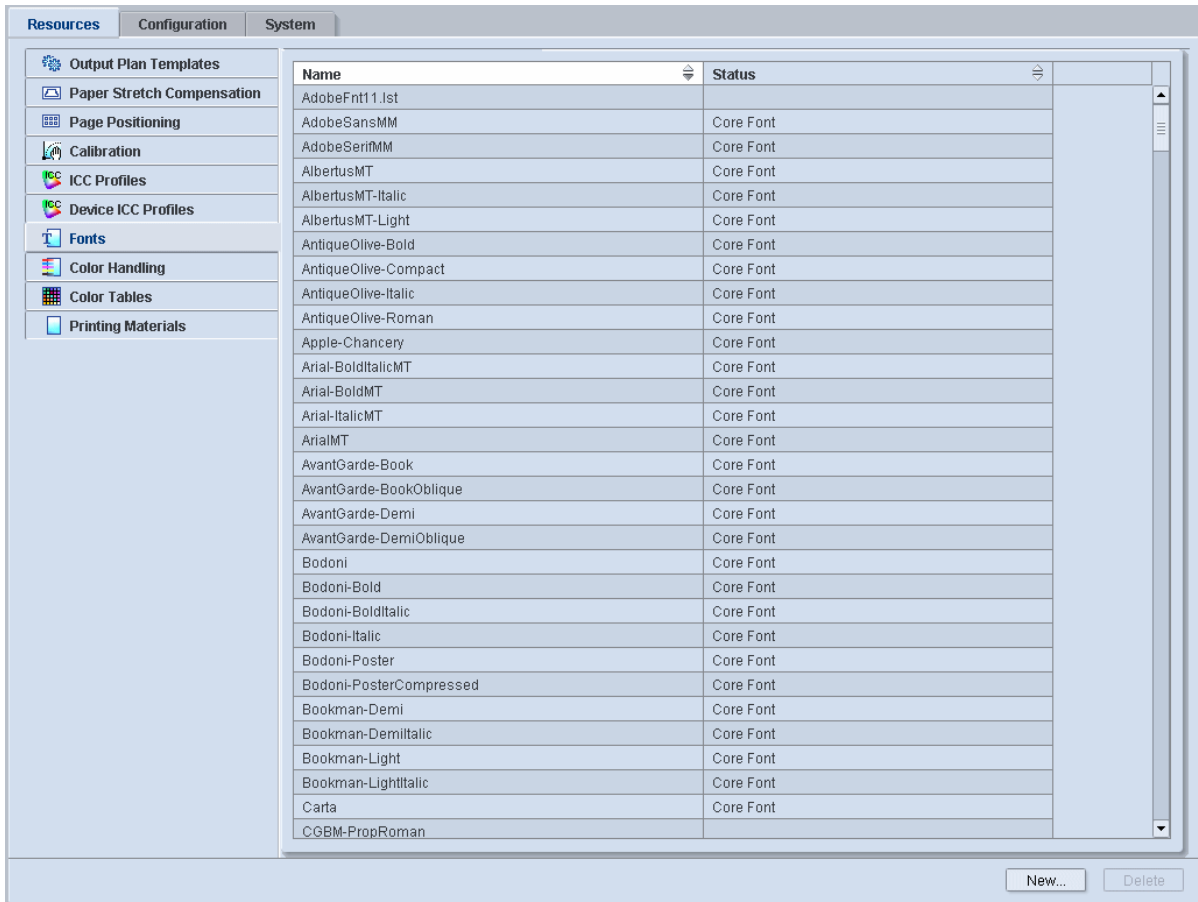
The system first looks among the fonts installed by the user. If nothing is found here, then the search includes the default fonts shipped with Prinect MetaDimension. If the font is not found anywhere, Prinect MetaDimension reacts to this as defined for the case of missing fonts in the Output Plan settings in "Policies" (see the [section "Fonts", page 307](#)).

The core fonts lie hidden and write-protected in the interpreter part of the Prinect MetaDimension software. You can neither delete the core fonts nor replace them with external font download applications. If needed, these fonts can be added as user-installed fonts of the same name by the Prinect

Administration - Resources

MetaDimension Printmanager with "New" in "Resources > Fonts" (see the [section "Loading Fonts", page 152](#)). The core fonts hide more or less behind the user-installed fonts and, as a result, have no effect. The core font is effective again when the user-installed font is deleted.

A font that is available as a core font and then installed subsequently by the user as well is handled as a user-installed font, as described above, and used for output.



Loading Fonts

You can load other fonts as follows:

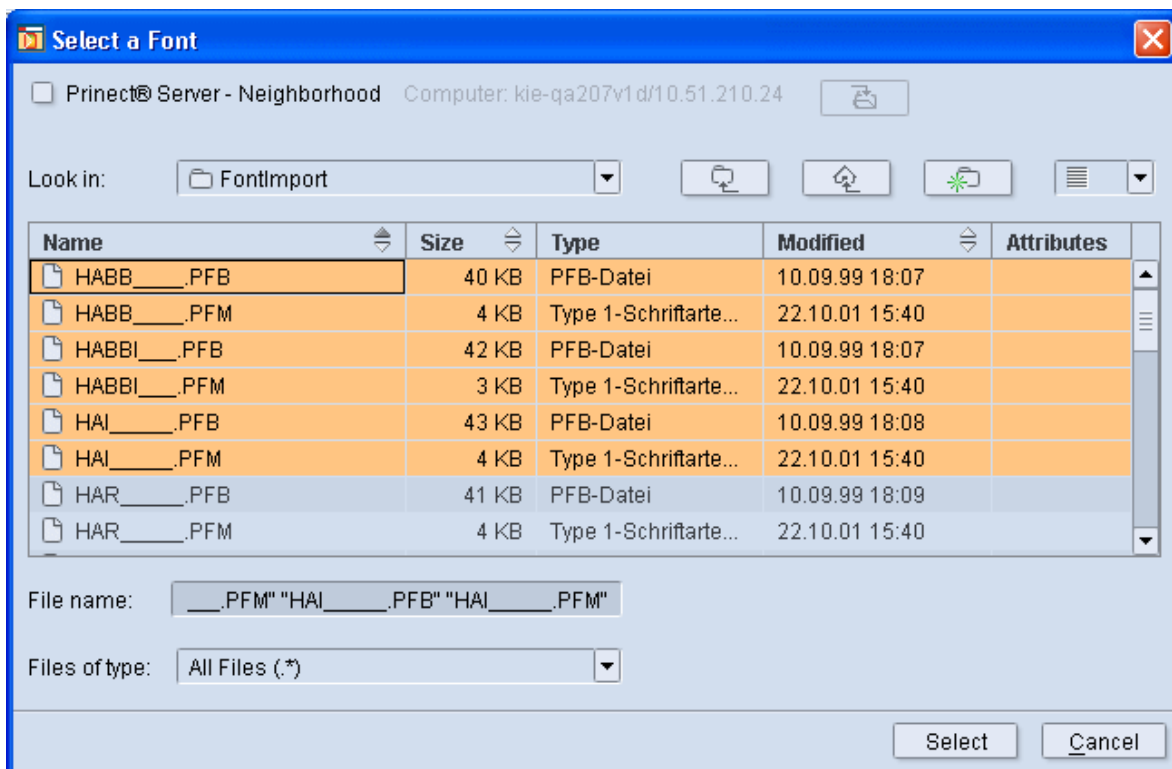
Copying Fonts through the Network

You can import fonts from the Macintosh or PC to Prinect MetaDimension via a network link as follows:

1. Create a "FontImport" folder on the MetaDimension PC, e.g. in "D:\MetaDimension". Then share this folder in the network (Windows share and if needed Macintosh share).
2. At the Macintosh or PC, map the "FontImport" folder on the Prinect MetaDimension PC.
3. Copy the desired fonts into the "FontImport" network directory. Attention: You can only use Adobe Type 1 and Type 3 fonts for MetaDimension!

Installation of Fonts in the MetaDimension Printmanager

1. Using the "New" button in the fonts list, you can load additional fonts in Adobe Type 1 or Type 3 format from the "FontImport" folder, a hard disk or removable disk or from a hot folder. The "Select" dialog is opened.



2. Pay Prerequisites: to the setting for the "Files of type" option. Select:
 - "All Files (*.*)" to include fonts in the Macintosh font format,
 - "Fonts (.pfb, .pfa)" to list Windows fonts only.
3. In "Look in", select the folder in which the font files are located. This can be a folder on the Prinect MetaDimension PC or in principle also another folder in the file system (removable disk, mapped drive, etc.). When you check the "MetaDimension Neighborhood" option, the MetaDimension program folder is set as the root directory and shown in "Look in". It is a good idea to use this option if the fonts you wish to install are located in a subfolder of the MetaDimension program folder.
4. Select the fonts you need (for Windows fonts, files with extension ".pfb" or ".pfa") and click "OK". Fonts selected here are automatically copied to a local folder and are then available for printing with Prinect MetaDimension.
5. After installation, you can delete any fonts in the "FontImport" folder that you copied there beforehand. Do this, for example, with Windows Explorer.

Delete installed fonts

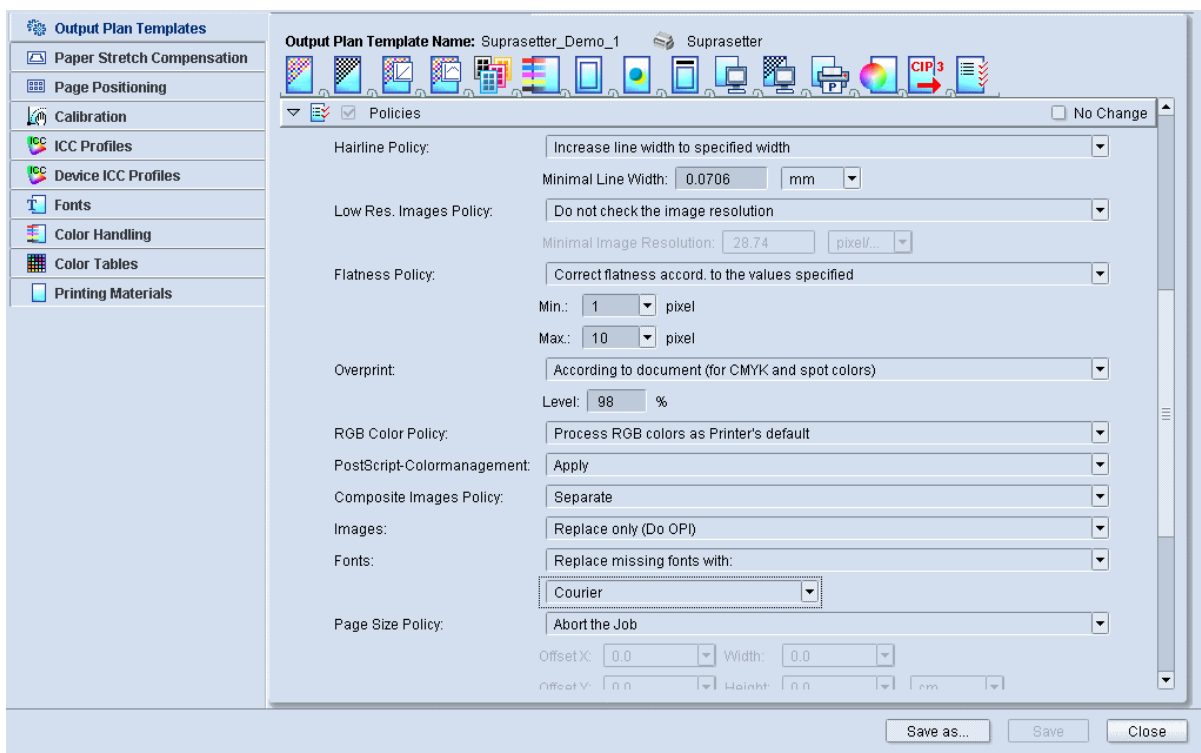
If you wish to delete fonts, mark one font or more in the list and then click the "Delete" button. You can only delete fonts which are not write-protected. After you have confirmed an alert message, the fonts will be deleted from the list and the font folder in the files system of the MetaDimension PC.

Handling missing fonts

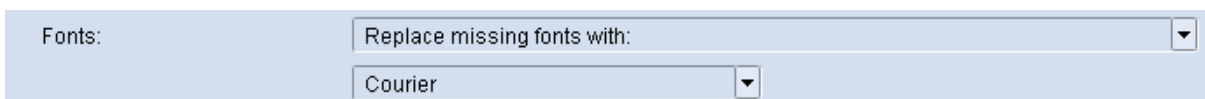
You can control the way Prinect MetaDimension reacts to missing fonts by the appropriate configuration in the Output Plan templates. When you assign an Output Plan template to a virtual printer, the virtual printer reacts as configured in the Output Plan.

Open an existing Output Plan template or create a new one (with "Administration > Resources > Output Plan Templates").

Click on the triangle to open the "Policies" area:



There are two selection lists available for the "Fonts" parameters:



You can select between "Abort the job if fonts are missing" and "Replace missing fonts with" in the top box.

If you selected "Abort the job if fonts are missing", job processing is aborted if one or more fonts referenced in the job code cannot be found. This is accompanied by an error message.

Each missing font is replaced by the one you set in the lower font list box if you select "Replace missing fonts with". You should only use this option if you are sure that the selected substitute font comes close to the original font in the job. All missing fonts are replaced by the one substitute font you set, even if they differ greatly. In such a case, your printed result is generally not what you want.

To be on the safe side, you should select "Abort the job if fonts are missing" if you are not sure and, if necessary, check the job with missing fonts or install the missing fonts.

When you create a print job, you should only use fonts that are installed as vector fonts (Adobe Type 1/Type 3 or True Type format) on the DTP workstation. In addition, you should integrate all the fonts used in the job into the output code (PostScript or PDF). To do so, use the relevant options in the printer settings or of Acrobat Distiller on your DTP workstation.

Avoiding Exposures with Bitmap Fonts

In order to be sure of preventing faulty imaging with bitmap fonts, you should observe the following conditions:

- When you are printing from a Macintosh computer (OS 9 and older) you should use a printer driver version 8 or higher. This printer driver allows communication with Prinect MetaDimension and can evaluate feedback on the fonts available and forward these to the application program. In this case you should always pay attention that the application, from which printing takes place, always works perfectly with this printer driver. Printer drives from version 8 onwards create a PostScript code which enables fonts to be clearly identified.
- You should make sure that all required fonts are available on Prinect MetaDimension or on the application computer.



Note: To ensure that no bitmap fonts are printed, all fonts in the document should be installed as Adobe Type 1 or Type 3 fonts on the DTP workstation, at least while the job is being printed. Always observe the remarks on missing fonts when the document is being loaded or during printing.

We generally recommend that all frequently used fonts should be installed onto the application computer.

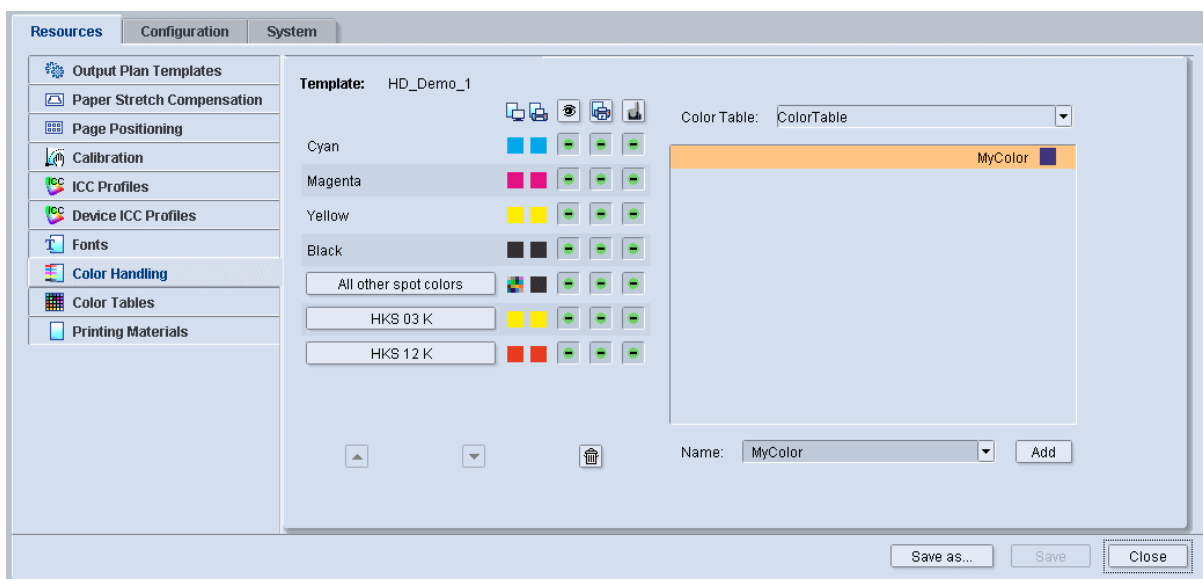
Color handling

In this section, you define how colors will be handled. The settings for color handling are saved as a template. You can select a color handling template in the "Color Handling" window in the Output Plan Editor (refer to the [section "Color handling", page 250](#)) and assign it to an Output Plan. This template then controls how colors will be handled in jobs that are processed with the Output Plan concerned. You can also use color handling templates to define the order of colors for paper stretch compensation (see the [section "Printing Order Tab", page 131](#)).

You can define the following settings with the color handling templates:

- ["Adding Spot Colors to the Color Handling List", page 156](#)
- ["Removing Colors from the Color Handling List", page 156](#)
- ["Adding Process Colors or All Other Spot Colors to the Color Handling List", page 157](#)
- ["Defining the Separation Order", page 157](#)
- ["Setup for replacing spot colors by process colors", page 157](#)

To edit a template, mark it and click the "Open" button. Click the "New" button to create a new template. The details view is opened:



The left section below the template name lists the separations set. Only the separations listed here are output if a color handling template is enabled in the Output Plan.



Note: Color handling can also be done in a job context: Open a job, go to the "Preview/Color" tab (see the [section "Preview / Color Tab", page 69](#)) or "Color" tab (see the [section "The Color Tab", page 86](#)) and define your settings for color handling. Then save the settings for the job.

Adding Spot Colors to the Color Handling List

In the "Color table" list box on the right of the window, you can select one of the color tables managed in "Color tables" (see the [section "Color Tables", page 159](#)). The box below displays the colors in the selected color table. To select a color for color handling, mark the color and click "Add". The color is added to the list of set separations.

Removing Colors from the Color Handling List

If you do not wish to output a separation, select this item in the list and then click the trashcan icon.

Adding Process Colors or All Other Spot Colors to the Color Handling List

The CMYK process colors and the item "All other spot colors" are available in the color handling list for you to create a new color handling template. "All other spot colors" controls the way any spot colors found in the processed jobs are output. These spot colors are not listed explicitly in the color handling list.

You can delete one or more process colors or "All other spot colors" from the list. To undo such a step, select a process color or "All other spot colors" in the "Name" list box in the right half of the window and click "Add" to add it back to the color handling list.

You can also enter a spot color name manually in the "Name" list box. A color name is automatically selected if the letters you type match a spot color name in the list above. You can now add the selected spot color to the color handling list by clicking "Add". This is a fast way of selecting a color name in a table with a long list of colors.

Defining the Separation Order

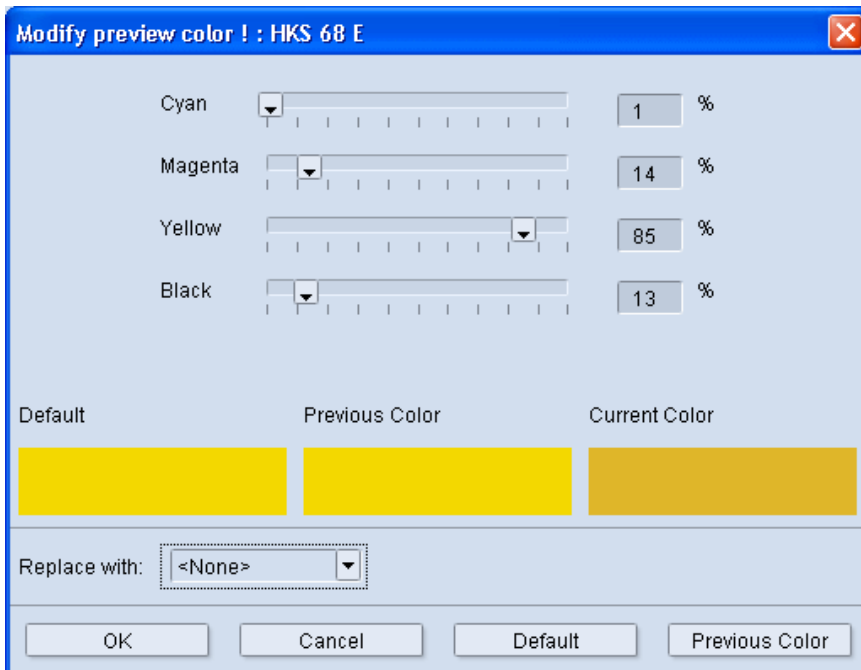
Select a color whose position you wish to change. Now click the up or down arrow to move the color accordingly. You define the order in which the separations are output with the order in this list.

Icons in the Color Handling List

The first two columns beside the separation items show you the preview colors i.e. the output colors. The three columns with the device icons show you that the colors will be output with the displayed devices (screen, proofers and/or imagesetters). A green point shows that the option is activated; a red point stands for a deactivated option. Click on the options to change them. An appropriate icon also appears if a spot color or "All other spot colors" will be replaced by CMYK. If the spot color is replaced, the corresponding color is shown in the "Output color" column. If no replacement is set, a black box with two question marks is displayed.

Setup for replacing spot colors by process colors

You can replace spot colors by single process colors or by a CMYK representation. You cannot replace process colors. Click on the spot color in the color management list that is to be replaced (the list entry is shown as a button). A test window opens in which you can parameterize the spot color replacement.



Select the desired option in the "Replace with" list. The following options are available:

- "None": The spot color is not replaced.

If you select the "None" option and confirm the dialog you can then use the "Visible", "Proofer" and "High-resolution output" check boxes. The spot colors are output as they are on the relevant device when you check these options. The spot colors are not output on the device if the boxes are unchecked. An appropriate device icon beside the selected spot color item indicates that output is checked.

- "CMYK": The spot color is replaced by a CMYK representation.

If you select this option and confirm the dialog an icon will appear beside the selected spot color entry. You cannot use the "Show/hide separations", "Proofer" and "High resolution output" column check boxes if the spot color will be replaced by process colors.

- A process or spot color replacing the spot color.

If you select one of these colors, an icon for the selected color appears beside the selected spot color entry. The check boxes in the "Show/hide separations", "Proofer" and "High resolution output" columns are dimmed because the spot color will be replaced by another color.

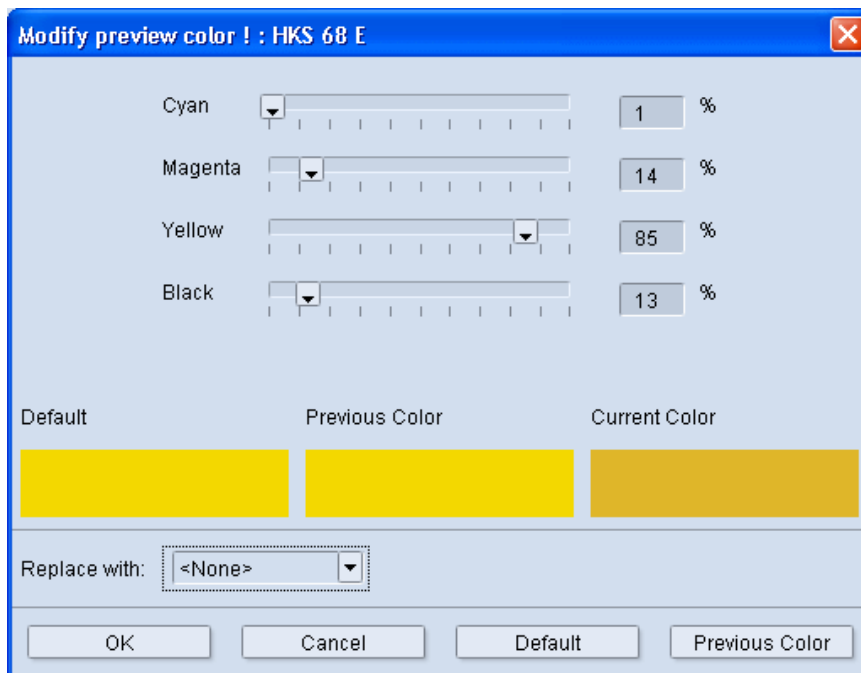


Note: CMYK mapping of spot colors is not possible in pre-separated jobs.

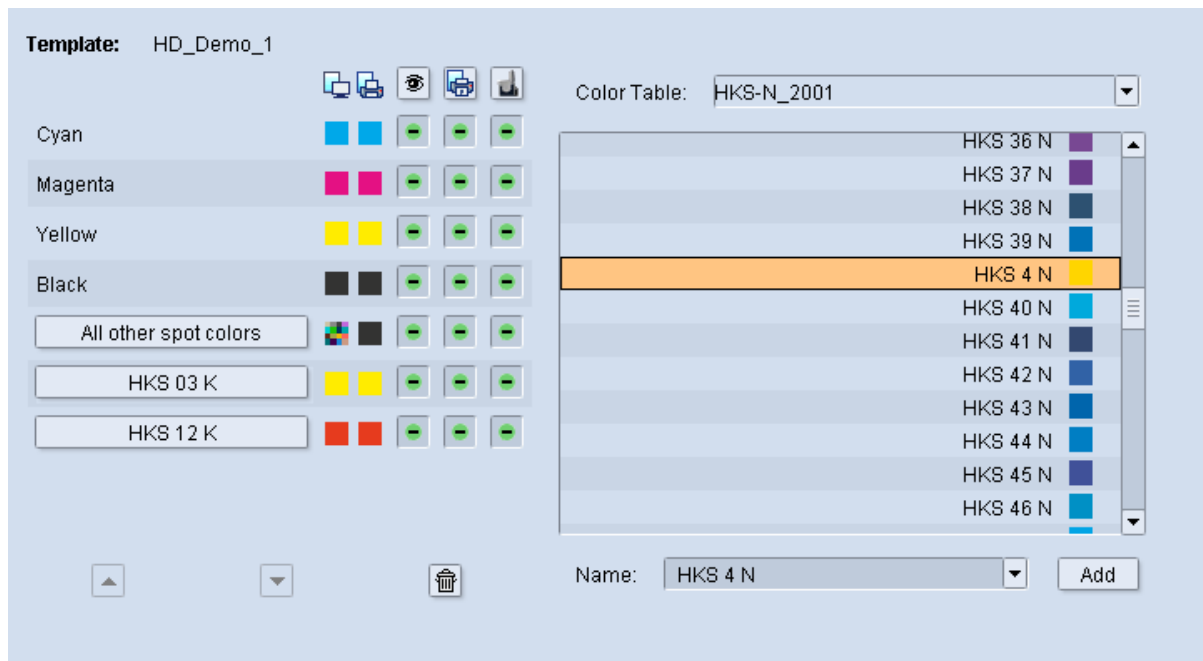
Color Tables

Color tables are used for the following purposes in Prinect MetaDimension:

- for CMYK representation of spot colors for proofing
- for trapping jobs that have spot colors
- for the "Convert spot colors to CMYK" option in "Color Handling" in the Output Plan template settings (see [section "Color handling", page 250](#)).



- for the CMYK mapping of spot colors during the configuration of color handling templates in "Administration > Resources > Color Handling" (see the [section "Color handling", page 155](#)).



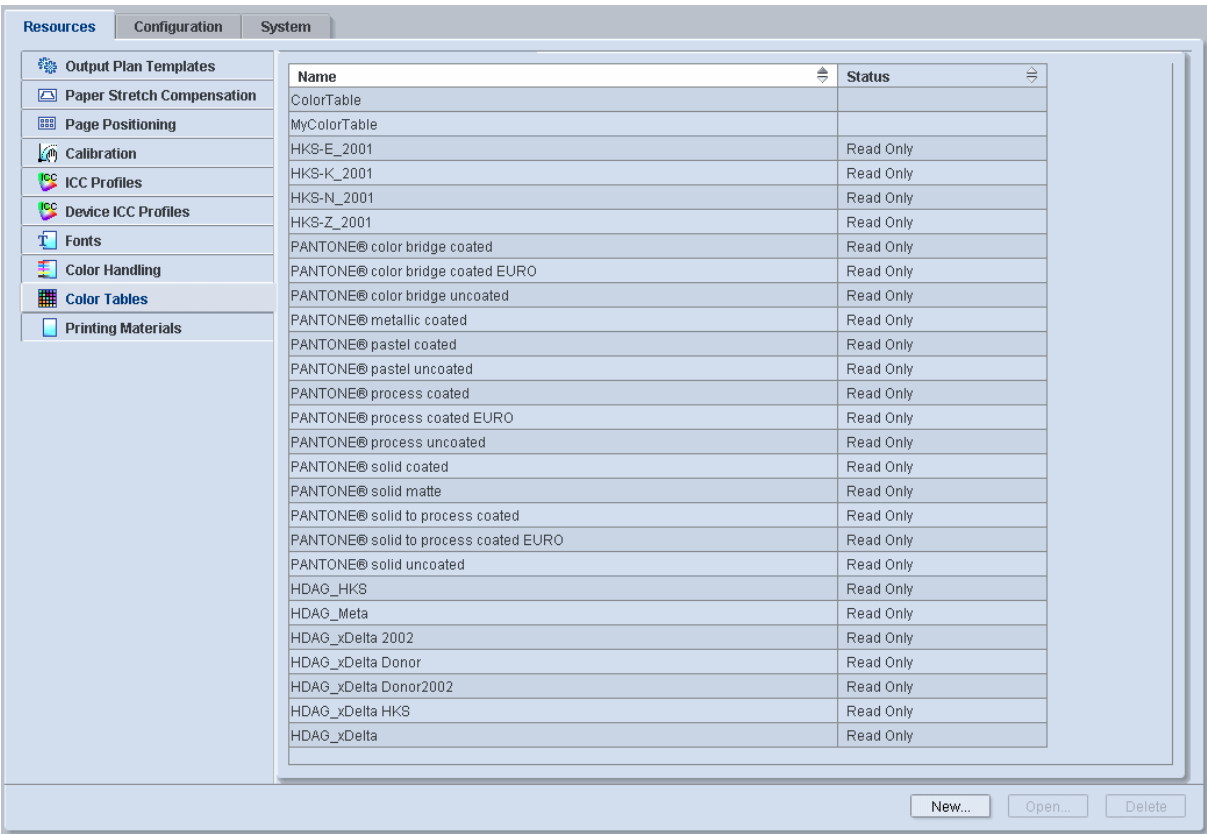
A number of different color tables (PANTONE®, HKS, Heidelberg color tables and Heidelberg Delta Technology-conform tables) are included in the shipment. These tables are write-protected. In addition to these standard color tables, you can define color tables of your own.



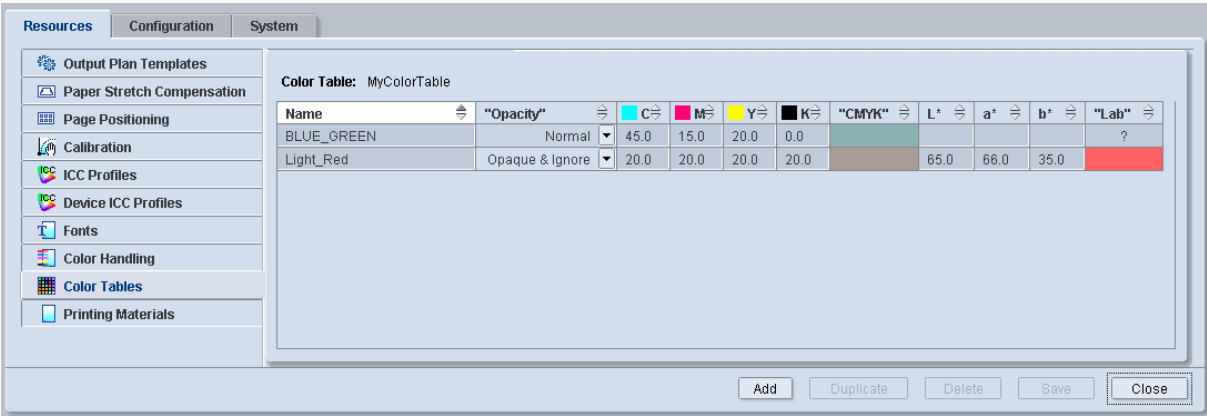
Note: PANTONE® color tables are only shown if the PANTONE® libraries are licensed and if the appropriate permissions are assigned to the user who wishes to use them.

List of Color Tables

In "Administration > Resources > Color Tables", you can view a list of existing color tables.



In order to see the contents of a color table and edit it as required, double-click the required table or mark it and click the "Open" button. The following view appears:



This shows you the single parameters of the spot colors.

The existing color tables are searched if, for example, Prinect MetaDimension detects during processing that the job has a spot color that must be converted to a CMYK representation for printing. If the required spot color is found, the CMYK representation defined in the table is used.

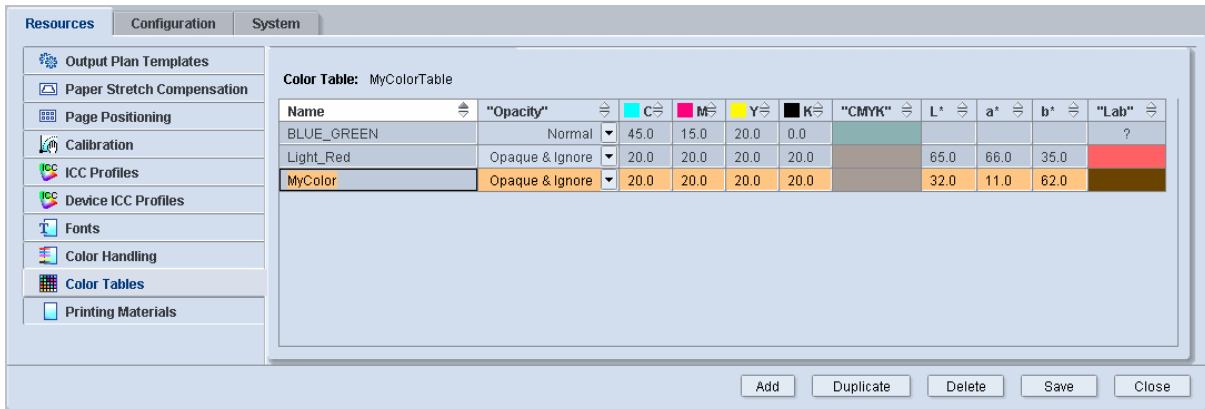
You can define your own color tables if you work with special spot colors (refer to the [section "Self-defined Color Tables", page 162](#)). You can manually set the search order for spot colors in the Output Plan settings in "Color Handling" (refer to the [section "Color handling", page 250](#)).

Administration - Resources

When searching spot colors, first of all the color tables you have defined yourself and then the standard color tables are searched. The search is made in alphabetical order.

Self-defined Color Tables

To add your own table, you can edit the "dummy" color table and save it as a new table or you can create a new table with the "New" button. The following view appears:



Enter a name and the CMYK or L*a*b* percentage values for the first spot color in your new table.

For trapping, a density value is calculated from the CMYK values during job processing.

The behavior of special spot colors (paint, metallic paint, etc.) during trapping can be influenced by the type of "Opacity". This selection list contains the following properties:

- "Normal"

Objects of this color type are trapped.

- "Transparent"

Objects of this color type allow the objects below them to be trapped. "Transparent" can be used for printing paints and punch contours.

- "Opaque" - nontransparent

Objects of this color type prevent trapping of the objects below them, however allow trapping at the edges. "Opaque" can be used for metallic printing inks.

- "Opaque and ignore" - Ignore nontransparent

Objects of this ink type prevent trapping for objects below them and adjacent to them. "Opaque and ignore" can be used for metallic printing inks.

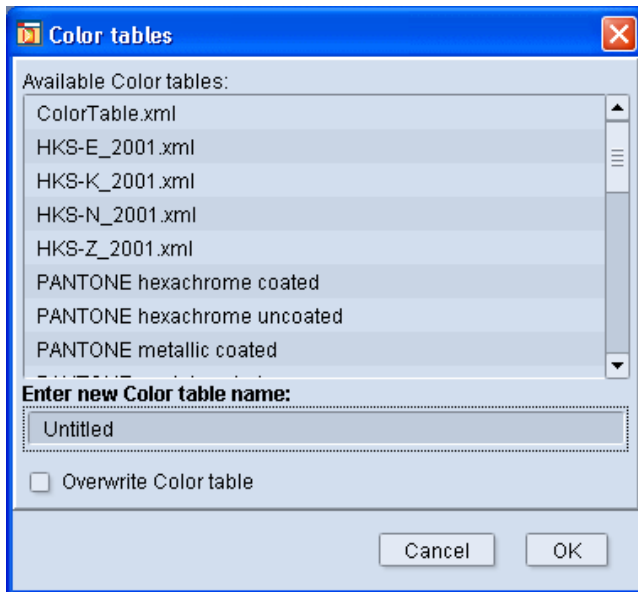
In the box to the right of the CMYK or L*a*b* color data, you can see a preview of the hue set.

A further color can be added to the table using "Add".

If you wish to delete a color from the table, select the color concerned and click the "Delete" button.

Click "Save" to save a modified color table.

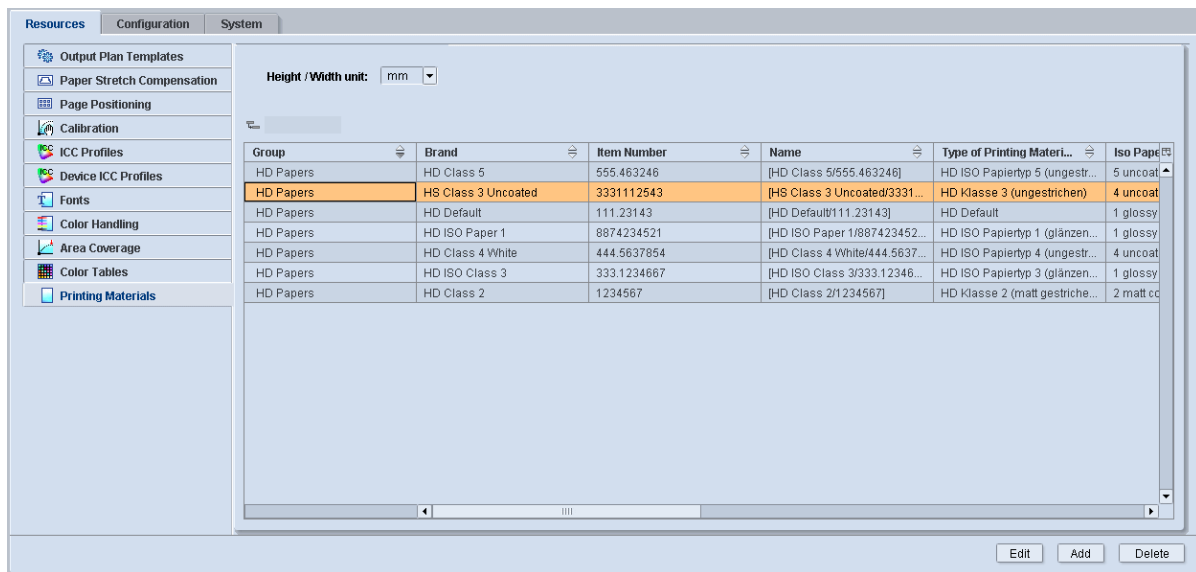
Click "Save" to save a new color table. The "Color tables" dialog appears.



Enter a name in the entry line and then click "OK". The color table is saved in "D:\MetaDimension\Resources\ColorTables" (instead of drive "D:" you can also set another drive during installation; "D" is the default). An existing color table of the same name will be overwritten if you checked the "Overwrite color table".

Printing Materials

In this section, you manage the printing materials (paper grades) used for output on the press. The printing material parameters that you enter in this tab support a standardized output process. You can select the printing materials you defined in this section for the Output Plan of an imagesetter in "Printing Mode > Printing Material" (see the [section "Printing material", page 246](#)).



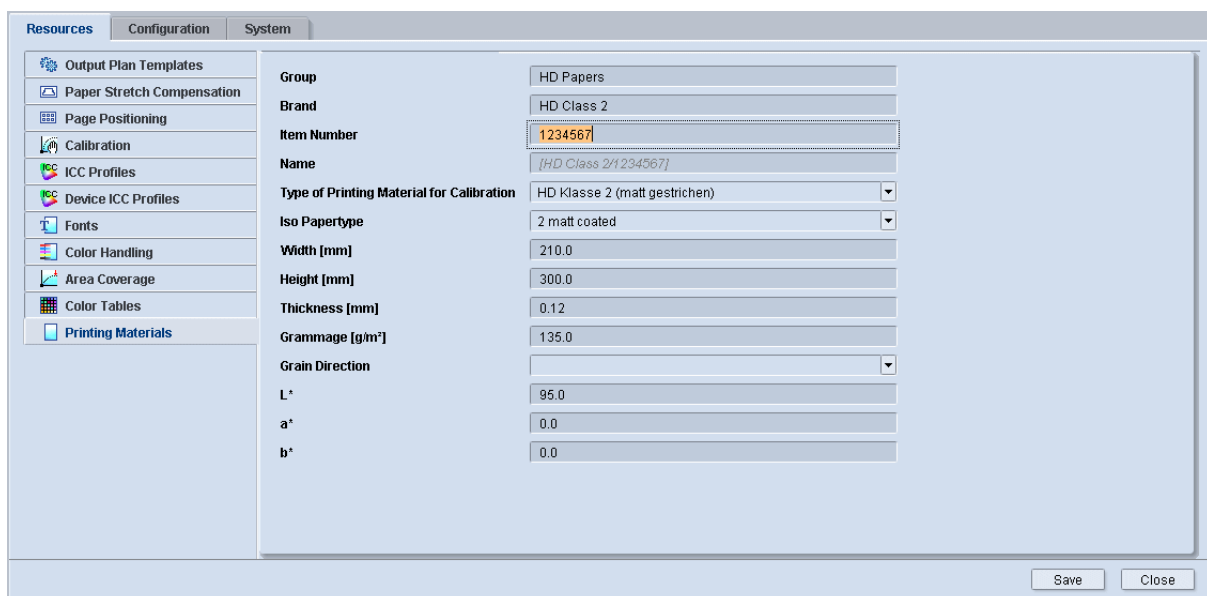
Group	Brand	Item Number	Name	Type of Printing Material	Iso Paper
HD Papers	HD Class 5	555.463246	[HD Class 5/555.463246]	HD ISO Papier typ 5 (ungestr...	5 uncoat
HD Papers	HS Class 3 Uncoated	3331112543	[HS Class 3 Uncoated/3331...	HD Klasse 3 (ungestrichen)	4 uncoat
HD Papers	HD Default	111.23143	[HD Default/111.23143]	HD Default	1 glossy
HD Papers	HD ISO Paper 1	8874234521	[HD ISO Paper 1/887423452...	HD ISO Papier typ 1 (glänzen...	1 glossy
HD Papers	HD Class 4 White	444.5637854	[HD Class 4 White/444.5637...	HD ISO Papier typ 4 (ungestr...	4 uncoat
HD Papers	HD ISO Class 3	333.1234667	[HD ISO Class 3/333.12346...	HD ISO Papier typ 3 (glänzen...	1 glossy
HD Papers	HD Class 2	1234567	[HD Class 2/1234567]	HD Klasse 2 (matt gestrichen...	2 matt co



Note: Printing materials are managed by Prinect MetaDimension if Prinect MetaDimension is running without any connection to a Master Data Store (see the [section "Prinect Integration Layer \(PIL\) as a Communication Level in the Prinect System", page 36](#)). If there is a Master Data Store, printing materials are managed by this service. Especially in a Prinect environment, printing materials can be defined also by other applications, for example, a MIS system and entered in the Master Data Store.

Defining Printing Materials

You can define new printing materials in the material list with "Add" or modify an existing entry with "Edit".



Group	HD Papers
Brand	HD Class 2
Item Number	1234567
Name	[HD Class 2/1234567]
Type of Printing Material for Calibration	HD Klasse 2 (matt gestrichen)
Iso Papertype	2 matt coated
Width [mm]	210.0
Height [mm]	300.0
Thickness [mm]	0.12
Grammage [g/m²]	135.0
Grain Direction	
L*	95.0
a*	0.0
b*	0.0

The following parameters are available for naming and identifying printing materials:

- "[Group](#)"
- "[Brand name](#)"
- "[Item Number](#)"
- "[Name](#)"
- "[Type of Printing Material for Calibration](#)"
- "[ISO Paper Type](#)"
- "[Width, Height, Thickness](#)"
- "[Grammage](#)"
- "[Grain direction](#)"
- The single components of the [L*a*b*](#) color space.



Note: If you do not know various parameters when you are creating a new printing material, you can take the values from the reference table to complete your data:

Grade (ISO)	Grammage	L*, a*, b*	Thickness
Type 1 gloss-coated	135 g/m ²	95, 0, 0	120 µm
Type 2 matt-coated	135 g/m ²	95, 0, 0	120 µm
Type 3, web, glossy coated	-	-	-
Type 4 uncoated	135 g/m ²	95, 0, 0	120 µm
Type 5 uncoated, yellowish	135 g/m ²	88, 0, 6	120 µm

Group

The "Group" parameter lets you group printing materials for faster identification if you should have a large number of materials. You can enter a freely selectable group identifier in the "Group" column, but it is not mandatory that you specify this. Using the "Group" parameter is a good idea especially if you wish to group the materials (see the [section "Grouping Printing Materials", page 167](#)).

Brand name

You can enter a brand in this box, for example, the one used by the manufacturer.

Item Number

No item number is used or there is no point in using one if Prinect MetaDimension is not connected to a Prinect Integration System or an MIS system (Prinance). In this case, the brand is used as the name and clearly identifies the printing material by its name. Item numbers are entered automatically if MetaDimension is connected to an MIS system. If this is not the case, you can enter brands for new printing materials in this column.

Name

Printing materials are defined in Prinance if Prinect MetaDimension is embedded in a Prinect Integration System that works with Prinance as its MIS system. In Prinance, printing materials are managed solely by item number. As a result, different item numbers may be defined for one brand. In this case, it's possible for you to define an alternative identifier for the printing materials in the "Name" column. A name is generated automatically if you don't enter an identifier in this column. This name then appears in the Output Plan in "Printing Mode > Materialname" (see the [section "Materialname Option", page 246](#)). The automatic name is generated based on the following pattern:

- The brand is used if there is no item number.
- The name is made up of the brand and the item number, separated by a stroke, if there is an item number.



Note: Please do not use the term "Default" as the name.

Type of Printing Material for Calibration

Default calibrated paper types are listed in this box. Select the (calibration) paper type that you wish to assign to the paper.



Note: Make sure that you have a calibration for the (calibration) paper you selected (refer to "Calibration Manager / Calibration Tool - Operating Manual").

ISO Paper Type

You can choose between one of five paper types:

- Type 1 gloss-coated
- Type 2 matt-coated
- Type 3 web, glossy coated (for web offset)
- Type 4 uncoated
- Type 5 uncoated, yellowish

Width, Height, Thickness

Enter the geometric data of the paper in this box.

Grammage

Grammage (grams per m²) refers to the exact weight of the paper.

Grain direction

The grain direction is important for folding the paper. You can choose between the following grain directions:

- Long grain and
- Short Grain

$L^*a^*b^*$

The values for the paper's basic color are entered in these columns. The percentages are entered separately for L^* , a^* and b^* .

"Save" button

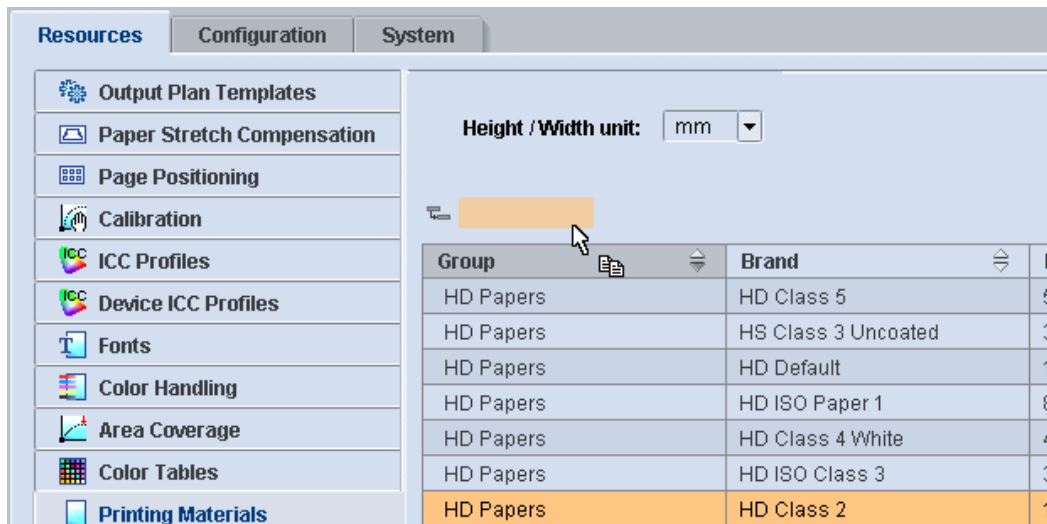
Any changes you made or new items you added are saved by clicking "Save".

Deleting Printing Materials

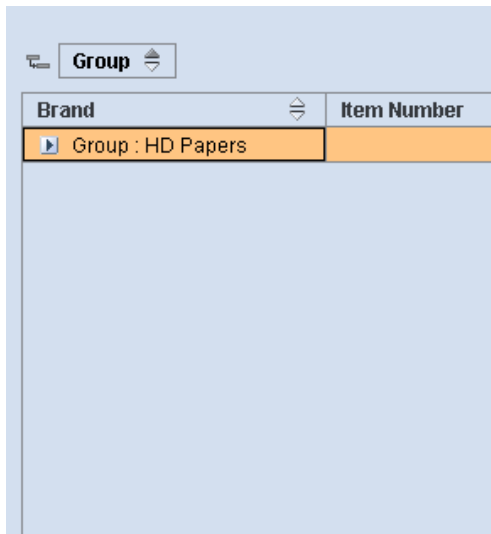
To delete a printing material, select the relevant item in the list and then click the "Delete" button.

Grouping Printing Materials

To give a clearer structure to a long list of printing materials, you can group the list based on the properties of the printing materials. The properties display in the columns in the list. To group the list by a property, mark the appropriate column header and, holding down the left mouse button, drag-and-drop it onto the "Group" icon above the printing material list.

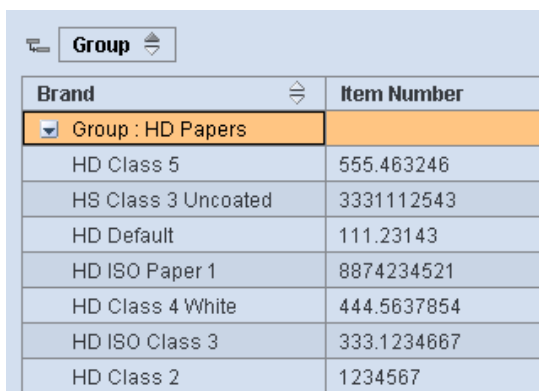


A special cursor (two pages) illustrates the drag-and-drop process. In this way, all the printing materials that have the same properties of the selected column are grouped. The group displays in the table as a popup list and the parameter on which grouping is based displays in the box beside the group icon. The grouped list has a small arrow.



Brand	Item Number
Group : HD Papers	

You can expand the group when you click this icon.

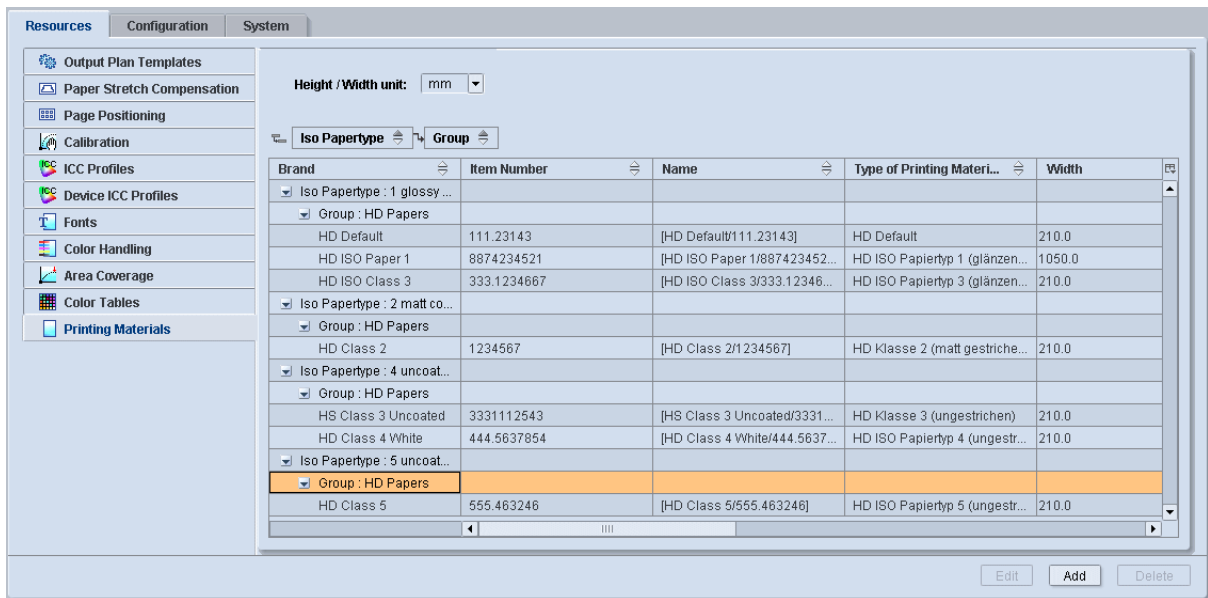


Brand	Item Number
Group : HD Papers	
HD Class 5	555.463246
HS Class 3 Uncoated	3331112543
HD Default	111.23143
HD ISO Paper 1	8874234521
HD Class 4 White	444.5637854
HD ISO Class 3	333.1234667
HD Class 2	1234567

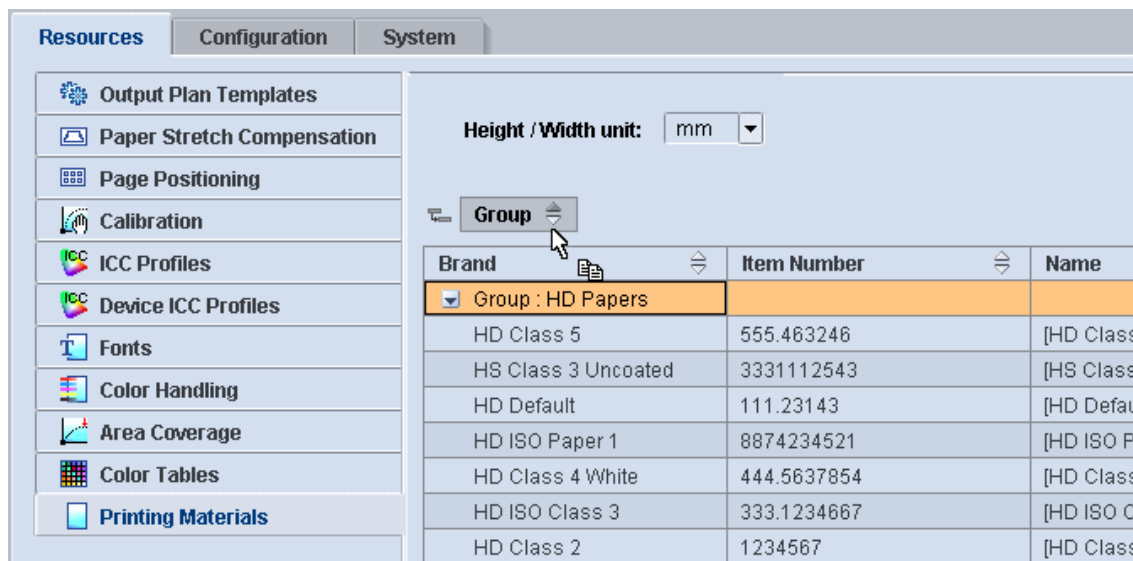


Note: Like in the column headers, you can sort each group in ascending or descending order by clicking the small up and down arrows beside the group parameter.

Now you can select another parameter to continue grouping the list. To do this, select the next column header and drag-and-drop it to the group icon. This new parameter becomes the new main group level. The group hierarchy also displays in the boxes beside the group icon. The top group level is always at the far left. You can create other group levels if required.



If you should discover that a selected group level is no longer needed, then you can undo the group step-by-step. To do this, mark any cell that displays beside the group icon and drag-and-drop it back to the column headers. The order of the hierarchy levels doesn't matter in this case.



These parameters are ungrouped and the single parameter values display again as table columns. In this way, you can undo the entire group.



Note: To assign single printing materials together to a group or to change the group they are assigned to, proceed as follows:

1. Select the items with multiple selection.
2. Select "Edit" in the context-sensitive menu. The edit mode displays.

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3. Only the "Group" box can be used in the edit mode. Type in the group name you want and save the assignment with "Save".

The selected printing materials are assigned to the set group.

Configuration

In "Administration > Configuration", you can define configuration settings that will affect the Prinect MetaDimension system:

- [Virtual Printers](#) ,
- [Image Directories](#) ,
- [Preferences](#) ,
- [Drive Monitor](#) ,
- [Switch language and unit of measure](#) ,
- [JDF Portal Settings](#) ,
- [Prinect® Services](#).

Virtual Printers

The virtual printers represent the "inputs" of the Prinect MetaDimension system. Virtual printers can be installed on the DTP computers as printers or hot folders. Printing to a virtual printer is started from the DTP application in the same way as to a "real" printer. When you have installed the required driver software, you can use all the options the virtual printers offer you on your DTP computer.

When you wish to use a hot folder, you must first generate the job as a file:

- For jobs in the PostScript format you output your print into a file using a PostScript printer driver. You can print this file directly via a network connection to the hot folder or you print it to a local folder and transfer the file in the file system to the hot folder.
- For jobs in the PDF format you must first create a PostScript file (see above) and then convert it to a PDF file using the Adobe® Acrobat Distiller. You can now check the job, for example, using a preview in Acrobat or Adobe Reader. Afterwards you transfer the PDF file in the file system into the hot folder.

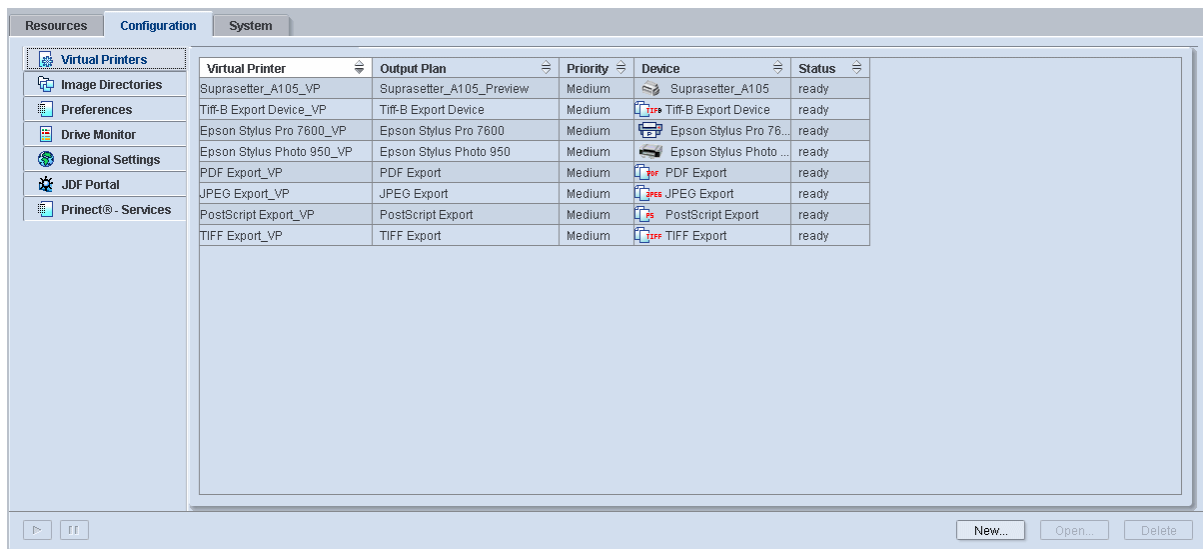


Note: Acrobat Reader operates as a proper "RIP" when opening PDF data but works differently than Prinect MetaDimension. For that reason, it is only suitable for a general job preview. Prinect MetaDimension offers you options for a job preview (see the [section "Preview / Color Tab", page 69](#) or [section "Halftone Soft Proof tab", page 89](#)) for proofing or for all cases where you need an accurate preview of the job.

Setting Options for Virtual Printers

In the "Administration > Configuration > Virtual Printers" view you can see a list of the virtual printers installed.

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Note: After (re)installation of the Prinect MetaDimension software, a "default" virtual printer is created for every installed output device. A default Output Plan template is assigned automatically to this virtual printer. You should customize these predefined parameters to make sure that your data are output with the correct output parameters.

By double-clicking an entry in the list or selecting an entry and then clicking the "Open" button you can modify an existing virtual printer. By clicking the "New" button you can create a new virtual printer. The details view mode for setup of a virtual printer displays:

The screenshot shows the 'Configuration' tab of the Princt MetaDimension software. The left sidebar contains a tree view with 'Virtual Printers' selected. The main area displays configuration settings for a virtual printer named 'Suprasetter_A105_VP'.

Configuration Details:

- Name:** Suprasetter_A105_VP
- Output Device:** Suprasetter_A105 (selected from a dropdown)
- Spool Directory:** D:\MetaDimension\SpoolDir (with a 'Browse...' button)
- Output Plan:**
 - ☒ Output Plan: Suprasetter_A105_01
 - Suprasetter_A105 (unselected)
 - Suprasetter_A105_01 (selected and highlighted)
 - ☐ Ignore Job Output Plan
 -
- Type:**
 - ☐ AppleTalk
 - ☐ Windows Queue
 - ☐ BSPP (TCP / IP) (with IP and Port fields)
 - ☒ Hot Folder (with path: D:\MetaDimension\Hotfolders\Suprasetter_A105)
 - ☒ Use filename for job name
 - ☒ Share this Hot Folder
 - ☒ Include subfolders (with a 'Browse...' button)
- Job Handling:**
 - ☐ Start Job Between: 08:00 And: 20:00
 - ☒ Transfer To The Depot After: 0 Days 06:00 Hours.
 - Depot Directory:** D:\MetaDimension\SystemData\CommonUserPath\Depot (with a 'Browse...' button)
 - ☒ Delete Job After: 0 Days 06:30 Hours.
 - ☐ only when Drive Monitor alertvalue is reached
 - ☐ also delete Jobs with warning status
 - ☐ also delete Jobs with error status
 - ☒ Delete Halftone Soft Proof Files After: 0 Days 06:30 Hours.
 - ☐ No Preview (only TIFF Import)
- Priority:** ☐ Low ☒ Medium ☐ High

You can configure the following properties:

Name:

Enter a name for the virtual printer. This name can be used to set the virtual printer up as a printer on the DTP workstation. When you create a new virtual printer, you must specify a name for this printer that is not used by another printer and also cannot be changed later.

Output Device:

Here you see the main output device installed, i.e. the device where plates or films will be imaged or proofs output.

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Spool Directory:

This is where you can define the spool directory for the virtual printer. All jobs that are sent to the virtual printer are gathered in the spool directory. The spool directory should be located on a hard disk drive which has enough free memory space. The default spool directory can (and should) be defined when you install the Prinect MetaDimension software. Normally, this default setting is the one you need and doesn't need to be changed. This option lets you set up a separate spool directory for a single virtual printer in the case that this printer needs to use its own spool directory because, for example, extremely large data volumes will be processed. Generally, you should select a drive on which neither the operating system nor the Prinect MetaDimension software is installed. This is valid for all the virtual printers that you will set up.

Output Plan:

Here you can assign an Output Plan to the virtual printer. When you check the "Output Plan" box, you can select an Output Plan template from the list. The Output Plan you selected displays in the box above the list box.

If you wish to modify a marked Output Plan at this point, you can open the Output Plan for editing with the "Open" button. This also lets you create a new Output Plan by giving the Output Plan a new name when you save it.

The parameters defined in the Output Plan are applied to the jobs processed by the virtual printer. This is valid for jobs that will be processed with the virtual printer. These settings do not affect jobs that are already being processed. If you do not assign an Output Plan to the virtual printer, the parameters of the default Output Plan for this virtual printer are used.

Ignore Job Output Plan

This option is designed for situations where you have already assigned an Output Plan to a job when printing from your DTP workstation or at the Prinect Signa Station using a specific software. Some applications create a "job ticket" (equivalent of an Output Plan) with trapping parameters. Prinect Signa Station can create a "Job Output Plan" as a single file or it can embed the Output Plan parameters in a PDF job.

The job-specific Output Plan is ignored if you check this option. Instead, the settings from the Output Plan assigned to the virtual printer are used. The default Output Plan for the relevant device is used if the virtual printer is not assigned an Output Plan.

Checking the "Ignore Output Plan" option affects Output Plans generated by the Prinect Signa Station as follows: The "Punches" and "Material" options that were defined in the Prinect Signa Station Output Parameter Set Editor as well as the "Mirror horizontal" and "Mirror vertical" options that you can set in the output parameter set are ignored or overwritten by the settings of the virtual printer.

You define the type of virtual printer in the "Type" section. It is possible to assign a virtual printer several types at the same time. You can choose between the following types:

Apple Talk

The virtual printer can be used as a printer in the Apple Talk network. This requires that the Apple Talk Network Protocol is supported on the Prinect MetaDimension PC (only for Windows server versions).



Note: You can print either via Apple Talk or Remote LPR from a Macintosh OS computer. You will find information about Remote LPR in the [section "Procedure on the Macintosh \(OS X\)", page 351](#).

Windows Queue

This option allows you to set up the virtual printer as a Windows queue. This means that the virtual printer can be installed as a network printer at your Windows DTP workstation. For more information about the "Windows queue" option see the [section "Setting up the Virtual Printer as a Windows Printer \(Windows Queue\)", page 178](#). You will find details about the setup of a virtual printer on a Windows DTP workstation in the [section "Procedure on the Windows PC", page 356](#).

BSPP:

For certain network configurations, for example, if you wish to print from a UNIX computer to Prinect MetaDimension and if you use an application that supports the BSPP protocol, you can assign the virtual printer one of the Prinect MetaDimension PC's TCP/IP addresses (if there are several network cards) for a BSPP connection. The IP number is specified by the system if the Prinect MetaDimension PC only has one network card. You should select an even number greater than or equal to 4002 for the port number. Your system administrator can help you if you wish to assign a TCP/IP address and port number.

Hot folder

When you activate this option, the virtual printer is given the property of a hot folder. You must assign a folder in the file system of your Prinect MetaDimension PC to the hot folder. You can select a folder or create a new one using the "Browse" button. For details on hot folders, please see the [section "Checking Jobs", page 49](#).

Use filename for job title:

The name of the PostScript or PDF file that you copy to the hot folder is used as the job name in the Prinect MetaDimension job lists if you check this option. You may find this option especially useful if you want to process jobs that have no job name in the code. The job names that are in the job code, e.g. as a PostScript comment, are shown if this option is not checked.

Share this Hot Folder

The hot folder is shared in the Windows and Macintosh network if you check this option (default).

If you are going to set up a large number of virtual printers as hot folders and share each hot folder, you must map all the hot folders you need separately at a DTP workstation. Each connection needs its own drive letter on a Windows PC.

To make such a configuration easier, proceed as follows:

1. First, create a folder in Windows Explorer that you will share. For example, generate "D:\MetaDimension\Hotfolders\Suprasetter_Hotfolder". To share this folder, open your computer management with "Control Panel > Administrative Tools > Computer Management". In the "System" structure, open the "Shared Folders" branch and click "Share". Now select "Action > New

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Share". Follow the instructions of the Wizard and select the hotfolder as the folder you wish to share. You can share the folder for Windows and/or Macintosh Apple Talk network accesses with the help of the Wizard.

2. Now create a virtual printer in MetaDimension Printmanager by activating the "Hot Folder" option. The "Select Hot Folder" dialog opens.
3. Go to this new folder ("D:\MetaDimension\Hotfolders\Suprasetter_Hotfolder") and create a subfolder, for example, "D:\MetaDimension\Hotfolders\Suprasetter_Hotfolder\Hotfolder_1" below it. Go to this folder and confirm the dialog with "Select". The "Select Hot Folder" dialog closes.
4. Disable the "Share this Hot Folder" option. Save the virtual printer. This hot folder is shared because it is a subfolder of a folder that is already shared.
5. If necessary, create other virtual printers as hot folders by generating subfolders for the "Suprasetter_Hotfolder" folder and disabling the "Share hot folder" option.

In this way, you can set up several hot folders with different properties in one single share. In the example, you only need to map the "Suprasetter_Hotfolder" and can use all lower-level hot folders with their different output options.

Include subfolders

By default, this option is enabled. This means that the subfolders of a hot folder are also enabled as hot folders. In other words, all the job data that are filed in these subfolders are processed automatically by the virtual printer.

You might not want this in certain cases, for example, if components of a job (control and content data) are divided up automatically between a main folder and one or more subfolders. You must disable the "Include subfolders" option for situations like this. The subfolders of a hot folder are then not handled also as hot folders but only the higher-ranking main folder is.

Start Job Between: ... And: ...

This option allows you to define a time interval for job processing. This option can be helpful, for example, if you have to process time-consuming jobs that are not urgent. You can configure a virtual printer which starts job processing during the night. If you send jobs to this virtual printer during the day, processing will only start at the time set for starting. This means that the system is not busy with such jobs during the day.

Transfer to the Depot After Hours

When this option is checked, all the jobs processed with this virtual printer are given a "depot" attribute after the set time. The jobs are then no longer displayed in the "Complete Job List" tab in "Jobs" but can only be viewed in the "Depot" tab. If you are working with a lot of jobs, this option can help you have a better idea of your current jobs. Apart from this switchover, no other changes are made to the jobs.

Delete Job After Hours

This option allows you to set a time after which completed jobs will be deleted. We recommend that you check this option for every virtual printer. This prevents the hard disk which contains the spool directory from becoming full with job data.

You can set the following additional options for automatic deletion of jobs:

- Only when Drive Monitor alert value is reached:

Jobs are deleted only if the alert value for the drive on which the jobs are saved is exceeded. For more information about the drive monitor see the [section "Drive Monitor", page 195](#).

- also delete jobs with warning status:

Jobs with a "done (warning)" status are also deleted. If this option is not checked, such jobs are not deleted in order to find out the reason for these conflicts, for example, in the job properties.

- also delete jobs with error status:

Faulty jobs are also deleted. If this option is not checked, faulty jobs are not deleted in order to find out the reason for the errors, for example, in the job properties.

Delete Halftone Softproof Files After ... Hours

This option allows you to set a period after which halftone bitmap files that were created for halftone softproof (see the [section "Halftone Soft Proof tab", page 89](#)) are deleted automatically. We recommend that you check this option for every virtual printer. This prevents the hard disk that holds the spool directory from becoming full with halftone bitmap data. Make sure to set a period that doesn't delete the halftone bitmaps before the jobs they are part of are checked.

"No Preview (only TiffB import)"

This option only has an effect if Tiff-B files were imported with the virtual printer and output to the connected output device. Normally, a high-resolution screen preview is generated from each imported Tiff-B file. You can open this preview in the ["Halftone Soft Proof tab", page 89](#). Such a preview is not generated if "No Preview" is enabled. Enabling this option increases the speed with which your job is processed.

Priority

You can use this option to assign a priority for job processing to the virtual printer (L=Low, M=Medium, H=High). By configuring several virtual printers with different priorities you can already determine the priority of your print job when initiating the printout on the DTP workstation by selecting a specific virtual printer.

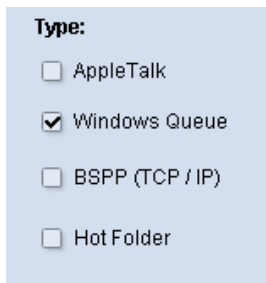
You cannot assign "Urgent" as a priority here as "urgent" causes a job to be output immediately and any running job to be interrupted (see the [section "Printing "Urgent" jobs next", page 62](#)). For that reason, you can assign "Urgent" as a priority only to single jobs.

Setting up the Virtual Printer as a Windows Printer (Windows Queue)

The following section describes how you can configure a virtual printer so that it can be installed and controlled as a network printer on a DTP workstation in a Windows network.

Configuring a Virtual Printer as a Windows Queue

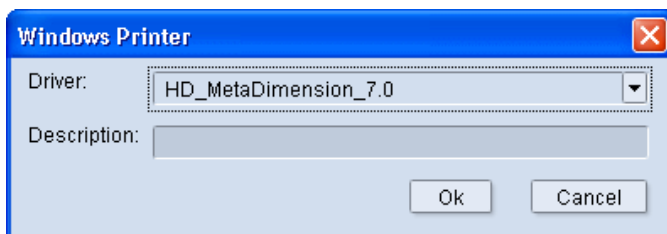
1. In the "Administration > Configuration > Virtual Printers" section, open an existing virtual printer or use the "New..." button to create a new virtual printer.
2. Activate the "Windows Queue" option in the "Type" section.



Type:

- ☐ AppleTalk
- ☒ Windows Queue
- ☐ BSPP (TCP / IP)
- ☐ Hot Folder

The "Windows Printer" window displays:



3. You can select the installed Heidelberg PPDs (PostScript Printer Description) and the printer drivers installed on the system in "Driver". You can select printer drivers only from this list. If you are going to use third-party PPD drivers, you must first set up these drivers on the Windows system so that you can select them in this list.

The MetaDimension drivers are designed for all output devices supported by Prinect MetaDimension. These drivers support all types of imagesetters and DI presses that Prinect MetaDimension can control. The "Trap" version is designed especially for the use of the InRIP trapper in Prinect MetaDimension. You must use the "Trap" version if you wish to enable InRIP trapping in the "Print" dialog of your DTP application (InDesign, InProduction, QuarkXPress).

Bear in mind that you must also have enabled the appropriate license option for trapping. If you do not intend to use trapping, select the PPD without trapping. For example, Adobe InDesign automatically detects which PPD was configured. If trapping is not to be performed, it is not possible to set parameters for trapping in InDesign.

Select the desired PPD and confirm the dialog with "OK".

4. Save the virtual printer with "Save As" and enter a name, in this example, "MD_Supra01_OP-P_VP01".

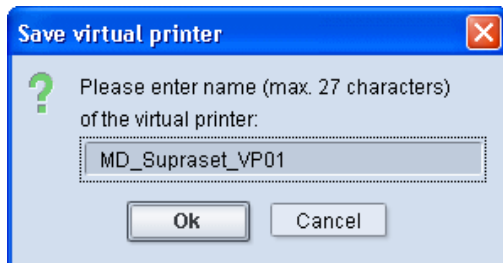
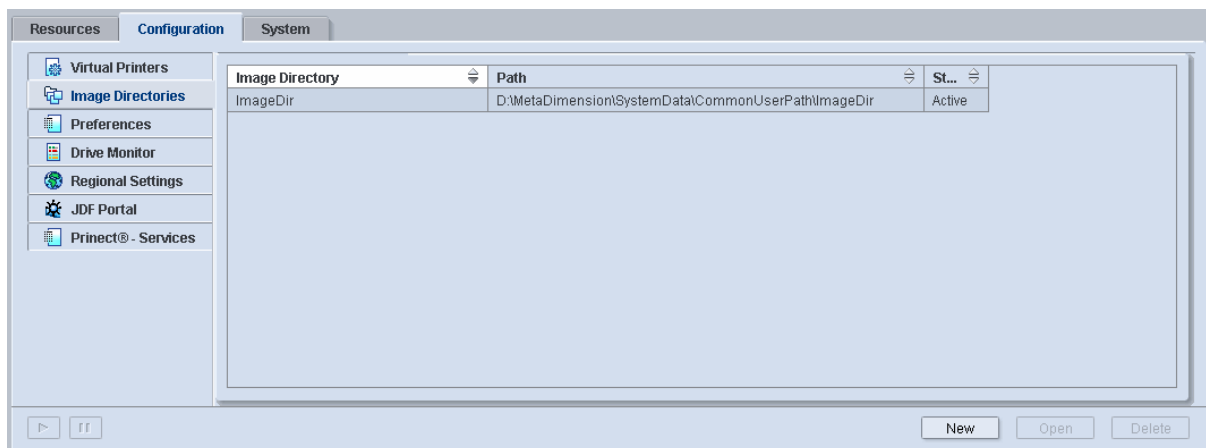


Image Directories

In the "Administration > Configuration > Image Directories" section you can configure the Prinect MetaDimension Imagemanager. The Image Manager is an essential part of the OPI functionality in Prinect MetaDimension" (see also [section "OPI \(Image Data Inclusion\)", page 331](#)). You can find more details about the Image Manager in the [section "Image Manager", page 337](#).

In the "Image Directories" view you first see a list of all existing image directories. By double-clicking an image directory or selecting one and then clicking the "Open" button you can configure an existing image directory. The "New" button lets you create a new image directory.



In the configuration view you can configure two basic components of the Image Manager: the "Image Directory" and the "Layout Generator". In the Image Directory you "collect" the high-resolution files which you will use to generate layout files. You can create high-resolution files, for example, at a scanner workstation and then transfer them to the Prinect MetaDimension PC.

Definition of term:

- Image directory: An image directory is a configured, functional component of the Imagemanager, consisting of an image folder (and any subfolders) and the layout generator.
- Image folder: An image folder is a folder in the file system where an image directory looks for images.



Note: For background information about image folders, the layout generator, the image formats supported etc., please see the [section "Image Manager", page 337](#) and the following sections.

The screenshot shows the 'Configuration' window with the 'Image Directories' tab selected. The left sidebar contains links to 'Virtual Printers', 'Image Directories', 'Preferences', 'Drive Monitor', 'Regional Settings', 'JDF Portal', and 'Prinect® - Services'. The main area is divided into sections for 'Image Directory Name', 'Image Root', update intervals, scan options, layout generator settings, and pixel image options.

Image Directory Name: ImageDir

Image Root: D:\MetaDimension\SystemData\CommonUserPath\ImageDir Browse...

Min. time between updates: 0 Minutes

Max. time between updates: 30 Minutes

☒ Scan subdirectories, except: %0*

☒ Ignore unknown files ☒ Start Job between: 8:30 AM and: 12:30 PM

☒ Reject illegal file names ☒ Delete Job after: 1:30 Hours

Layout Generator:

Extension: .lay

☐ Image Directory

☒ Directory: C:\Program Files\Heidelberg\MetaDimension\UserDir\LayoutDir Browse...

☐ Directory relative to image: layouts

Pixel Image Options:

☒ Generate Preview Resolution: 72 dpi ☐ Unlimited Preview size (EPS layout files only)

☐ Generate Proof Resolution: 150 dpi ☐ Unlimited Proof size

EPS, DCS, ICS Options:

☒ Preserve Preview(s) ☐ Generate EPS Layout File for:

☐ Preserve DCS, ICS Proof ☐ TIFF Files

☐ JPEG Files

☐ SCITEX-CT Files

Save Close

The section for the setup of an image directory is divided up into:

- Image Folder and
- Layout Generator

Image Directory Settings

This close-up view shows the 'Image Directory Name' and 'Image Root' fields, along with update intervals and scan options.

Image Directory Name: ImageDir

Image Root: C:\Program Files\Heidelberg\MetaDimension\UserDir\ImageDir Browse...

Min. time between updates: 0 Minutes

Max. time between updates: 30 Minutes

☒ Scan subdirectories, except: %0*

☒ Ignore unknown files ☒ Start Job between: 8:30 AM and: 8:30 PM

☒ Reject illegal file names ☒ Delete Job after: 1:30 Hours

Image directory name

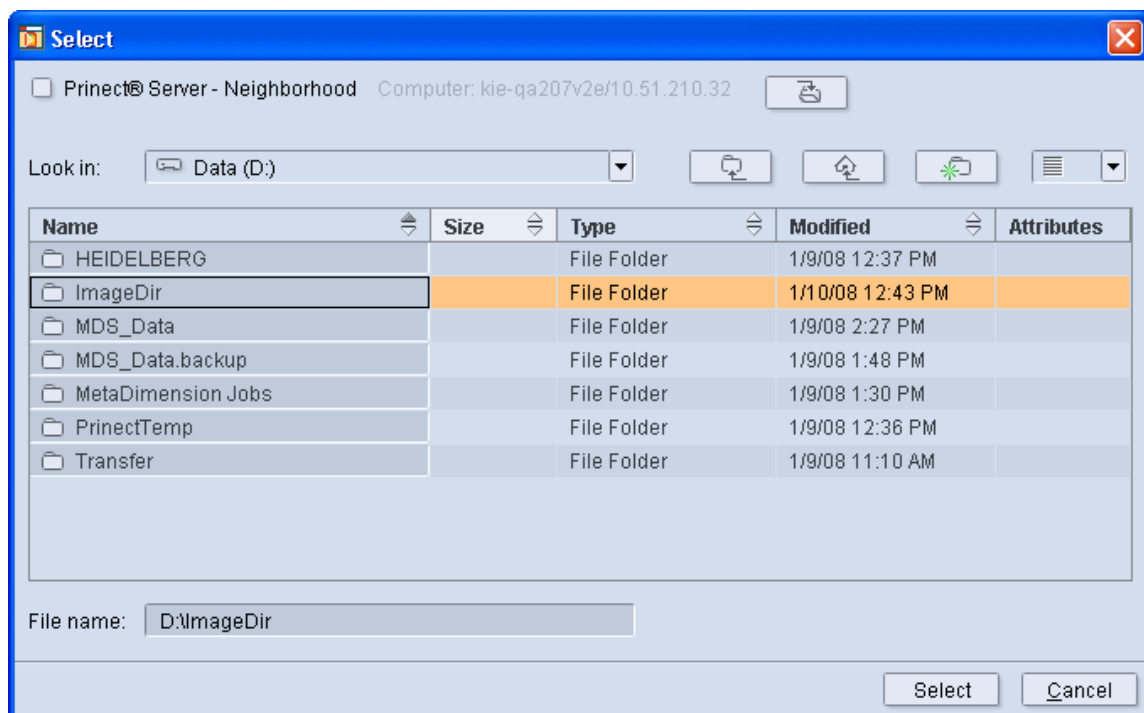
This is where you can enter a name for the image directory, e.g. "MyImageDir". The image directory is managed in the Prinect MetaDimension system under the name entered here. The name is independent of the "physical" folder name in the file system, but you can use the same name if you want.



Note: You must assign a name. When they are created, image directories are shared automatically for the Windows file system and, if MetaDimension was installed on a Windows Server operating system, also for the Macintosh file system. The share name comprises the image directory name (e.g. MyImageDir) and an automatic ending "_IM". The share name in this example is then "ImageDir_IM".

Image Root:

This box shows the file system path of the image directory. You can select a folder by clicking the "Browse" button. The "Open" dialog displays.



In this box, you can select a folder in the file system or create a new image folder with the "Create new directory" button. When you check the "Prinect® Server Neighborhood" option, the MetaDimension program folder is set as the root directory and shown in "Look in". It is a good idea to use this option if the image folder you wish to install will be located in a sub-folder of the MetaDimension program folder.



Note: You can allocate a different folder in the file system later on to an existing image directory.

Administration - Configuration

Min. Time between Updates Parameter

The "Min. time between updates" parameter allows you to set the interval in which the system will poll the image folder and any subfolders for newly arrived high-resolution images. This action can take a long time especially if the image folder and subfolders have a great amount of image data. For that reason, we recommend that you set a time that ensures that the computing time required for the search does not disturb your workflow in any considerable way. If searching the image folder takes several minutes, for example, a value of at least 30 - 60 minutes should be entered. On the other hand, you must make sure that the Imagemanager can make available current layout files on time for the required tasks.

Max. Time between Updates Parameter

The Imagemanager is not only able to monitor image folders located on a local hard disk of the Prinect MetaDimension PC but also mapped folders. Directories shared in Windows NT are automatically monitored by Prinect MetaDimension. This monitoring is not controlled by time. The Image Manager uses its own mechanism for monitoring mapped image folders, for example Macintosh OS X computers, since the Windows mechanisms for monitoring do not work properly on such computers. The "Max. time between updates" parameter allows you to set the interval in which these external folders will be monitored.



Note: The value for "Max. time between updates" must always be greater than or equal to the value for "Min. time between updates".

Scan subdirectories, except

Image folders can have subfolders, e.g. each customer can have his/her own subfolder. Check the "Scan subdirectories, except" option if you want to search subfolders for image files. If you want to exclude certain subfolders from layout file generation, enter parameters in the text box to specify which subfolders you wish to exclude:

The parameter % 0* defines that all subfolders starting with the string % 0 will be excluded from layout file generation. Characters * and ? can be added as "wildcards" to the names of the subfolders. The asterisk (*) replaces any string whereas the question mark (?) is used as a wildcard for a single character. The exclusion of subfolders also affects those subfolders that are not located directly below the image folder but, for example, two directory levels lower in the image root hierarchy.

Example:

The name of your image directory is "MyImageDir". "EPSImages" in the text box has the effect that the subfolder

"\\...\MyImageDir\CustomerA\EPSImages"

is excluded from layout file generation.

Example:

If you type "NewCustomer*" in the text box, then all subfolders whose names start with "NewCustomer" are excluded, for example, "NewCustomer_largeImg", "NewCustomer3", "NewCustomerImagesXYZ..." etc.

Example:

"Customer?_img" causes all subfolders whose names are based on the pattern "Customer1_img", "Customer2_img", "CustomerX_img", "CustomerY_img", ... etc. to be excluded.

Ignore unknown files option

In the normal case, i.e. when this option is not activated, an error message is displayed for every file in the image folder whose file type is not recognized by the Image Manager. This setting makes sense if solely image files will be copied to the image folder to generate layout files of them.

However, error messages constantly appear if not only image files but also entire customer jobs consisting of image files, DTP files, vector graphics, etc. are copied to an image folder as in this case many file formats cannot be processed. In this case you can check the "Ignore unknown files" option. All error messages relating to unknown file types are then suppressed.

If however image files of a known file type are to be processed, and if an error occurs during the file analysis, an error message is displayed even if the "Ignore unknown files" option is checked. This may occur, for example, if a TIFF file is built up erroneously so that the Image Manager cannot process it. The file format is indeed recognized in this case, but its internal structure is such that it triggers an error message.

Reject illegal File Names Option

If this option is checked and image file names do not correspond to Windows defaults (names include illegal special characters etc.), the Image Manager stops processing and issues an error message. If it doesn't, the DOS 8.3 substitute file name is used for processing.

Execute Jobs between

The image folders are automatically "monitored". This monitoring triggers that each high-resolution image file located in an image folder is automatically passed on to the layout generator. This process of layout file generation makes use of some of the resources of the Prinect MetaDimension PC (CPU, main memory, hard disk controller...) and may slow down the speed with which the other components of the Prinect MetaDimension software (Printmanager, interpreter, trapping module, screening generator) perform their functions.

To avoid such a handicap, you can "program" the layout generator to perform its automatic task at a certain interval. This workflow control is activated by checking the "Start Job between" option. Type the time (24-hour clock) for starting and ending job processing in the two relevant text boxes.

Example:

An image directory is to be defined in such a way that the image files found in the directory are processed by the layout generator between 19:00 and 6:00 hours. In this way, the process of creating a layout file does not disturb the functionality of the Printmanager and the internal RIP during daytime operation.

1. Check the "Start Job Between" option.
2. Enter the hours "19:00" and "06:00" in both fields. Use HH:MM as your input format.

If image files are transferred to this folder between 6:00 and 19:00, they are collected there but no layout file is generated from them. At 19:00, the automatic layout file generation starts. The layout generator stops its work if the image folder has so much image data that layout file generation is not finished by 06:00. Layout file generation starts again at 19:00.

Image files transferred to this image folder between 19:00 and 6:00 hours are either processed immediately by the layout generator or placed at the end of the queue if there are other image files waiting to be processed.

Administration - Configuration

Delete Job after:

When this option is checked, successfully completed jobs are deleted from the job list after the time you set. This option helps you to keep track of very large job lists.



Note: The jobs are only removed from the job list, but no files are deleted physically from the data carrier! To remove files from the data media, you must delete them in the respective image folders in Windows Explorer.



Note: The deletion of jobs from the job list only affects jobs that were sent to the image folder after this option is checked. If you want to remove jobs from the job list, which were processed before this option was activated, you can do this manually (see [section "Buttons", page 52](#)).

Layout File Generator Settings

The screenshot shows the 'Layout Generator' settings window. It has several sections: 'Extension' with a dropdown set to '.lay'; 'Image Directory' with radio buttons for 'Image Directory', 'Directory' (selected), and 'Directory relative to image'; 'Pixel Image Options' with checkboxes for 'Generate Preview' (checked) and 'Generate Proof' (unchecked), each with a resolution dropdown (72 and 150 dpi respectively) and an 'Unlimited' size checkbox; and 'EPS, DCS, ICS Options' with checkboxes for 'Preserve Preview(s)', 'Preserve DCS, ICS Proof', and 'Generate EPS Layout File for:' (checked for TIFF, JPEG, and SCITEX-CT files).

Defining the file name extension

In "Extension" you can set which extension the lay-files will have. The text box can be freely edited (max. 6 characters). You must also enter the dot if this is to be retained before the extension. The box can remain empty if the layout files are not to be written to the image folder. In this case, the layout files have the same names as their image files.



Note: When the "Image Directory" option is selected, you must enter a file extension to give the layout files different file names to the file names of the appropriate high resolution images.

Directory Settings

This option allows you to define where the generated layout files will be saved.

- "Image Directory" option:

The layout files are saved in the same image folder as the high-resolution image data. In this case, the "Extension" box must have an input.

- "Directory" option:

The layout files are saved in a separate layout folder. If the image folder has subfolders, corresponding subfolders will be created in the layout directory to have an identical structure for both the image folder and the layout folder.

If you want to create a new folder, open the "Open" dialog with the "Browse" button. The procedure for creating a new layout generator is the same as for creating an image folder (see the [section "Image Root:", page 181](#)).

- "Directory relative to image" option

The layout files are saved in a subfolder of the image folder that contains the high-resolution images. A separate layout folder is created for each subfolder if an image folder has several subfolders. The layout files are always saved one level below the folder with the corresponding high-resolution images. The name of the subfolder must be entered in the text box. Subfolders will be created automatically if they don't exist.

Example:

The name of the image directory is "MyImageDir", and it contains the subfolders "Customer1" and "Customer2". The name for the relative subfolders is "Layouts". The folders "\\....\MyImageDir\Layouts", "\\....\MyImageDir\Customer1\Layouts" and "\\....\MyImageDir\Customer2\Layouts" are created automatically, and the layout files belonging to the high-resolution images in "MyImageDir", "MyImageDir\Customer1" and "MyImageDir\Customer2" are saved in their corresponding subfolders.



Note: If the "Directory" or "Directory relative to image" option is checked, you should not select any file name extension because the high-resolution images and layout files are saved in different folders; and as a result, no layout files will overwrite their corresponding high-resolution images. If you leave out the file name extension, image handling in your DTP application is easier.

Pixel Image Options Area

You can enable the following options for image files in pixel format (all supported pixel formats, including Photoshop EPS):

- Generate Preview (EPS layout files only)
- Generate Proof
- Layout File with Generate Preview

If this option is checked, layout files for the screen preview are created in the original format of the high-resolution image, unless an appropriate option is checked in "Generate EPS Layout File for" (see the [section "Generate EPS Layout File for:", page 187](#)). The resolution for the preview can be set as desired. Some values are suggested in the "Resolution" list box. You can overwrite

these values if you wish. However, you should select a value which best suits the screen resolution of your DTP system (e.g. 72 dpi or 96 dpi for Windows or Macintosh systems).



Note: The "Generate Preview (EPS layout files only)" option affects the generation of layout files only if this occurs in EPS format. It doesn't matter what file format the high-resolution image has.

- Layout File with Generate Proof

If the "Generate Proof" option is checked, layout files for a layout proof are generated, e.g. for proof printing on a laser printer. You can also set a resolution of your choice for layout proof generation. You should select a resolution that the proof printer can reproduce well, e.g. 150 dpi for laser printers. You should select a higher resolution if the images are scaled up greatly when you position them in the DTP application. Vice versa, a lower resolution is sufficient for a scaled-down image.



Note: The resolution set also affects the size of the layout files: the higher the resolution the bigger the layout file. In order for the lay files to remain a manageable size, the layout generator reduces the resolution of images where necessary so that the preview is not larger than 1 MBytes and the layout proof not larger than 1.5 - 2 MBytes. This applies to uncompressed images, the files are correspondingly smaller if images are compressed (JPEG). If you do not want these restrictions, the "Unlimited Preview size" and "Unlimited Proof size" options must be enabled.

If the "Generate Preview" and "Generate Proof" options are checked at the same time, layout files in the Photoshop EPS format will have both a screen preview (TIFF preview) and a layout proof (PostScript). Layout files in other formats (TIFF, JPEG, Scitex CT), however, always only have just one image. For this image, the proof resolution is used if the "Generate Proof" option is activated. Otherwise the preview resolution is used.

EPS, DCS, ICS Options:

Preview data and layout proofs (only DCS, ICS) are not generated from high-resolution images in PostScript vector formats (EPS, DCS, ICS). In these cases, the layout files only contain references to the high-resolution images. Layout files that are embedded in DTP documents appear as empty areas (sometimes gray and have the layout file name).

However, images in the PostScript (vector) format can already contain preview data or layout proofs. The "Preserve Preview(s)" and "Preserve DCS, ICS Proof" options affect such image files. Any preview data or layout proofs are added to the layout files if the relevant option is checked. If these options are not checked, the layout files only contain references to the high-resolution images. These options do not affect image files that are not in the PostScript format.



Note: These options take priority over the pixel image options so that preview and/or proof images are only generated if they cannot be directly taken from the fine image file.

Generate EPS Layout File for:

By checking the appropriate file format, you can set the Layout Generator that it will generate layout files in the EPS PostScript format, i.e. Photoshop EPS, instead of the original formats of the high-resolution images.

Example:

You wish to generate lay files in the original format from TIFF and Scitex-CT fine images. On the other hand, you wish to create lay files in the EPS format from fine images in the JPEG format. In addition, you wish to generate previews and layout proofs for all image formats.

Activate the "JPEG Files" option in the "Generate EPS Layout Files for" section. Enable the "Generate Preview" and the "Generate Proof" options in the "Pixel Image Options" sections and set the desired resolutions.



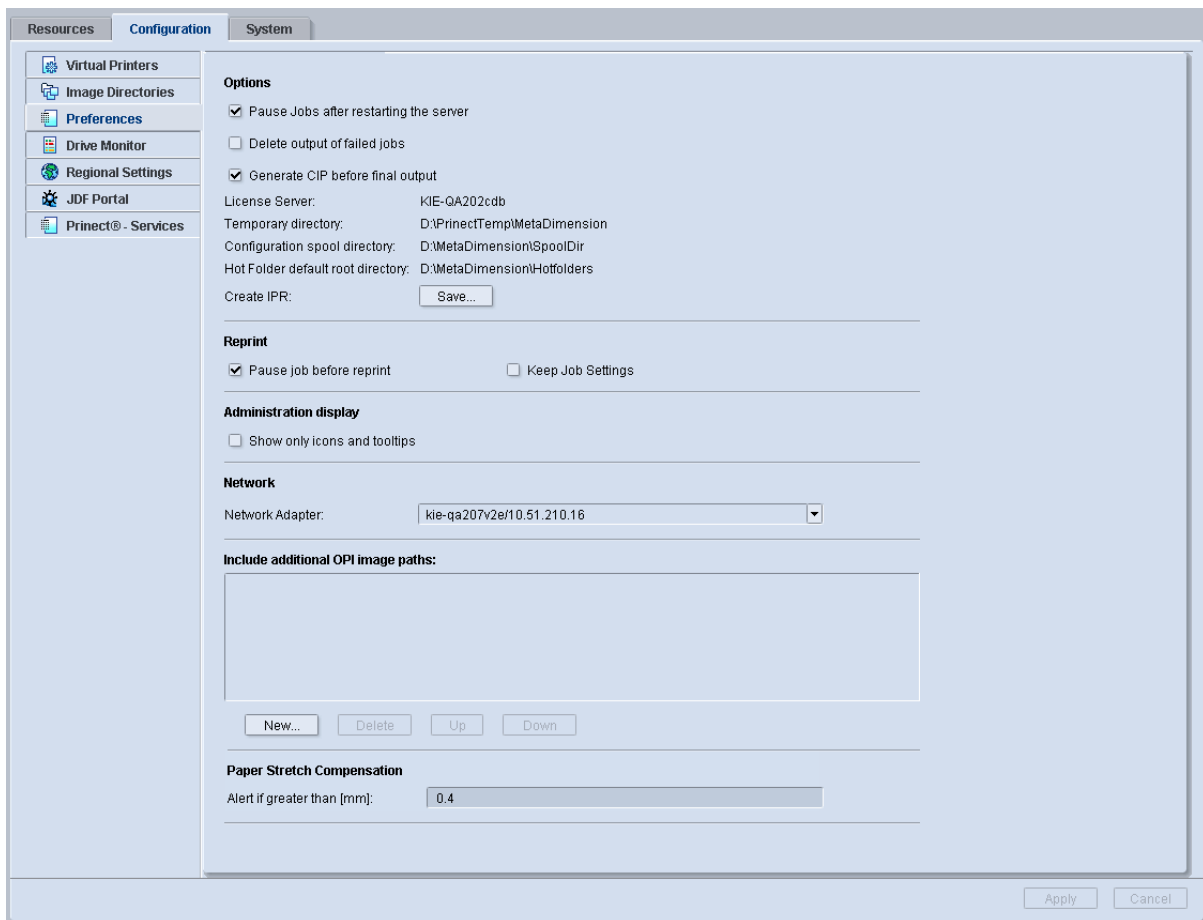
Note: The layout files will be generated in the original format of the high-resolution images if none of the formats in this group are checked. The following rules apply to the resolution of the preview data in these layout files:

- If the "Generate Proof" option is not enabled, the previews are generated in the resolution set in "Generate Preview".
- If the "Generate Proof" option is checked, the resolution set in "Generate Proof" is used.

Preferences

In the "Administration > Configuration > Preferences" section you can make default settings for Prinect MetaDimension.

Administration - Configuration



The preferences are broken down into the following groups:

- ["Options", page 188](#)
- ["Reprint", page 192](#)
- ["Administration display", page 193](#)
- ["Network", page 194](#)
- ["Additional OPI Image Include Paths:", page 194](#)
- ["Paper stretch compensation", page 195](#)

Options

You can define various options in this group.

Pause Jobs after restarting Prinect MetaDimension



If the output device is not available after starting Prinect MetaDimension, we recommend that you enable the "Pause Jobs after restarting MetaDimension" option. When everything is ready, you can start the job with the Start button.

Delete output of failed jobs

When this option is enabled, the TIFF-B files of failed jobs are deleted automatically during output in the TIFF-B workflow.

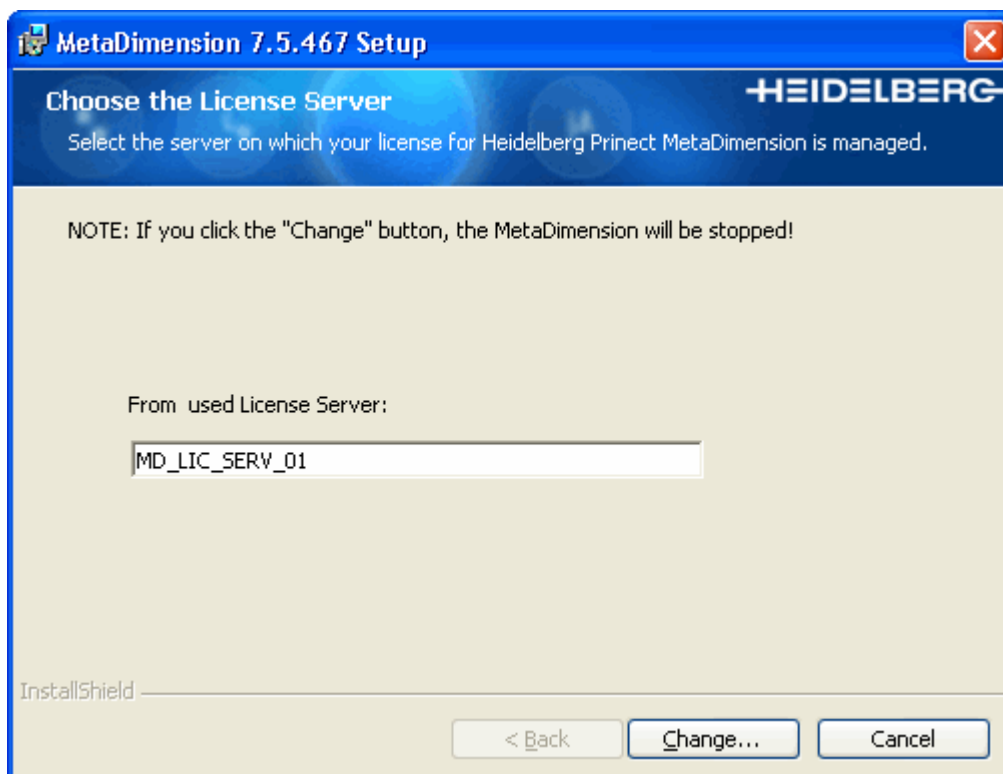
Generate CIP before final output

This option can be used only if output of CIP 3 data is enabled in the Output Plan (see the [section "CIP 3", page 289](#)). This option works as follows:

- If this option is not enabled, the CIP 3 data are generated only after imaging is completed. As a result, you have the final output at an earlier stage.
- If this option is enabled, the CIP 3 data are generated before the final output. This delays the final output, but you have the CIP 3 data at an earlier stage.

License Server

This box displays the computer name of the License Server that makes the licenses for Prinect Meta-Dimension available. Normally, the License Server is defined during installation of the Prinect Meta-Dimension software. If the License Server is to be located on a different computer or if the computer name of the License Server is to be changed, go to the Windows Start menu and display "Start > Programs > Heidelberg Prinect MetaDimension > Modify License Server". First of all, exit the MetaDimension Printmanager! The following window displays:



Administration - Configuration

You should enter the new computer name before you disable the old License Server. Save this setting with "Change". The window closes and the Prinect MetaDimension services exit automatically. Afterwards, make sure that the new License Server is running and can be reached in the network and that the required licenses are assigned to the Prinect MetaDimension computer (in the License Manager). After that, restart the Prinect MetaDimension services.

Temporary folder:

During rendering, the PostScript/PDF interpreter creates temporary files that can be very large.



Note: The PDF PrintEngine also uses a temporary folder for the swap files. This folder is defined during the installation of the PDF PrintEngine and cannot be configured at this point.

The "Temporary folder" shows you the folder where the temporary files will be buffered for the PostScript interpreter.

Configuration spool directory

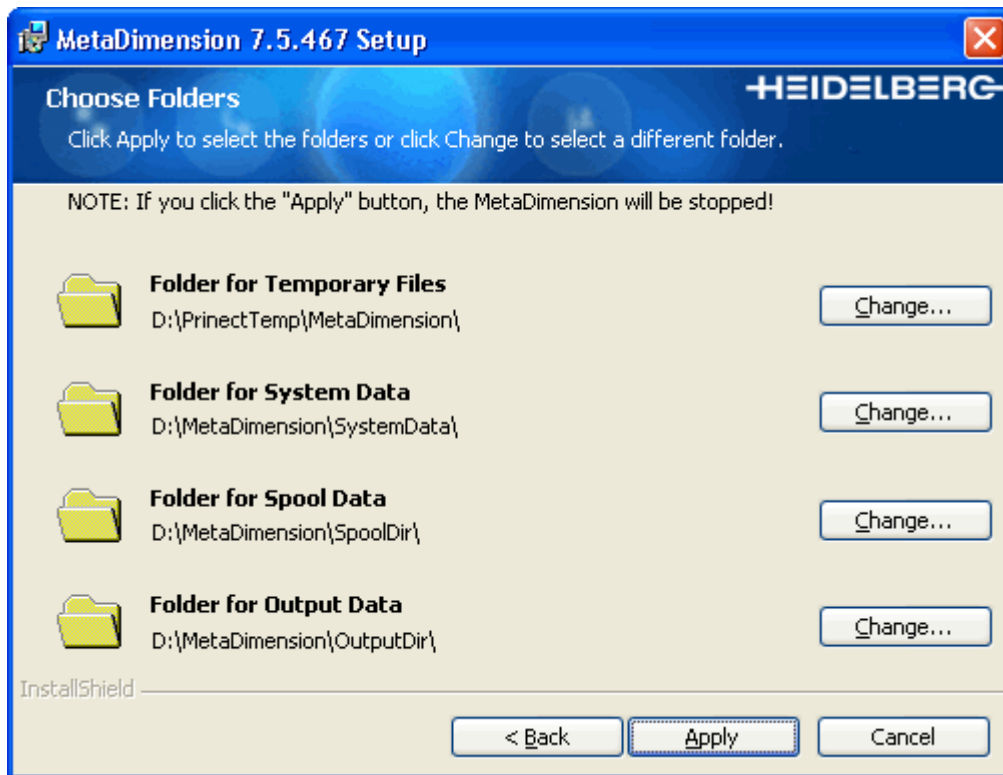
The configuration spool directory is used by Prinect MetaDimension to buffer (to spool) data generated during job processing.

Hot Folder Default Root Directory

To share hot folders (see the [section "Share this Hot Folder", page 175](#)), a default root directory for hot folders can be created and shared during the installation of the MetaDimension software. A number of subdirectories can be set up as hot folders in this root directory.

Modify Folder Selection

Normally, the folders for temporary data, user data, spool data and output data are defined during installation of the software. You can change these set folders later if you wish to relieve a hard disk drive of the high load on it, for example, from temporary data, by selecting a different drive for the temporary data. To do this, in the Windows Start menu display "Start > Programs > Heidelberg Prinect MetaDimension > Modify folder selection". The following window displays:



You can now modify the set folders in each case with "Change". After you made all your changes, make sure that the MetaDimension Printmanager is not running and click "Apply". The window closes and the Prinect MetaDimension services exit automatically. Then start the Prinect MetaDimension services again with "Start > Programs > Heidelberg Prinect MetaDimension > MetaDimension Service Control".

Create IPR:

Every time that Prinect MetaDimension is started, the settings of the imagesetter connected are queried and written into a file as Imagesetter Profile (IPR). The imagesetters are delivered with default settings, for which there are also standard IPR files in Prinect MetaDimension, but the user can define his own imagesetter settings which are not covered by the standard IPR profiles. The position of the punch holes can be altered for instance. These changes are saved into the device-specific IPR file.

When you control Prinect MetaDimension from a Prinect Signa Station or when you transfer jobs to Prinect MetaDimension from another Prinect MetaDimension PC with TIFF-B export or from Delta Technology, you must know the device parameters on the system that generates the external output files.

1. Click "Save" next to "Create IPR". The "Save IPR as" dialog opens.
2. In the "Devices" list box in the "Save IPR as" dialog, select the output device for which the profile file will be created.



Note: You can create profile files for platesetters or imagesetters or DI presses as well as for proofers. If you create a profile file for a "TIFF-B Export Device", the special properties of a device are not filed in the profile file but all the settings that are possible for TIFF-B export are filed there. For that reason, there is no sense in creating a profile file for a "TIFF-B Export Device".

3. Then select a location for the profile file in the file system of the Prinect MetaDimension PC or in the network environment.
4. Assign a name for the .ipr file (e.g. "Suprasetter_105.ipr") and click "Save". In general, you can retain the name which is suggested.

Reprint

The following options are available for this:

Pause Jobs before Reprint



If you wish to reprint a job which has already been output (e.g. because imaging problems occurred or because the job is to be imaged with different output parameters), mark the job in the job list and click the Start button.

When you do so, a copy of the selected job is created and job processing is usually started immediately. To give you the opportunity of changing the plate material or altering the output parameters, for example, before reprinting, you should enable the "Pause job before reprint" option in the Preferences. When you click the Start button, the job is set to the standby status. You can now change the output parameters if you wish to do so or to remedy the problems in the output device. When everything has been prepared, you can start job processing by once again clicking the Start button.

Only if you are sure that the output device is ready and that the output parameters do not need to be altered, can you deactivate the "Pause job before reprint" option. This is the case, for example, if you wish to make one or several copies of the job using the Reprint function.

Keep Job Settings

This option affects all jobs that you wish to print out again after printing (refer to the section [section "Restarting, Pausing, Continuing and Reprinting Jobs", page 54](#)).

It is important to remember that Output Plans affect jobs in two different ways:

- System-specific Output Plan: If you assign an Output Plan to a virtual printer in Prinect MetaDimension, this Output Plan will affect all jobs that are processed with this virtual printer.
- Job-specific Output Plan: A job can already have an Output Plan, either it was assigned an Output Plan in an upstream software (e.g. using the WEB UI or Prinect Signa Station) or it was already output via Prinect MetaDimension and reprinted with modified job settings (see the [section "Modification of the Job-specific Output Plan Setup", page 60](#)).

If you leave the "Keep Job Settings" option unchecked, changes that you made to the system-specific Output Plan after a job is printed will be applied to the job when it is reprinted. The job acts like a job that is new and sent to Prinect MetaDimension for the first time to be output, with the current Output Plan settings of the virtual printer applied.

An exact copy of the printed job is created when you check the "Keep Job Settings" option, irrespective of the present Output Plan settings in the virtual printer.

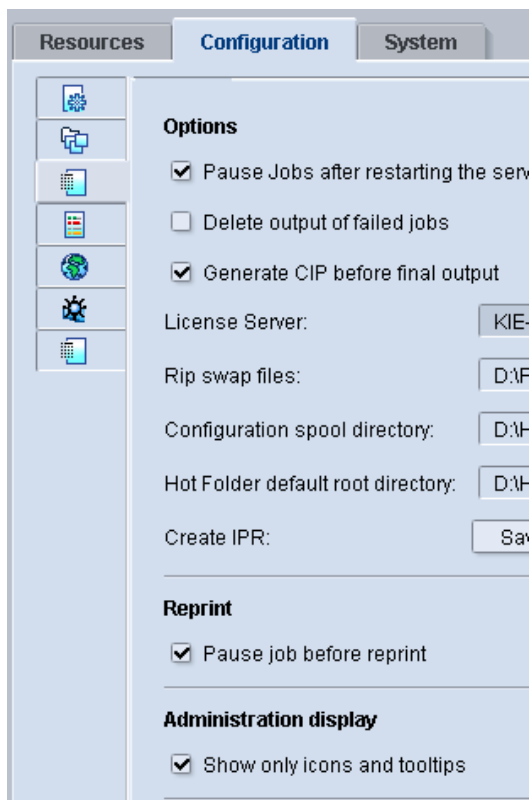
Generally, it is advisable to check the "Keep Job Settings" option because otherwise your results might not be what you want.

Administration display

You will find the following options in this group:

Show only icons and tooltips

The wording on the vertical tabs on the left in the "Administration" group of the Prinect MetaDimension Printmanager is hidden if you check this option and then click "Apply".



This gives you more room for the parameters of the administration settings. The tab wording displays again when you uncheck this option and confirm it with "Apply".

Network

If you have more than one network card in your Prinect MetaDimension PC (e.g. because the Prinect MetaDimension PC is integrated into more than one network environment), you can select a network adapter that allows a remote installation of the Printmanager to access the Prinect MetaDimension server. This adapter must be connected to the network in which the computer that will access the server is mounted.

Additional OPI Image Include Paths:

If, during image data substitution (see the [section "OPI - Image Data Inclusion \(not with PDF Print Engine\)", page 331](#)), the high-resolution images cannot be found on the basis of the references in the layout files, the OPI Includer uses an intelligent search algorithm to find the high-resolution images. As part of the search algorithm, you can give alternative search paths for default image directories here.

The default image directories are searched using a specific method, if the high resolution images are not found on the basis of the references included in the job. This can occur when, for example, high-resolution images that were filed on the Prinect MetaDimension PC during the creation of the layout files were later relocated to a different disk drive. When jobs which refer to such high resolution images are sent to the Prinect MetaDimension Printmanager, the search algorithm is activated.

Example:

On drive D of the Prinect MetaDimension PC, a "CustomerImages" directory is created that contains one subdirectory for each letter of the alphabet. Within each of these subdirectories, additional subdirectories are created, named according to each individual customer. So the complete path for the "TestImage" of the "FreeDesign" customer would read as follows:

"D:\CustomerImages\F\FreeDesign\TestImage"

If the "D:\CustomerImages\" directory was relocated to the "Images" directory on drive E: after the layout files were generated because drive D: was overloaded, the new path for "TestImage" is:

"E:\Images\CustomerImages\F\FreeDesign\TestImage".

In this case, we recommend that you specify "E:\Images\"

as a default image directory. The search algorithm for Prinect MetaDimension tries to combine the original path of the "TestImage" with the path of a default image directory in such a way that the image can be found. The algorithm works in such a way that it successively replaces the components of the original path with those of the default directory name until the correct match is found.

In the example above, drive D: will first of all be replaced with the path

"E:\Images"

so that the new search path is:

"E:\Images\CustomerImages\F\FreeDesign\TestImage".

At this point, the search algorithm will already "make a hit" and uses this high-resolution image for image data inclusion.

To enter a new path, click the "New" button. In the "Select Directory for OPI Including" dialog, look for the alternative search path, e.g. "E:\Images\CustomerImages\F\FreeDesign\TestImage".



Note: Additional paths are also required if the "LM Includer on Server" functionality will be used by the Prinect Signa Station. The paths refer to the data loaded in the signature.

Changing the Search Order

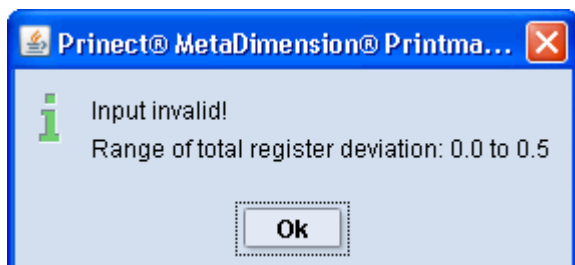
When you have entered several alternative search paths, the "Up" and "Down" buttons allow you to change the order of the paths in the list. To do so, mark a job and click the "Up" or "Down" button to move the path upwards or downwards. When the image directories are searched, the paths at the top of the list are searched first. This way you can accelerate the search for high-resolution images by moving the search paths at the top of the list which most likely contain the fine images being searched for.

Deleting Search Paths

To delete search paths which you do not need any more, mark one search path or more in the list with the mouse and then click "Delete".

Paper stretch compensation

The preferences that you set in this section affect paper stretch compensation (see the [section "Paper stretch compensation", page 127](#)). You can define an upper limit for the values entered into the "Total Register Deviation" table in the "Alert if value greater than [mm]" window. If the limit is exceeded, an alert message appears when you go to save the paper stretch compensation template:



This function is designed to prevent you from inadvertently using compensation values that are too high.

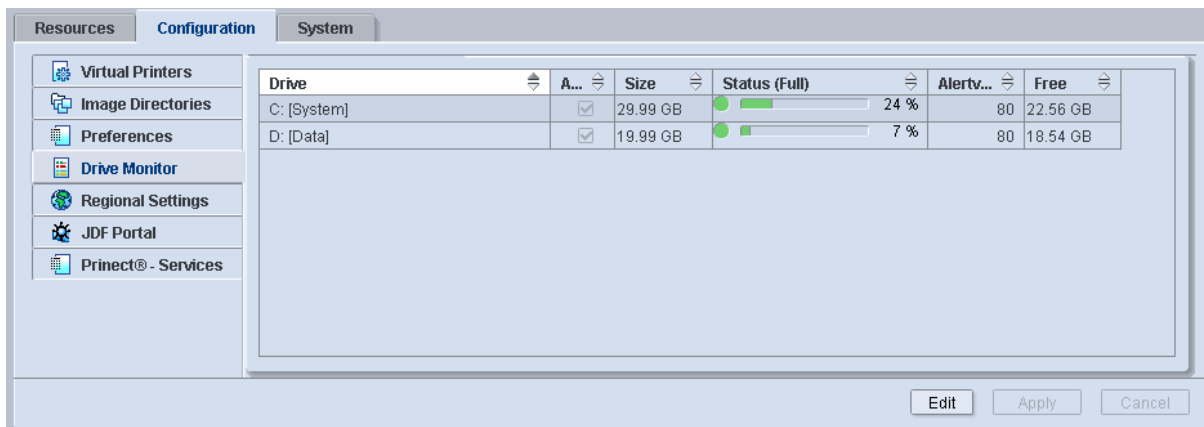
Applying the Settings

Changes in the Preferences will only take effect when you confirm your entries by clicking "Apply".

Drive Monitor

In the "Administration > Configuration > Drive Monitor" section you can see the drive monitor user interface.

Administration - Configuration



The drive monitor is used to monitor the hard disk capacity of the drives connected to the Princt MetaDimension PC.

If a hard disk in the Princt MetaDimension system is "full", this can bring the Princt MetaDimension software to a complete standstill or cause an uncontrollable state. It is therefore important to ensure that space is freed in time on a drive which is too heavily loaded. In particular those drives which contain the operating system or spool directories must always have enough free memory space.

In order to ensure this, local hard disks or partitions (e.g. spooler disks, image disks etc.) can be monitored by the drive monitor. The status color warns you of this by switching from green to yellow shortly before the set level is reached. In this state, you should create more memory on the drive concerned, for example, by deleting files you no longer need. The status color turns red if the defined level ("Alertvalue") is exceeded. No further operations that take up hard disk drive space will be started in this status. Virtual printers whose spool directories are in a full partition are switched to the "Pause" status. In other words, all jobs that will be processed by these virtual printers but whose processing has not yet started are paused. When sufficient memory is available once again after jobs are processed or manual deletion of files that are no longer required, the locked status is released again.

RIP processes running at the time the capacity is exceeded are not stopped so that an overflow of hard disks cannot be prevented in all cases.

Exception: The PDF PrintEngine stops if the drives it uses are monitored by the drive monitor and these drives exceed the alert level.

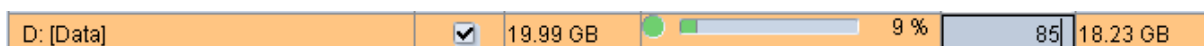
Set the alert level for the monitored drives to a value that always makes sure that the files generated during job processing cannot cause a capacity overflow of the drives.

Setting the Monitoring Options

First click the "Edit" button to activate the editing functionality.

Activating the Drive Alert

In the "Activate" column, check the box to the right of the drive name. The monitoring function for this drive is now activated.



The monitoring option should be activated for all "critical" drives of the Prinect MetaDimension PC, i.e. for all drives that contain the operating system, spool directories, hot folders, output directories (e.g. for Tiff-B export) or parts of the Prinect MetaDimension system software.

If drives are only to be monitored, without the Prinect MetaDimension software stopping if the set alert limit is exceeded, leave the box in the "Activate" column unchecked.

Tips for Operation of the Drive Monitor

You can jump between the various rows of the drive monitor with the Tab key and, for example, check or uncheck a drive with the space bar. You may only define settings for the drive monitor when Prinect MetaDimension is idle, i.e. when no jobs or images are being processed. If not, the settings might not be accepted.

Color of the Monitor Bar Graph

The bar graph can assume the following colors:

- Green: everything is ok,

The drive has sufficient space free.

- Yellow: the status of the drive is critical,

Free disk space at all cost! The transition from green to yellow takes place at the limit value - 5%.

- Red: the limit value has been exceeded,

The virtual printers were paused. The virtual printers can only resume their work when sufficient space has been freed on the drive.

Setting the Alert Value

If possible, the "Alertvalue" should be set so there is still enough memory to process the job that is currently active.

Activating Settings by Clicking Apply

All settings which have been altered only become effective when you click the "Apply" button.

Additional Notes

Please observe the notes below when working with the drive monitor:

Automatically Stopping some of the Prinect MetaDimension Software Functions

If the limit value set for one of the drives, relevant to the virtual printers, is exceeded (with the Alert function activated), the following activities of the Prinect MetaDimension Printmanager are halted:

- All virtual printers are halted, i.e. no further jobs can be transferred to the virtual printers. The virtual printers cannot be re-started manually.



Note: Copying of files is controlled by the operating system. For that reason, copying to a hot folder cannot be prevented by the drive monitor. Remember this, for example, when running a Prinect Signa Station with Prinect MetaDimension.

- Jobs in the paused hot folders are not processed.
- Print jobs which are already in progress will continue to be processed.
- The functions which were halted are enabled again when the monitored drive falls below the set limit by at least 5%.

Freeing Space on a Monitored Drive

If the drive's monitor bar graph is yellow or red, space should or must be freed on the relevant drive. The following options are open for this:

- Deleting files you no longer need (e.g. jobs that are completed) with the help of the Prinect MetaDimension Printmanager.
- Relocating activities which take up a large amount of space (e.g. collecting Tiff-B output files) to another drive.
- In "Administration > Configuration > Virtual Printers", check the "Delete Job After" and, if necessary, "Delete Halftone Softproof Files After" options and set the times so that processed jobs are deleted quickly. By checking the "Only when Drive Monitor alert value is reached" option, you set that jobs are deleted automatically only if the alert value is exceeded (see also the [section "Delete Job After Hours", page 176](#)). This setting does not affect jobs already in the system but only jobs that will be sent to Prinect MetaDimension.

Job Handling:

☐ Start Job Between: 08:00 And: 20:00

☒ Transfer To The Depot After 0 Days 06:00 Hours.

Depot Directory: D:\MetaDimension\SystemData\CommonUserPath\Depot Browse...

☒ Delete Job After 0 Days 06:30 Hours.

☐ only when Drive Monitor alertvalue is reached

☐ also delete Jobs with warning status

☐ also delete Jobs with error status

☒ Delete Halftone Soft Proof Files After 0 Days 06:30 Hours.

☐ No Preview (only TiffB Import)

- Relocating virtual printer spool directories to another drive if necessary (see also the [section "Spool Directory:", page 174](#)).

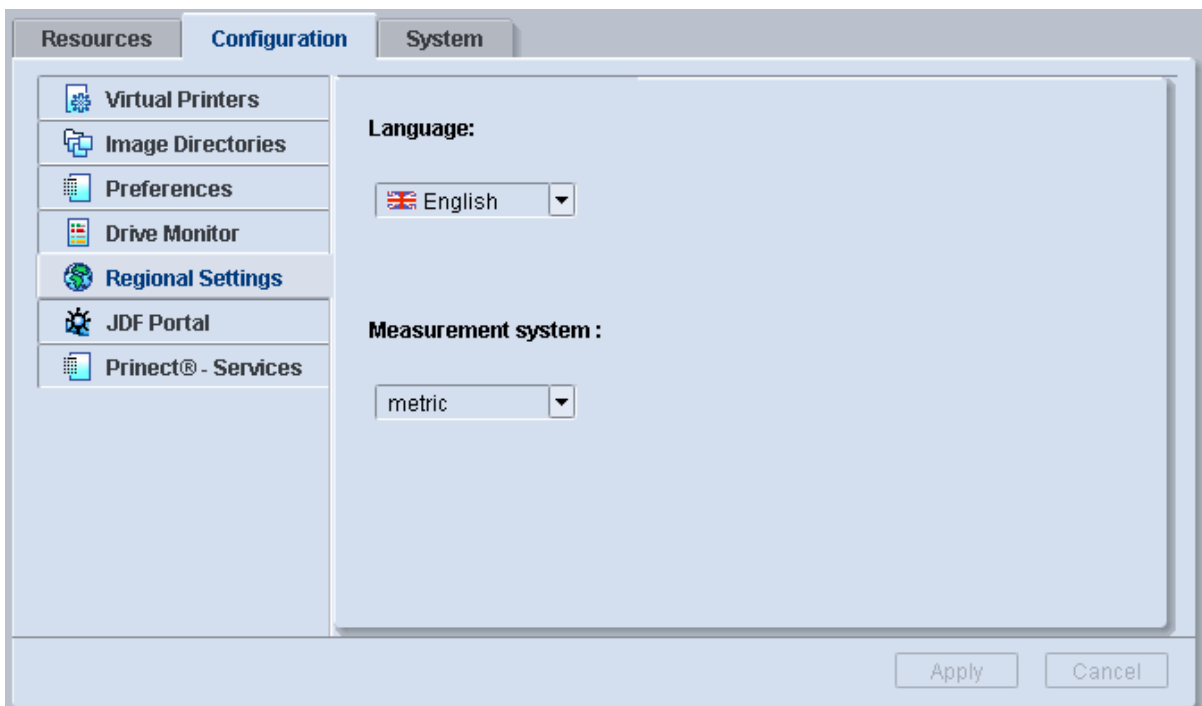
Installing Additional Drives

If no further space can be freed on existing drives, the Prinect MetaDimension PC can be fitted with additional drives. After installing and setting up additional drives, space can be freed on the existing drives by taking the following measures:

- Creating image directories on the newly installed drive and re-locating image data to the new drive.
- Creating spool directories on the new drive and changing the settings for the virtual printers to these spool directories.
- Creating hot folders on the new drive, which will replace the existing hot folders.

Switch language and unit of measure

In the "Administration > Configuration > Regional Settings" section, you can select the language of the MetaDimension Printmanager user interface.



Language

You can select a different language for the Printmanager user interface in this list box. The language of the Printmanager Online Help switches over to the new language at the same time.

Administration - Configuration

Measurement system

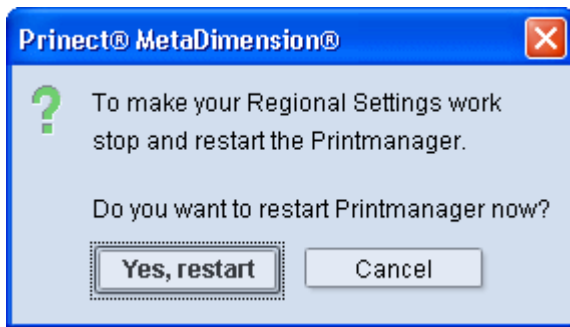
This is where you select the unit for dimensions used in Prinect MetaDimension. You can choose between the following units of measure:

- "Metric" and
- "US"

If you set "US", dimensions are switched to US American units, for example, "inch" or "lpi" (lines per inch). Apart from this preference, you can set the units of measure individually at many different points in the Prinect MetaDimension user interface, for example, in the Output Plan Editor.

Applying the Setting

Click "Apply" to apply the selected setting. The following dialog box appears:



When you confirm this dialog with "Yes, restart", the Prinect MetaDimension Printmanager closes and restarts automatically. Then the Printmanager displays in the language just selected or the new selected unit of measure.

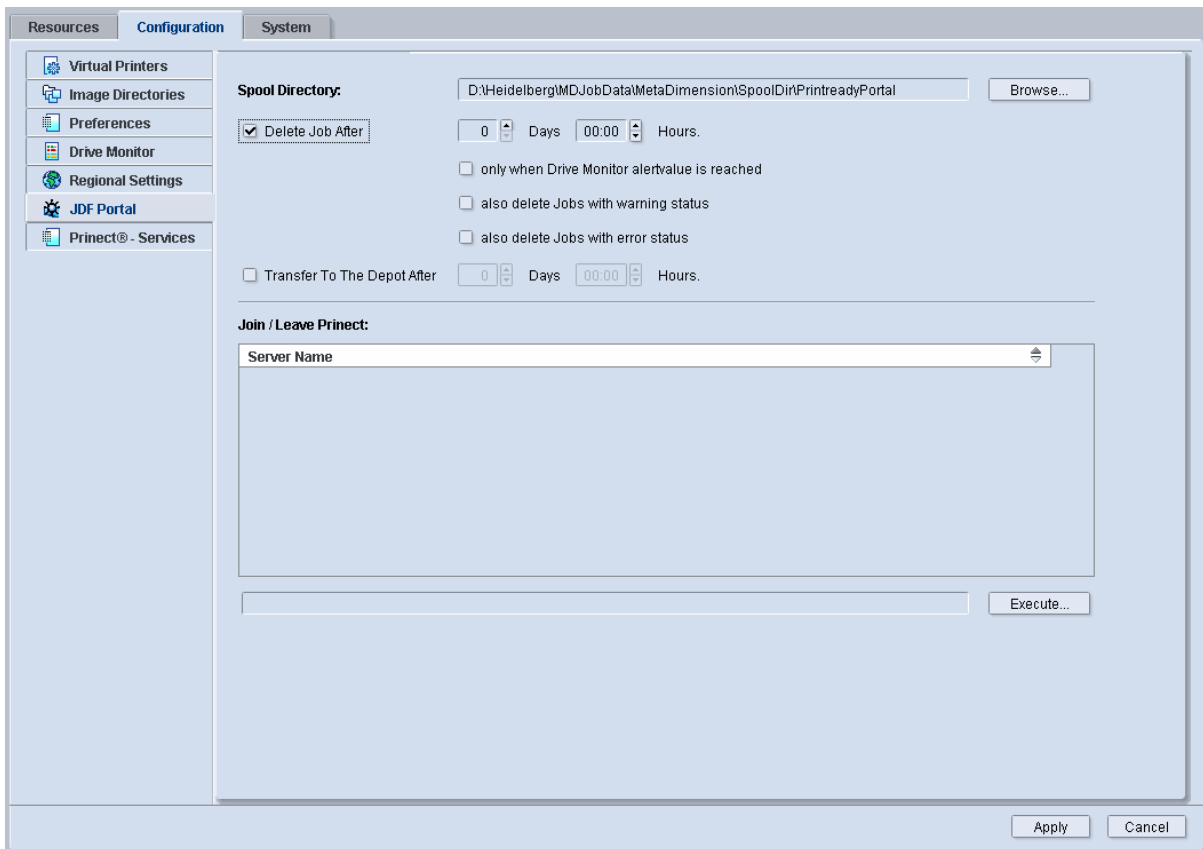
JDF Portal Settings

In "Administration > Configuration > JDF Portal", you can define settings for what is known as the "JDF Portal". JDF portal is the interface for connecting Prinect MetaDimension to a JDF-based workflow system, such as the Heidelberg Prinect Integration Manager.



Note: JDF is an XML-based data format that combines the job ticket specifications with a message description standard and a message interchange protocol. JDF is a further development of well-known technologies such as CIP3 PPF and the Adobe Portable Job Ticket Format (PJTF).

In the JDF workflow, Prinect MetaDimension processes only jobs that are in the PDF format. The output options are set in the upstream workflow system and written to a JDF file. The JDF file is sent together with the PDF files to Prinect MetaDimension. Prinect MetaDimension interprets the data from the JDF file and processes the supplied PDF documents accordingly.



Spool directory

This is where you can set a spool directory for the files processed with the JDF workflow. The PDF and JDF files are buffered in the spool directory. Use the "Browse" button to select a spool directory or to create a new one. The JDF portal spool directory can be specified during the installation of the Prinect MetaDimension software. By default, the folder for the spool directory is set up on the drive with the most available disk space at the time of installation. If necessary, select a drive of the Prinect MetaDimension PC that has enough memory available for buffering the data of the spool directory. You should have the drive on which you set up the spool directory monitored (see the [section "Drive Monitor", page 195](#)).



Note: For performance reasons, we recommend that you do not install the spool directory on the drive holding the operating system and the Prinect MetaDimension installation.

Delete Job After

When checked, this option allows you to set a period after which the jobs that were processed with Prinect MetaDimension using the JDF Portal are deleted automatically from the spool directory. You should enable this option so that the hard disk with the JDF Portal spool directory does not become full with data.

Administration - Configuration

You can set the following additional options for automatic deletion of jobs:

- Only when Drive Monitor alert value is reached:

Jobs are deleted only if the alert value for the drive on which the jobs are saved is exceeded. For more information about the drive monitor see the [section "Drive Monitor", page 195](#).

- also delete jobs with warning status:

Jobs with a "done (warning)" status are also deleted. If this option is not checked, such jobs are not deleted in order to find out the reason for these conflicts, for example, in the job properties.

- also delete jobs with error status:

Faulty jobs are also deleted. If this option is not checked, faulty jobs are not deleted in order to find out the reason for the errors, for example, in the job properties.

Transfer to the Depot After

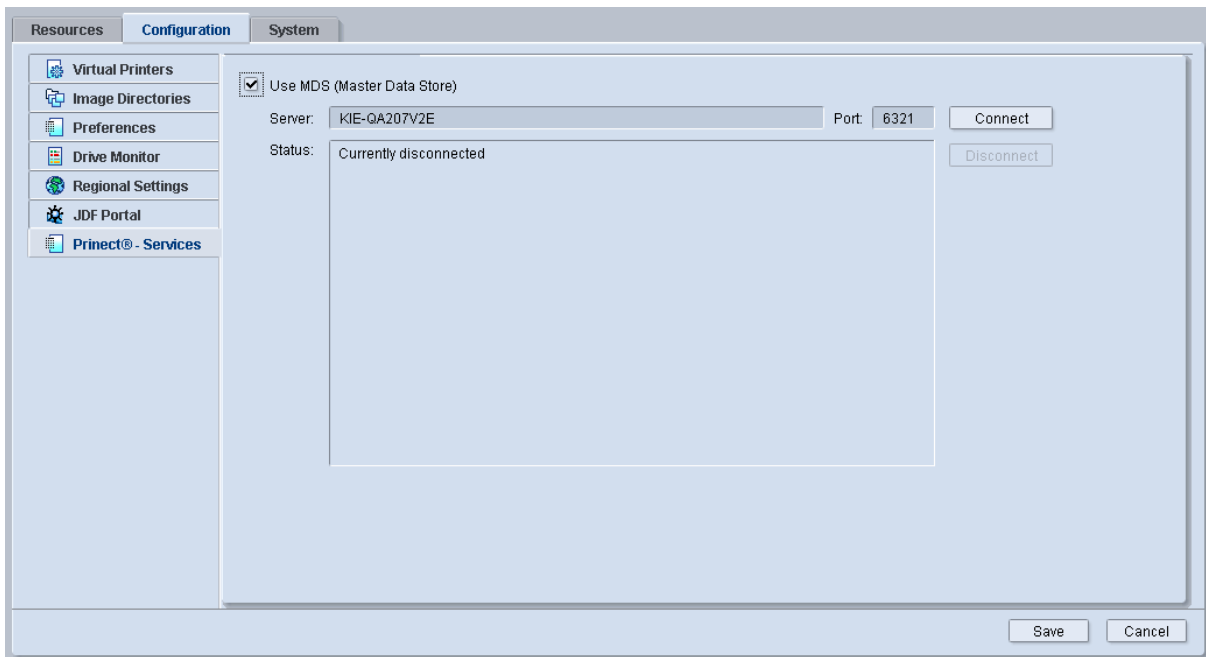
When this option is checked, all the jobs processed via the JDF portal are given a "depot" attribute after the set time. The jobs are then no longer displayed in the "Complete Job List" tab in "Jobs" but can only be viewed in the "Depot" tab. If you worked or are working with a lot of jobs, this option can help you have a better idea of your current jobs. Apart from this switchover, no other changes are made to the jobs.

Join/Leave Prinect

All Prinect Integration Manager servers that are located in the network environment are listed. Select the server that you wish to log in to and click "Execute". The "Join Prinect" program opens via the network connection to the selected server. You need this program to register Prinect MetaDimension in a Prinect Integration Manager. The "JoinPrintready.exe" is in the shared network folder "PtConfig" of the Prinect Integration Manager server, in the "JoinPrinect" subfolder. You can find more information about login to a Prinect Integration Manager in the [Configuration of Prinect MetaDimension as a Integration Manager Engine, page 399](#).

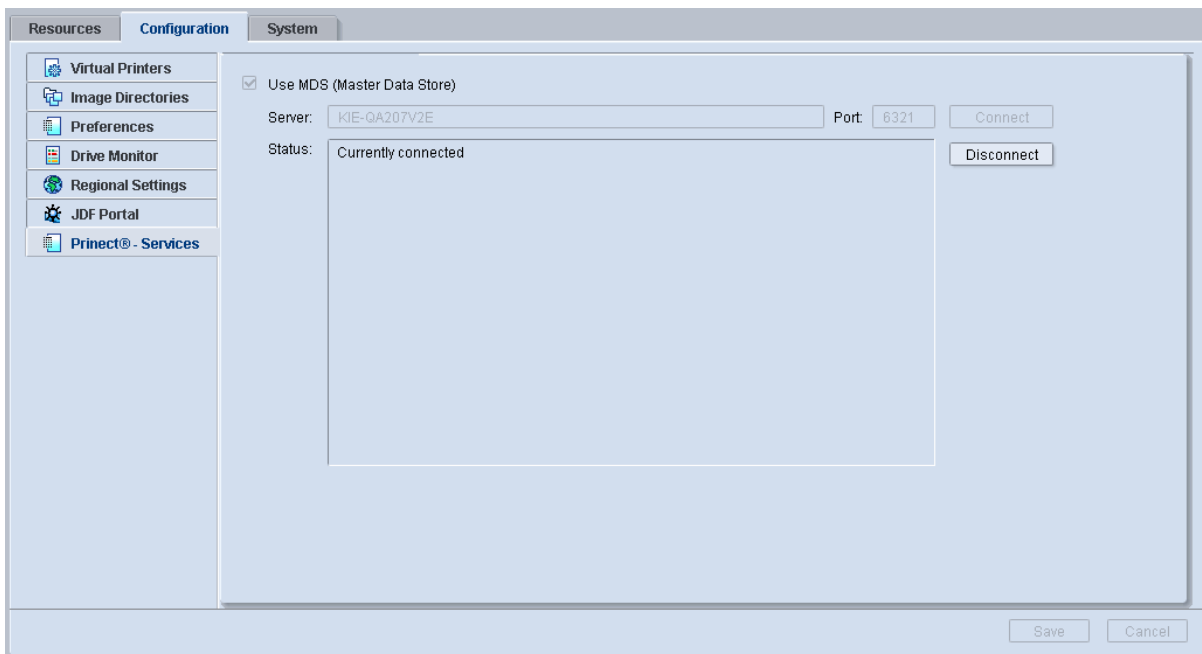
Prinect® Services

Here you can enable use of the Master Data Store Service. This requires that an active Master Data Store is available in the network environment or on the Prinect MetaDimension PC. You will find information about the Master Data Store in the section [Prinect Integration Layer \(PIL\) as a Communication Level in the Prinect System, page 36](#).



1. Activate the "Use MDS (Master Data Store)" option.
2. In "Server", enter the network name or the IP number of the computer providing the Master Data Store Service. This can be, for example, a Princt Integration Manager server or the local MetaDimension computer if the Master Data Store is installed on the MetaDimension computer.
3. The port number "6321" is set by default in "Port". This port is responsible for the Master Data Store Service. Change the port number only if this is necessary.
4. Click "Connect". An appropriate status message appears if connection is successful.
5. If you want to disconnect from the Master Data Store, for example, because you want to connect a Princt MetaDimension system to a Princt Integration Manager and use the Master Data Store there, click "Disconnect".

Administration - Configuration



6. Enter the computer name or the IP number of the new server in the "Server" field and click again on "Connect".

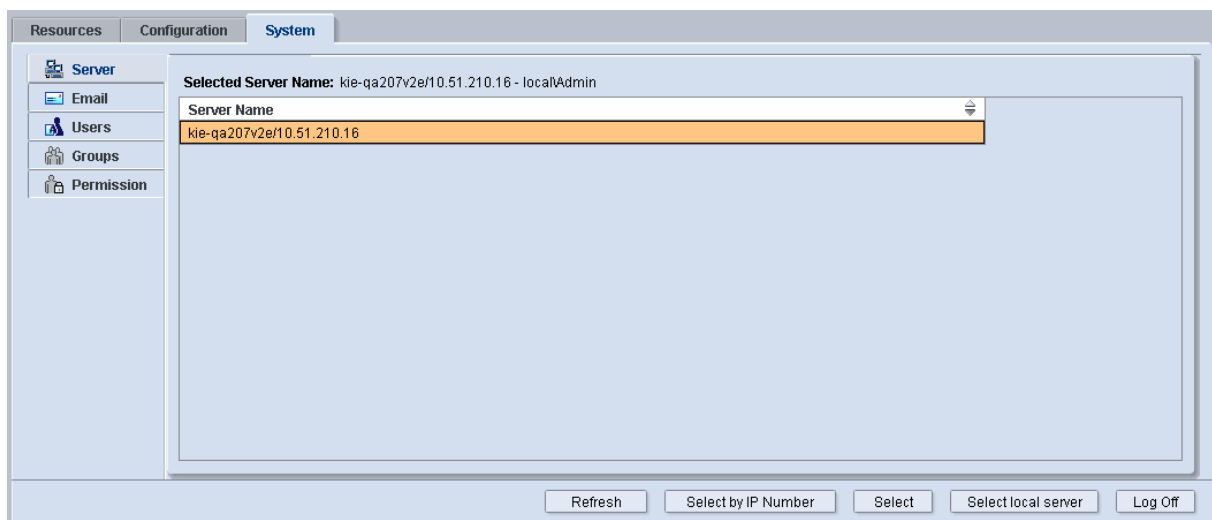
System Administration

In the System Administration section, you can select a Prinect MetaDimension server, configure the e-mail notification service and manage permissions for users and user groups:

- ["Server", page 205](#)
 - ["E-Mail", page 206](#)
 - ["Users", page 211](#)
- (see also [section "User Management", page 209](#))
- ["Groups", page 212](#)

Server

In the "Administration > System > Server" section you can manage the Prinect MetaDimension server configuration.



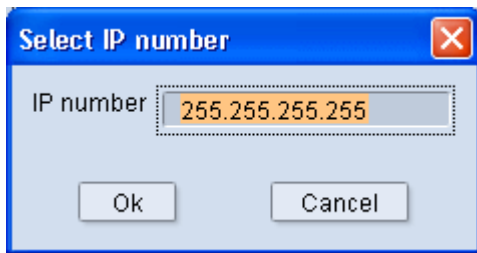
Prinect MetaDimension can communicate with any Prinect servers in the network. This communication mechanism allows Prinect MetaDimension to be remote-controlled from other computers ("Remote Control" functionality). The following functions cannot be performed by remote control:

- for example, creating virtual printers with the "Windows Queue" property,
- calling up the Engine Manager(s),
- calling up the contone/halftone preview and the DI Bitmap Viewer and
- calling up Calibration Manager.

Administration - System

"Remote control" is possible from other Windows computers. If there are several active Prinect MetaDimension systems in a network, you can select a Prinect MetaDimension server for remote control operation by marking the corresponding line and clicking the "Select" button in the "Server" tab. After selection, your local Prinect MetaDimension Printmanager establishes the connection to the selected server and displays the server's user interface.

Click the "Select by IP Number" button if you wish to select a Prinect MetaDimension server by an IP number or have to because, for example, the server is not in the list or your network doesn't support administration by name.



You can type the IP number of the server in the "Select IP number" dialog. Confirm the dialog with "OK". Ask your system administrator for the IP number of the Prinect MetaDimension server you want if you are not sure of it.

The "Refresh" button updates the server list and includes Prinect MetaDimension servers which were started after the Server view was called up.

You can select the server on which you are currently operating Prinect MetaDimension as the local server with the "Select local server" button. Normally, the local server is set automatically. However, if you used the Prinect MetaDimension Java user interface to "remote control" a different Prinect MetaDimension server, you can switch to the local server fast with this button without having to know the network name or IP address of the local server.

E-Mail

If your Prinect MetaDimension PC has an e-mail connection, you can configure Prinect MetaDimension in the "Administration > User Administration > Email" section so that an e-mail is sent to up to four recipients if an error occurs during job processing. This e-mail contains a short text describing the error.

This feature enables you to react quickly to errors, even if Prinect MetaDimension is running without being monitored.

Resources **Configuration** **System**

Server
Email
Users
Groups
Permission

Email sender address:

Email address:

SMTP Host:

POP3 Host:

Username:

Password:

Notification Recipient:

Recipient 1:

Recipient 2:

Recipient 3:

Recipient 4:

Notification type:

Notification:	Recipient:			
	1	2	3	4
Device error:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job abort:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Server:

Drive monitor warning: ☐ ☐ ☐ ☐

Setting the sender's address

In the "Email sender address" section you assign the access data of an e-mail user to the e-mail function. Here you must enter user data which allow e-mail access.

- "E-mail Address":

Enter a valid e-mail address in this box. Prinect MetaDimension uses this address as the sender's address. This information is necessary for the e-mail function.

- "SMTP Host":

Enter the SMTP host applicable for the relevant e-mail address. This information is necessary for the e-mail function, because e-mails are distributed via the SMTP host.

- "POP3 Host":

You must fill out POP3 host, user name and password only if the service requires "POP3 before SMTP" to send e-mails. In this case, authentication of the e-mail sender is requested by the POP3 server because the SMTP protocol doesn't have its own password. To enable this option, enter the POP3 host related to the e-mail address.

- "User name":

Enter the user name for the e-mail address. This entry is optional.

- "Password":

Enter the password associated with the user name. This entry is optional.



Note: Extended SMTP (eSMTP) with password protection in the SMTP protocol is not supported by MetaDimension.

Setting the Notification Recipients

In "Notification Recipient", you can enter the e-mail addresses of up to four recipients. As recipients you can, for example, enter DTP users who print via Prinect MetaDimension.

Assigning Notification Events

In the "Notification type" section you can assign different event messages to the four possible e-mail recipients. The following event types are possible:

- "Devices":

These errors are reported by the relevant output device to Prinect MetaDimension during output and are passed on as an e-mail.

Example: If the supply cassette of an imagesetter is empty, a device error message is generated.

- "Job abort":

If job processing was aborted due to an error in the internal RIP, a suitable error message is generated.

Example: If the "Check Fonts" option was activated in a virtual printer and if a required font is not found, this causes the job to be aborted and an error message to be issued.

- "Drive monitor warning":

If the Alert value set for a drive monitored by the drive monitor was overshoot, Prinect MetaDimension stops the processing of further jobs. This event can be passed on as an e-mail.

User Management

Administration of permissions for Prinect MetaDimension is done in "Users", "Groups" and "Permission". Prinect MetaDimension has its own user administration. This means that you can define and manage your users yourself in Prinect MetaDimension.

Concept

User management for Prinect MetaDimension has nothing to do with user management of your operating system. To have a better overview of your work, it may be a good idea to use the same user names and passwords in the user management of Prinect MetaDimension and in your operating system.

In user management, a difference is always made between saving and managing your Prinect MetaDimension user data locally on your MetaDimension PC and centrally on a master data (MDS) server (see also the [section "Prinect Integration Layer \(PIL\) as a Communication Level in the Prinect System", page 36](#)):

- Local user management

- Domain: "local"

The master data of Prinect MetaDimension and your user data are stored locally on your computer.

- Prinect user management

- There is a connection to a MDS server (see [section "Prinect® Services", page 202](#)).
 - The Prinect MetaDimension master data and your user data are stored on the MDS server.
 - Prinect permissions structure is valid (see the [section "Prinect Permissions Structure", page 210](#)).
 - Domain: "MDS"

The following is applicable both for local and for Prinect user management in Prinect MetaDimension: The permissions of a user are defined solely by belonging to one of the following permission groups:

- Group with administrator permissions
- Group with Poweruser permissions
- Group with user permissions
- Group with guest permissions

The permissions of the group are based on a hierarchy: administrator permissions have the most authority and guest permissions the least.

Administration - System

The following users are defined by default after installation:

Local user management:

Predefined Users	User Name	Password	Permission Groups
Administrator	Admin	Admin	Administrators
Poweruser	Poweruser	Poweruser	Poweruser
User	User	User	User
Guest	Guest	Guest	Guest

Prinect user management

Predefined Users	User Name	Password	Permission Groups
Prinect Administrator	Administrator	-	PrePressAdministrators
PrePress Power User	PrePressPoweruser	-	PrePressPoweruser
Prepress User	PrePressUser	-	PrePressUser
PrePress Guest	PrePressGuest	-	PrePressGuest
Press Power User	PressPowerUser	-	PrePressPoweruser
Press User	PressUser	-	PrePressUser
Press Guest	PressGuest	-	PrePressGuest
PostPress Power User	PostPressPowerUser	-	PrePressPoweruser
PostPress User	PostPressUser	-	PrePressUser
PostPress Guest	PostPressGuest	-	PrePressGuest

You should log in as administrator the first time you start Prinect MetaDimension Printmanager after installation. You then have permission to create users and assign them to the permission group desired.

Prinect Permissions Structure

The MDS users created in a Prinect application are stored on the MDS server. They are available to all other Prinect applications that are connected to the MDS server.

In the MDS permissions structure, the following four permission groups are mandatory for all Prinect applications:

- PrePressAdministrators
- PrePressPowerUsers
- PrePressUsers

- PrePressGuests

The permissions of the MDS users are managed autonomously by each Prinect application. This means that the permissions that an MDS user has are defined separately in each Prinect application. The permissions of the MDS user are defined by means of the group the user belongs to. (The Prinect Integration Manager is an exception in the Prinect system. In this case, single permissions can also be assigned to the MDS users.)

Example

Prinect MetaDimension, Prinect Shooter and Prinect Integration Manager are connected to the MDS server.

You create an MDS user "HD_Global" in Prinect MetaDimension and assign it to the "PrePressUsers" permission group.

The "HD_Global" user is now available to all other Prinect applications that are connected to the MDS server, this means in our example to Prinect Shooter and Prinect Integration Manager. In other words, you can log in as "HD_Global" with the appropriate password on Prinect Shooter and on the Prinect Integration Manager as well. Here too, the "HD_Global" user has the permissions of the "PrePress-Users" permission group.

You can assign, for example, the "HD_Global" MDS user to another permission group if you are logged in to the Prinect Shooter or the Prinect Integration Manager with appropriate administrator permissions.

Users

Existing users are listed in the "Users" section. The "New" button lets you create a new user account.

The screenshot shows the 'System' configuration window with the 'Users' tab selected. The left sidebar contains icons for Server, Email, Users, Groups, and Permission. The main area displays a table of existing users.

Username	Fullname	Ena...	Groups	Details	Type
Admin		Yes	Administrators	Built-in administrative account	local
Guest		Yes	Guests	Built-in print guest account	local
Poweruser		Yes	Powerusers	Built-in print poweruser account	local
User		Yes	Users	Built-in print user account	local

Below the table, there are buttons for 'New...', 'Delete', 'Properties...', and 'Change Password...'. At the bottom, there are two list boxes: 'Available Groups:' and 'Member of:', with 'Add >>' and '<< Remove' buttons between them. At the very bottom right are 'Apply' and 'Cancel' buttons.

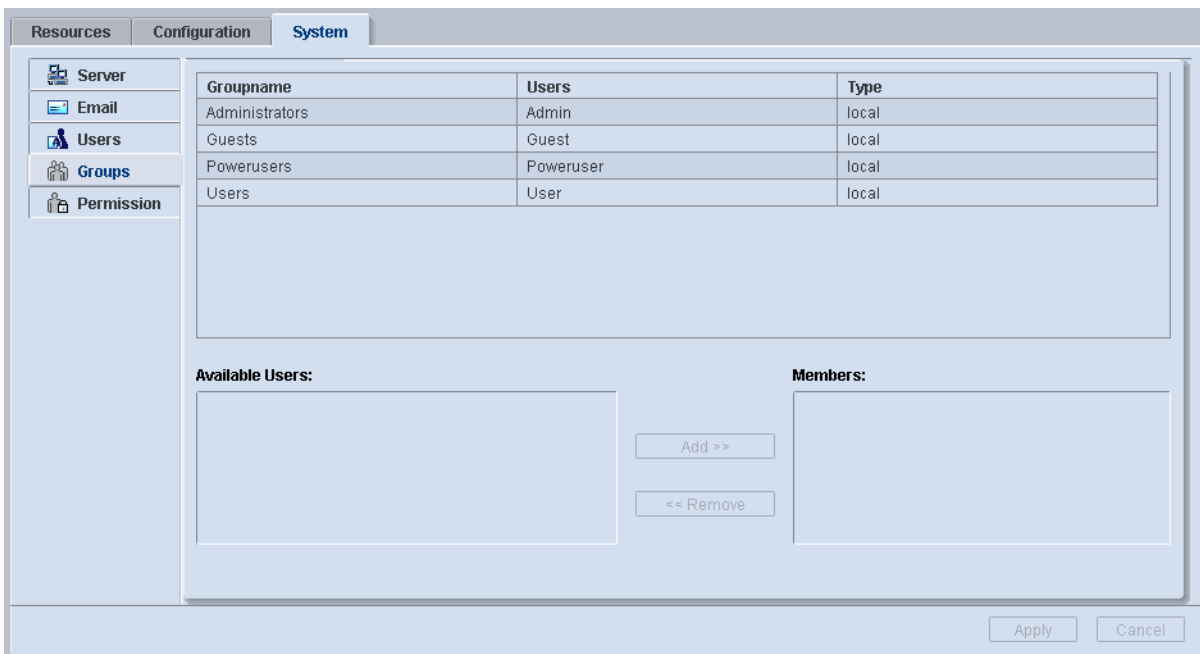
Administration - System

When you select a user, the permission groups that you can assign to this user are shown in "Available Groups". You can assign one or more permission groups to the user with "Add". You can undo the assigned permission group(s) with "Remove".

For more information about the administration of users and groups, see the section [Management of Users and Groups, page 212](#).

Groups

Existing permission groups in user management are listed in the "Groups" section.



When you select a group, the users that you can assign this group to are shown in "Available Users". You can assign one or more users to the group with "Add". You can undo the assigned permission group(s) with "Remove".

For more information about the administration of users and groups, see the next section [Management of Users and Groups, page 212](#).

Management of Users and Groups

The following three examples will be used to describe the procedure for the management of users and groups.

Essentially you can perform the following actions:

- Create a user (see [section ""Users": Example 1: Creating a new user", page 213](#)).
- Assign a user to a permission group. The user then has all the permissions of this permission group (see [section ""Users": Example 2: Assigning a user to a permission group", page 213](#)).

- Assign one or more users to a permission group. All the assigned users then have the permissions of this permission group (see [section ""Groups": Example 3: Assigning several users at the same time to a different permission group", page 214](#)).

"Users": Example 1: Creating a new user

The following user will be created in this example:

- User name: "HD_Admin"
- Password: "Heidelberg"
- Domain: "local" (local user management)

1. Select the "Users" tab on the left to display the list of all defined users.
2. Click "New" to create a new user.
3. Type in "HD_Admin" as the user name, "Heidelberg" as the password, "local" as the domain and click "OK".

You will then see the new "HD_Admin" user in the list of defined users. The "HD_Admin" user still has no permissions because he/she was not yet assigned to a permission group.

4. You can define properties for each user. Double-click the user in the user list or click "Properties". Take note of the following items:
 - "Enabled": In the user list, the "Enabled" column shows whether this option is set or not. If a user is enabled, he/she can log in to Prinect MetaDimension Printmanager. You can also disable users with this option without having to delete the user account with all its properties.
 - "Details": In the user list, the "Details" column shows the item of this box.
 - "Address > Name": This box is filled automatically if you enter the "First Name" and "Family Name" in "Person".
5. You can change the password of every user. To do this, select the user in the user list and then click "Change Password". Type in the new password and confirm it with "OK".
6. You can delete every user that you created. To do this, select the user in the user list and then click "Delete".

"Users": Example 2: Assigning a user to a permission group

The "HD_Admin" user from example 1 is to have administrator permissions.

1. Select the "Users" tab on the left.
2. Click the "HD_Admin" user. You can see two lists below: "Available Groups" and "Member of".
3. Click "Users" in the "Member of" list and then click "Delete".
4. Click "PrePressAdministrators" in the "Available Groups" list and then "Add".
5. Click "Apply". The selected "HD_Admin" user then becomes a member of all groups in the "Member of" list, in this example, of the "PrePressAdministrators" group.

6. To remove the "HD_Admin" user from the "PrePressAdministrators" group again, select this group in the "Member of" list and then click "Delete".

"Groups": Example 3: Assigning several users at the same time to a different permission group



Note: The "Groups" tab is used mainly to assign several users to a new permission group. To assign a single user to a different permission group, go to the "Users" tab and assign the user as described in Example 2.

"HD_User_1", "HD_User_2" and "HD_User_3" are members of the "Administrators" group. You are going to remove these users from this group and assign them to the "PowerUsers" group instead.

1. Select the "Groups" tab on the left.
2. Click the "PowerUsers" group in the list of permission groups.
3. Mark "HD_User_1", "HD_User_2" and "HD_User_3" in the "Available Users" list and then click "Add".
4. Click "Apply". All users in the "Members" list then become a member of the "PowerUsers" group, in other words, "HD_User_1", "HD_User_2" and "HD_User_3". Since a user can only be a member of one group, these users are automatically removed from the "Administrators" group.

Permissions Table for Prinect MetaDimension

Abbreviations:

- "Access": All permissions
- "restr. access (1)": All permissions, but deletion of image jobs is not possible.
- "restr. access (2)": All permissions, but the "Select by IP Number" option is dimmed. This means that you cannot select the Prinect MetaDimension computer by the IP number when you select the server.
- "restr. access (3)": All permissions that are confined to one's own user account.
- "Access (4)": All permissions, but passwords of other users can only be changed if the original password is known.
- "readonly": Read-only permissions
- No entry: No permissions

Function	Administrator	Poweruser	User	Guests
Jobs				
Job list - general	Access	Access	Access	readonly
Starting/pausing/stopping jobs	Access	Access	Access	NO ACCESS
Delete Jobs	Access	Access	NO ACCESS	NO ACCESS

Function	Administrator	Poweruser	User	Guests
Change the priorities of jobs	Access	Access	Access	NO ACCESS
Job Settings	Access	Access	Access	NO ACCESS
Job Information	Access	Access	Access	readonly
Job details	Access	Access	Access	readonly
Job preview /color	Access	Access	Access	NO ACCESS
Signatures	Access	Access	Access	NO ACCESS
DI Job Control	Access	Access	Access	NO ACCESS
Halftone Soft Proof	Access	Access	Access	NO ACCESS
Image Job List	Access	Access	restr. access (1)	readonly
Devices				
Device List	Access	Access	readonly	readonly
Engine Managers	Access	Access	NO ACCESS	NO ACCESS
Resources				
Output Plan Templates	Access	Access	readonly	readonly
Paper stretch compensation	Access	Access	readonly	readonly
Page Positioning	Access	Access	readonly	readonly
Calibration	Access	Access	NO ACCESS	NO ACCESS
ICC Profiles	Access	Access	readonly	readonly
Fonts	Access	Access	readonly	readonly
Color handling	Access	Access	readonly	readonly
Color Tables	Access	Access	readonly	readonly
Printing Materials	Access	Access	readonly	readonly
Configuration				
Virtual printers - list	Access	Access	Access	Access
Virtual printers - create/delete	Access	NO ACCESS	NO ACCESS	NO ACCESS
Virtual printers - change	Access	Access	NO ACCESS	NO ACCESS
Virtual printers - starting/pausing	Access	Access	NO ACCESS	NO ACCESS
Image Directories	Access	Access	readonly	readonly
Default settings	Access	Access	readonly	NO ACCESS
Drive Monitor	Access	readonly	readonly	readonly
Regional settings	Access	Access	NO ACCESS	NO ACCESS

Function	Administrator	Poweruser	User	Guests
JDF portal	Access	NO ACCESS	NO ACCESS	NO ACCESS
Princt@ services	Access	NO ACCESS	NO ACCESS	NO ACCESS
System				
Server	Access	Access	Access	restr. access (2)
E-Mail	Access	Access	readonly	NO ACCESS
User Management				
User - create/delete/assign groups	Access	readonly	readonly	readonly
User Properties	Access	restr. access (3)	restr. access (3)	restr. access (3)
User - change password	access (4)	restr. access (3)	restr. access (3)	restr. access (3)
User - permissions	readonly	readonly	readonly	readonly

Prinect MetaDimension Output Plan Editor

The Output Plan Editor allows you to create output plan templates that can be saved as templates and assigned to different virtual printers. The output parameters defined in the Output Plan template are applied to the jobs when the print jobs are being processed.



Note: The concept behind the Output Plan templates helps you to individually set the parameters for the virtual printers. It lets you assign Output Plan templates to several virtual printers and vary them slightly if needed. For example, you wish to use a virtual printer that supports proofing in addition to imaging and you also need another virtual printer that prints to the same imagesetter but is not to be used for proofing. In this case, you can assign the same Output Plan template to both virtual printers and need to disable the proof option in just one Output Plan template.

If an Output Plan template is assigned to a virtual printer, the settings made there will have an effect on the jobs that are processed by this virtual printer. That is why the term "Output Plan" instead of "Output Plan template" is used when a virtual printer is configured: The general template has turned into a specific Output Plan.

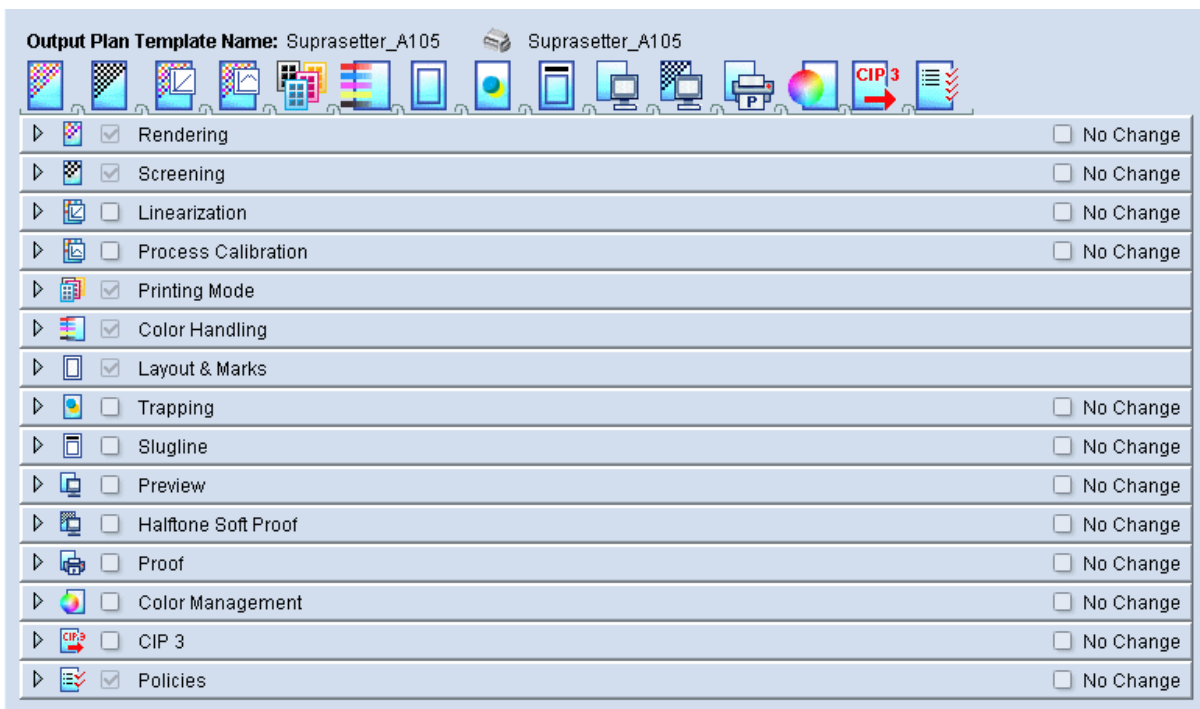
Output Plans are equivalent to Job Tickets in Adobe (Portable Job Ticket Format). The term Output Plan was selected because extensions that do not comply with the Adobe Job Ticket format were added to the internal dataflow in Prinect MetaDimension.

You can use the Output Plan Editor to set up the following output properties. The output properties vary depending on the system configuration and device selected.

- ["Rendering", page 225](#)
- ["TIFF-B Export Settings", page 227](#) (for TIFF-B export or DI presses)
- ["Device Settings", page 228](#) (for proofers)
- ["Settings for Concept Proof", page 229](#)
- ["Settings for Color Proof Pro", page 230](#)
- ["Settings for Proof Open PS/Proof Open TIFF/Proof Open JPEG", page 232](#)
- ["PDF Export Settings", page 233](#)
- ["Screening", page 234](#)
- ["Linearization", page 241](#)
- ["Process Calibration", page 243](#)
- ["Output mode", page 245](#)
- ["Color handling", page 250](#)
- ["Layout & Marks", page 253](#)

Output Plan Editor

- ["Trapping", page 256](#)
- ["Slugline", page 261](#)
- ["Preview", page 263](#)
- ["Halftone Soft Proof", page 263](#)
- ["Proof", page 264](#)
 - ["ROOM Proof", page 273](#)
- ["Color Management", page 275](#)
- ["CIP 3", page 289](#)
- ["Policies", page 293.](#)



You can edit the Output Plan Editor in the Prinect MetaDimension Java user interface (Printmanager).

You can use the Output Plan Editor at three different points in the Printmanager:

- In "Administration > Resources > Output Plan Templates" (see [section "Output Plan Templates", page 123](#)):

In Prinect MetaDimension, you set the output properties using "Output Plan Templates". You save these templates and assign them to a virtual printer (in "Administration > Configuration > Virtual Printers"). Each job printed with this virtual printer is processed based on the assigned Output Plan.

- In "Virtual Printers":

When you are configuring a virtual printer, you can open one of the available Output Plans with "Open" so that you can edit it (see [section "Output Plan:", page 174](#)).

- In the job settings:

In the "Jobs" section, open a job from the job list. You can then view details of the job properties in the "Job Settings", "Job Information" "Job Preview" and "Signatures" tabs. The "Job Settings" tab displays the parameter setup of the Output-Plan with which the current job was processed ("job-specific Output Plan").

Generally, the Output Plan settings can only be displayed and not changed here. Only when you reprint a job (by selecting a job and clicking the Start button) and if the status of this job is "paused" is it possible to modify the Output Plan settings of the job.

When you save the settings and output the job by clicking the Start button again, the job will be edited based on the new parameters (see also [section "Modification of the Job-specific Output Plan Setup", page 60](#)).



Note: These settings only affect the job that is currently open. The Output Plan template of the virtual printer is not influenced by this.



Note: You can enable or disable the "paused" status of jobs you want to reprint by selecting "Administration > Configuration > Preferences". For more information, refer to the section [section "Reprint", page 192](#)

Priorities for the Setup of Output Settings

You can set the output parameters in the Output Plan settings. A "job Output Plan" may also be created as a "job ticket" by a DTP application or by Prinect Signa Station and assigned to the job. You can disable such external Output Plan settings for editing the job with Prinect MetaDimension (see [section "Ignore Job Output Plan", page 174](#)). After you do this, only the output parameters set in Prinect MetaDimension are used.

The individual Output Plan settings are divided into different parameter groups, for example "Screening", "Linearization", "Process Calibration", etc. When setting the Output Plan parameters, you can decide between two models by which the parameter priorities will be controlled:

- The direct model (as in the Prinect Integration Manager)
- The layer model (as with the older MetaDimension version)

You decide on the setup model you will use in the single parameter groups of the Output Plan settings, as shown in the following example for Trapping:

Output Plan Editor

Every parameter group has a "No Change" option in the top right corner. By default, this option is not enabled.

Princt MetaDimension works with the direct model if this option is disabled for all parameter groups of an Output Plan and if no other parameters are set to "No Change".

The direct Model

All settings you defined in the respective parameter groups affect job processing directly if the "No Change" option is disabled.

Initially, you need to enable the parameter group by checking the relevant box.

Now you can select the parameters of this group. All settings made here will have a direct effect on the processing of all jobs handled by this Output Plan. Only when the output parameters have different settings in Princt Signa Station or in the DTP program will the Output Plan settings be overwritten.

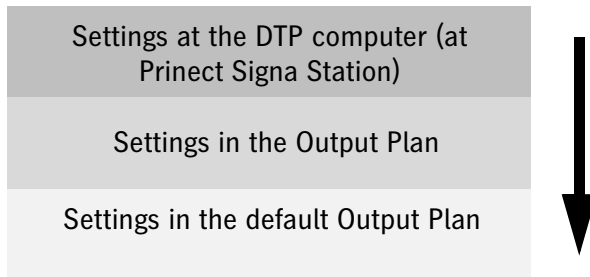
The Layer Model

You can set the parameters for processing jobs you wish to output via Princt MetaDimension at various points:

- at Princt Signa Station,
- at the Princt MetaDimension PC: in the Princt MetaDimension Output Plan settings,
- in the default Output Plan settings. For every installed output device there is a default Output Plan. In this Output Plan, the output parameters are the factory defaults. You can open and

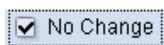
modify the default Output Plan with the "Edit default" button (see [section "Buttons in "Administration > Resources > Output Plan Templates""](#), page 125).

These setting options affect job processing by different levels of importance. Think of the setup as having three "layers":



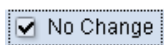
- The bottom layer contains the settings in the default Output Plan. These settings can be overwritten by the above two layers.
- The middle layer makes up the output parameters that you can define in the individually modified Output Plans. These settings can only be overwritten by the parameters of the top layer.
- The settings at Prinect Signa Station or on the DTP computer form the top layer.

In Prinect MetaDimension, you can define different Output Plans for specific purposes. In addition, there is always a default Output Plan. If you do not assign a value to a parameter in a special Output Plan, or if single parameters or parameter groups are set to "No Change", the corresponding settings in the default Output Plan will be used.



The output settings defined at Prinect Signa Station (on the DTP computer) form the top layer. These settings can overwrite settings in layers that are further down, irrespective of whether "No Change" is set or not set in the Output Plan. This ensures that the user does not have to define settings on the Prinect MetaDimension Printmanager if he/she wants certain individual settings for the job.

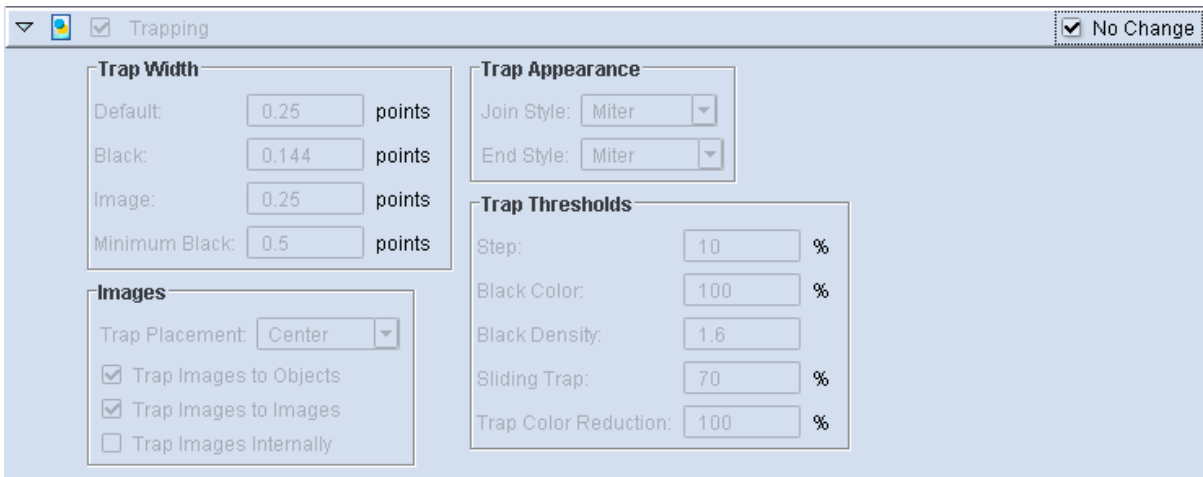
Set a parameter group to "No Change"



By enabling the "No Change" option, you can set an entire parameter group to "No Change".

Irrespective of whether the parameter group was previously enabled or not, all settings options are then "dimmed":

Output Plan Editor



The entire parameter group, for example, Trapping, is then "dormant", that is, the trapping settings are ignored for job processing with this Output Plan. Instead, the trapping settings of the default Output Plan are used. If trapping settings were made at Prinect Signa Station where the jobs were created, they overwrite the settings in the default Output Plan.



Note: Some parameter groups, for example "Printing Mode", "Color Handling" or "Layout & Marks" cannot be set to "No Change" as a whole. Here you can only set individual parameters to "No Change".

Adjusting the Default Output Plan

You can edit and save the default Output Plan for every output device that is installed. These settings in the default Output Plan are used until they are changed again.



Note: It is recommended that you adjust the default Output Plan to your needs after the MetaDimension installation. To do this, go to "Administration > Resources > Output Plan Templates" and select the output device you want. Click the "Edit default..." button. The Output Plan Editor shows the default Output Plan of the selected output device.

In the default Output Plan set all the parameters that you want to define as the basic setup for this device. If you use a Suprasetter as an output device, for example, and generally always use the trapping option, enable the "Trapping" option and set any additional parameters for trapping.

☐ No Change



Note: If you edit a default Output Plan, the "No Change" option is not active because a default Output Plan is the "basis" upon which the layer model is formed, that is, settings from a deeper level cannot be carried over. When you install the Prinect MetaDimension software, the default Output Plans will have plausible preferences that will give you proper output results but don't take into account any special needs. As each output route generally has a specific setup and, for that reason, you are very likely to change many of the output parameters, we strongly recommend that you customize the settings in the default Output Plan. In particular, the settings in the "Policies" group should be customized.

After the setup, save the default Output Plan with "Save" (and not "Save as"!) and close the edit view ("Close" button). Customization of the default Output Plan has the following effect:

- If you set up a virtual printer and do not assign it an individual Output Plan, the jobs for this virtual printer will always be handled using the default Output Plan settings.
- When you create a new Output Plan (with "New"), all the parameters have the settings of the default Output Plan. You only have to modify those parameters that will differ from the defaults. For example, in a new Output Plan, you can enable and set up the "Trapping" parameter group. Then trapping of this Output Plan is used although trapping is not enabled in the default Output Plan.

Some processing steps, like "Screening" (for imagesetters) or "Policies", are always enabled in the default Output Plan and cannot be disabled (the boxes for enabling the relevant parameter group are checked and dimmed). This means that each processing step has parameters.

An Example for Setting Parameters According to the Layer Model

A recorder controlled via the internal RIP is configured in the default Output Plan with the "IS classic", "Smooth elliptical", "1000 x 1000 pixel/cm" and "60 l/cm" screening parameters.

Two Output Plans are then set up for this recorder: in one Output Plan the "Screening" parameter group is set to "No Change" so that the default Output Plan remains set.

In the second Output Plan the screening options are set to "Hybrid Screening", "Round", "1000 x 1000 pixel/cm", "80 µ pixel size" ("No Change" option is disabled).

Two virtual printers are set up that will each be assigned to one of the two Output Plans.

Now the virtual printer with the "No Change" screening setting can be used for all output to be carried out with the IS Classic screening setting.

The second Output Plan where Hybrid Screening is enabled can be used for outputs with Hybrid Screening.

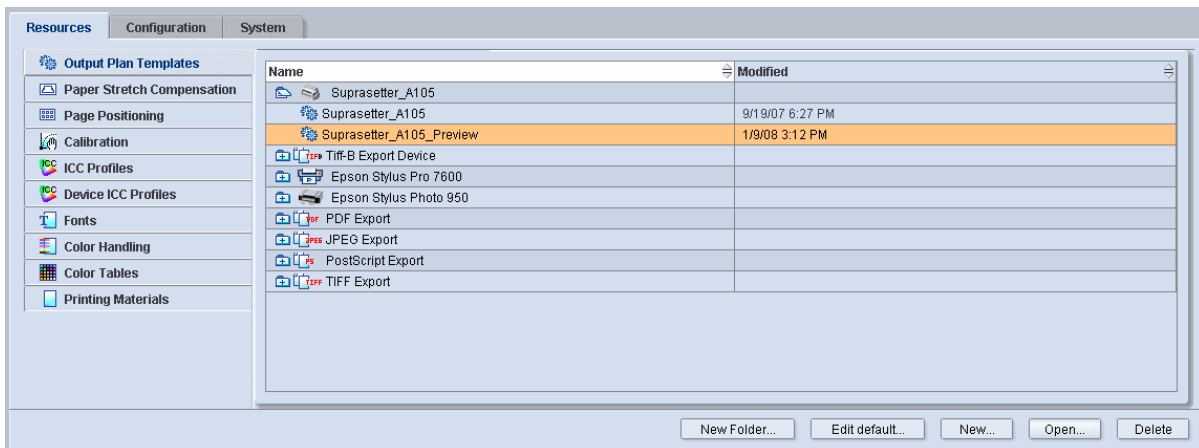
The print jobs in this example are created at a Prinect Signa Station.

If a one-time setting needs to be used, for example, imaging with Hybrid Screening with a resolution of 1000 x 1000 pixels/cm and a dot size of 30 µ, the appropriate parameters can be changed in the output mode settings at Prinect Signa Station. The virtual printer with Hybrid Screening is selected as the printer (in contrast to dot size and resolution, screening generally cannot be set in the DTP application).

Such "alternative settings" should only be made if the desired output options are used so rarely that it is not worth creating an separate Output Plan with the corresponding virtual printer for the Prinect MetaDimension Printmanager.

Creating an Output Plan Template

To create or modify an Output Plan template, go to "Administration > Resources" and select the "Output Plan Templates" tab. The installed devices are listed in the dynamic part of the window.



Structure of the Output Plan Templates

Before every device item, there is a folder symbol that is marked with a plus sign if it has Output Plan templates. You can expand the structure by clicking the symbol. Click the symbol again to close the structure. You can create a subfolder for Output Plan templates for a particular device by marking an item in the list and clicking the "New Folder" button. If required, you can extend the folder structure even further by creating other subfolders in the folder you just created.



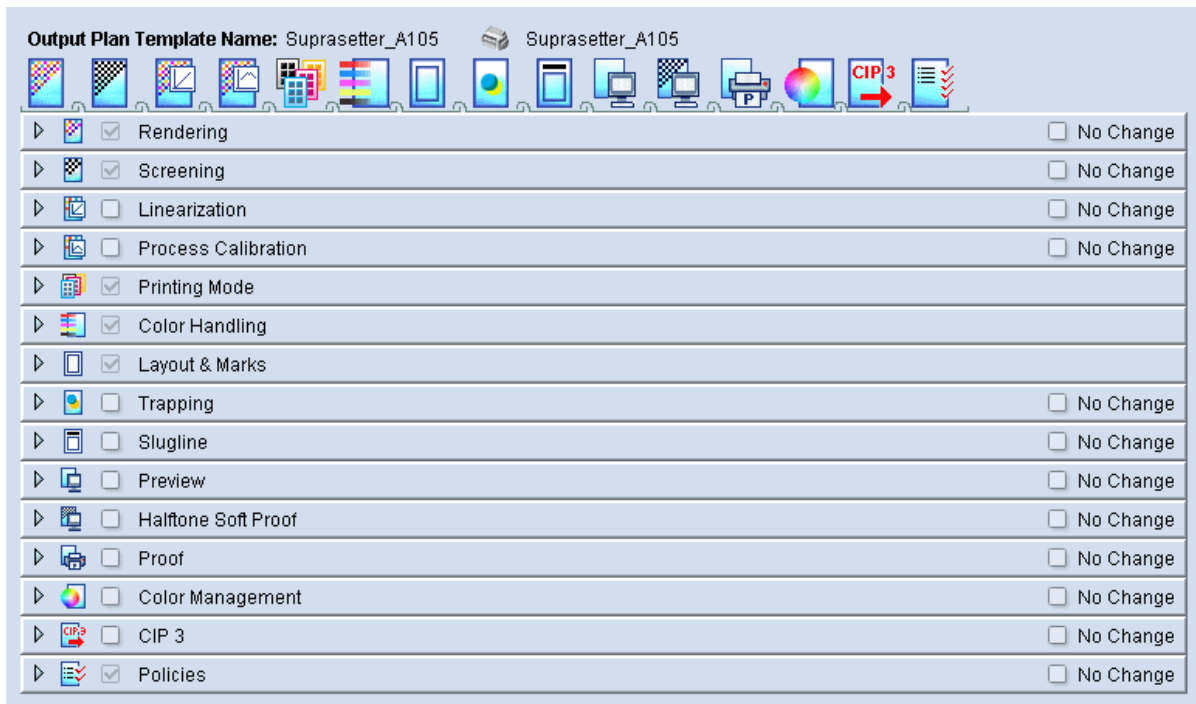
Note: Organizing your Output Plan templates in a folder structure allows you to assign such templates to different customers. This folder structure makes it easy for you to manage your Output Plan templates especially if you need a large number of Output Plan templates to implement different output variants.

The folder structure of the Output Plan templates is also found in a virtual printer configuration when you assign an Output Plan template to a virtual printer (see [section "Virtual Printers", page 171](#)).

Editing an Output Plan Template.

You can open an Output Plan template by double-clicking the relevant item in the list. To create a new Output Plan template, select the device item or folder you want and click the "New" button.

The details view displays when you open an Output Plan template:



Each parameter section, e.g. "Screening", "Linearization", "Process Calibration", "Printing Mode", etc. has its own specific icon. The icons are displayed twice:

- side by side below the name of the Output Plan as large symbols without a name
- below each other next to the options buttons.

You can open the parameter sections in two different ways:

- By clicking the corresponding icon on the horizontal icon bar below the Output Plan name. All other sections close when you click the icon and only the selected parameter is displayed.
- By clicking the arrow to the left of the item you want in the vertical list of parameters. You can open several sections at the same time if you choose this way.

Select the appropriate check box to make changes to a parameter section. Additionally, the "No Change" option may not be checked. You will find notes on the Output Plan settings and the "No Change" option in the section [Priorities for the Setup of Output Settings, page 219](#).

Rendering



Note: You can use "Rendering" only if the "PDF PrintEngine" option is enabled.

Use the PDF PrintEngine for the rendering of PDF documents in an original PDF workflow. Compared to the CPSI PostScript Interpreter, the advantages of the PDF PrintEngine basically lie in the processing of transparency elements ("Live Transparency"). For more information about the PDF PrintEngine see [section "Adobe PDF PrintEngine \(APPE\)", page 28](#).

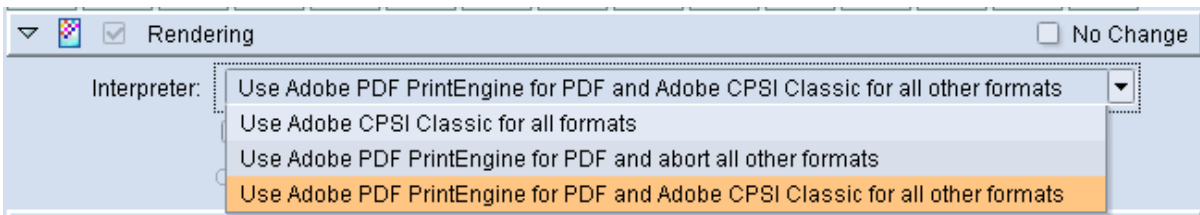
Output Plan Editor

The PDF PrintEngine is installed in addition to the "Configurable PostScript Interpreter (CPSI)" that can also be used for the rendering of PDF documents as well as of PostScript documents.

In "Rendering", you define which renderer will be used in the Output Plan for processing PDF documents. PostScript documents can only be processed by the CPSI renderer.

Interpreter

You can select between the following options in the "Interpreter" list box:



- Use Adobe CPSI Classic for all formats:

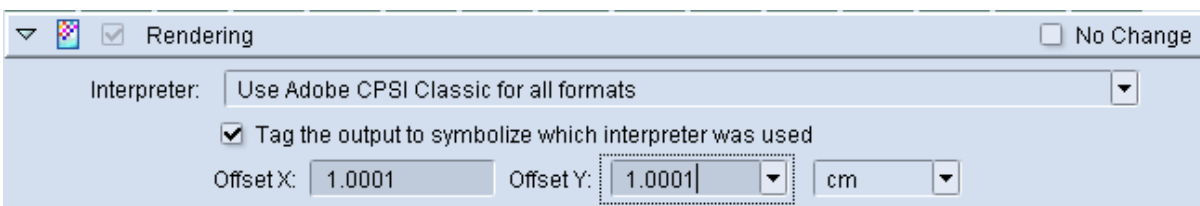
All the documents (PostScript and PDF) will be processed with the CPSI. This Output Plan doesn't use the Adobe PDF PrintEngine.

- Use Adobe PDF PrintEngine for PDF and abort all other formats:

Only the PDF PrintEngine is used as the renderer. Solely PDF documents can be processed if you set this option. Job processing is aborted if you try to process documents other than PDF.

- Use Adobe PDF PrintEngine for PDF and Adobe CPSI Classic for all other formats:

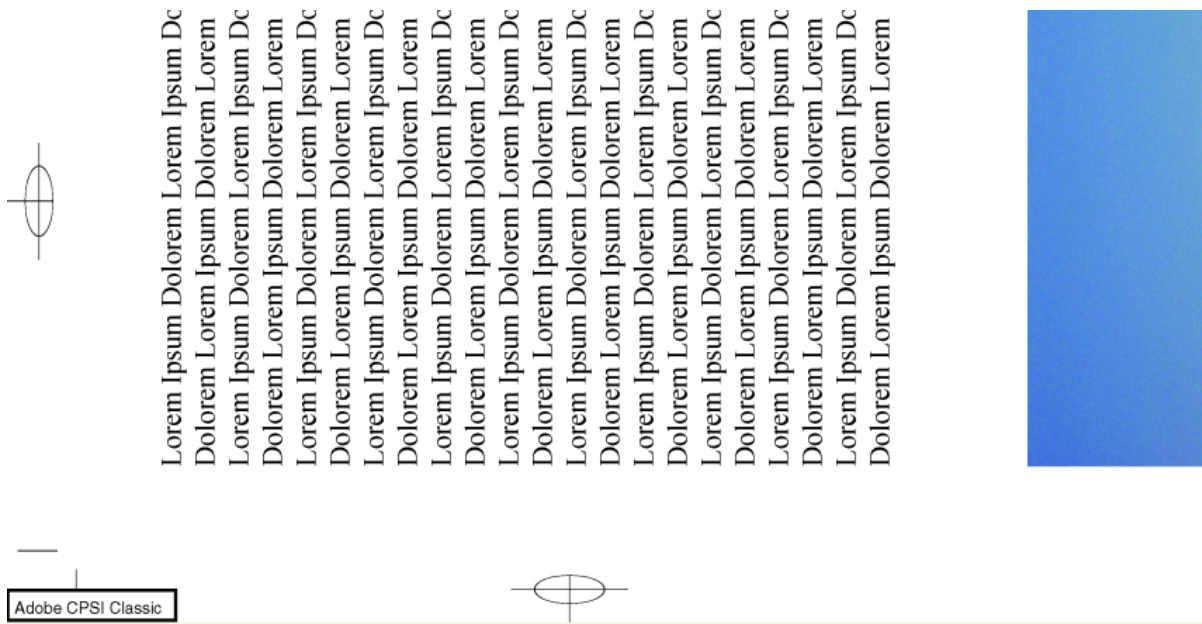
The PDF PrintEngine is used for PDF documents, and the CPSI interpreter is used for PostScript documents and all other document formats.



Tag the output to symbolize which interpreter was used

A comment about which renderer was used is added to the output (plate, proof, export file) when this option is checked. Use the offset parameters (Offset X, Offset Y) to define how far this comment is from the bottom left corner of the imaging area of the output.

- Offset X: Distance of the bottom left text mark from the bottom left corner of the imaging area in horizontal direction.
- Offset Y: Distance of the bottom left text mark from the bottom left corner of the imaging area in vertical direction.

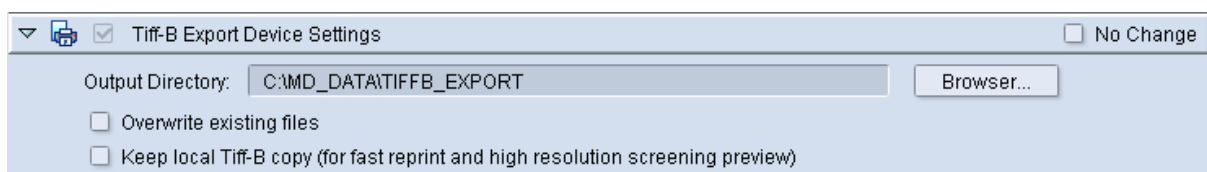


Note: To define where you can place this comment without covering the 1up content or important marks, you can enable the preview in the Output Plan and determine the offset values there with the "ruler" (see [section "Preview", page 263](#) or [section "Preview / Color Tab", page 69](#)). The example shows the text mark with Offset X = Offset Y = 0.

TIFF-B Export Settings



Note: You can only see the "Tiff-B Export Device Settings" section in the Output Plan template if Prinect MetaDimension was installed for the Shooter workflow for output to Prinect Shooter or to another TIFF-B-compatible output device or for the Speedmaster DI/Quickmaster DI workflow.



- "Output Directory" text box:

This displays the name of the folder for data output as was defined during the setup of the Tiff-B Export Engine Manager.

You can set a different output directory by overwriting the path or using the "Browser" button.

Output Plan Editor

- "Overwrite existing files" check box (not available for DI presses)

Any TIFF-B files that are in the output directory are overwritten by files of the same name if you check this option. If this option is left unchecked, a number is added to the new file name to tell it apart from the previous file.

- "Keep local Tiff-B copy (for fast reprint and high resolution screening preview)" check box (not available for DI presses)

If you check this option, a copy of the TIFF-B files remains on the MetaDimension server after the output and is not deleted. This option enables a renewed output of the TIFF-B files without this having to be generated again. This option must also be enabled if you wish to use the high-resolution halftone softproof (see [section "Halftone Soft Proof tab", page 89](#)). Please note that TIFF-B files require a lot of hard drive memory. You should therefore only activate this option if sufficient memory is available and if it can be expected that a repeated output is required. These copies are filed in a subfolder of the spool directory. They are deleted when the job is deleted.

Device Settings



Note: You can only see the "Device Settings" section in the Output Plan template of a proofer.

You must have set up a proofer with the "Color Proof Pro" application or the "Proofing Engine Manager" ("Concept Proof") in order for it to appear as a device in the Output Plan.

Activate and parameterize this section if, for example, you want to use a proofer as main output device instead of an imagesetter. In this case, please leave the "Proof" section disabled! If you don't, you would enable a "proofer workflow" (see [section "Proofer Workflow", page 359](#)) that does not make any sense in a proof output and would only give you more proofs on another proofing device (see also [section "Proof", page 264](#)).

Exception: For output on a proofer, you required a proof on another proofing device, e.g. if you would only like to print a poster on the proofer and beforehand want to have a proof on a DIN A4 proofer. This applies for all proofers.

Define settings for a proofer in "Proof" in the Output Plan template of your imagesetter if your output device is a filmsetter or platesetter and you wish to proof your data in addition (and use the proofer as your secondary device). For more details, see also [section "Proofer Workflow", page 359](#).



Note: For detailed information about proofing with Prinect MetaDimension, see the "Prinect MetaDimension x.x - Proofing Engine Manager" manual and Online Help or the "MetaDimension Color Proof Pro" manual.

The various settings for different devices will now be described.

The "Device Settings" parameter setup is divided into the "Proofer Parameter" and "General Settings" groups.

Settings for Concept Proof

Proofer Parameters

You can set "Tray", "Paper Name" and "Resolution" in this group if your installed printer provides you with such configuration options.

General Settings

You define general settings for proofing in this section.

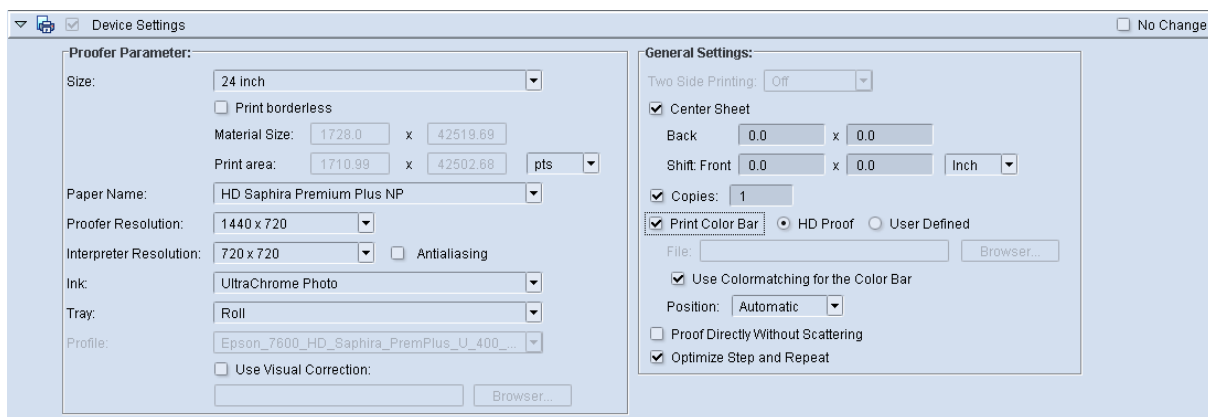
- "Two Side Printing": This is where you set how the proof sheet will be used. Settings are only possible if the device has a duplex unit.
 - "Off": Only one side of the proof sheet is used.
 - "Tumble": The two sides of the proof sheet are used. For example, the sheet is turned from front to back, with the page marks remaining on the page, but the front mark going to the back.
 - "Turn": The two sides of the proof sheet are used. For example, the sheet is turned from right to left, with the page marks going from right to left, and the front mark remaining at the front.
- "Center Sheet": The settings in this section can be used for the front/back output. By inputting vertical and horizontal shift values in the selected dimensional unit, you can attain the front/back prints perfectly spaced one above the other. This allows you, for example, to perform an exact formproof for front and back.
 - "Back": Enter the values here in horizontal and vertical direction for a shift of the back page in order to center the output.
 - "Shift Front": Enter the values here for a shift of the front page in order to place the front page identically over the back page.
- "Copies": Enter the desired number of proof copies.

Output Plan Editor

- "Print Color Bar" A color bar is also printed during proof output.
 - "HD Proof": The preinstalled Heidelberg Proof Color Bar is used with this option.
 - "User-Specific": You can load a self-defined color bar file in the TIFF or EPS format.
 - "Use Colormatching for the Color Bar": Color bars are output with color management.
 - "Position": This is where you can set whether the color bar will be positioned vertically or horizontally.
- "Optimize Step and Repeat": In print jobs where a number of identical pages are placed on one sheet (multiple copies), repeated objects are interpreted just once to shorten processing time if this option is enabled.

Settings for Color Proof Pro

The settings for an Epson Stylus Pro 7600 will be described as an example of a printer driven by Color Proof Pro. Other settings may be possible with other devices. Compared directly to the settings shown above for a printer driven by the Proofing Engine Manager, you can see that there are differences in what can be set in the various Engine Managers.



Proofer Parameters

You can set different device parameters in this group. The settings that are possible can vary depending on your device.



Note: Take note of the requirements listed in [section "Proofer Parameters", page 266](#).

- "Size": Set the size of your proofing material in this box. Remember that the output area defined in the settings for the Scatter Proof mode ("Devices > Proof Devices") (see [section "Output area Group", page 118](#)) must never be bigger than the material size you enter in this box.
- "Paper Name": In the Color Proof Pro Engine Manager you can create linearizations (EPL files) for every printer and link them with an ICC profile. You do this with the "Base Linearization" and

"Profile Keeper" applications. Each of these EPL/ICC files is made up of a combination of paper type, resolution, ink and quality mode. Based on the EPL/ICC files that are found, the Output Plan now shows the possible parameters in the list boxes for Paper Name, Resolution and Ink. Select the paper that will be used for output with this Output Plan from the list box.

- "Proofer Resolution": Select the resolution you want for the proofer from the list box.
- Interpreter Resolution: Select the resolution you want for the interpreter from the list box. With some printers, it's possible for you to set a different interpreter resolution to the printer resolution. For example, you can set a lower interpreter resolution to increase the job processing performance.
- Antialiasing: Antialiasing is used when calculating the proof data. Antialiasing is disabled automatically if the resolution exceeds certain limits. In such cases, better quality is not possible and antialiasing would only inflate the volume of data.
- "Ink": In the Color Proof Pro Engine Manager, you can use the "Profile Keeper" to select different types of ink, depending on your proofer. Select the ink that will be used for proofing with this Output Plan from the list box.
- "Tray": You can select the paper tray you want in this box. If you set "Automatic", the system selects the tray that best matches the size of your material.
- "Profile": This box displays the profile that is used, depending on the parameters you selected for Paper Name, Resolution and Ink. You can select a profile in this list box if more than one EPL/ICC combination (e.g. with different quality modes) was created in the Color Proof Pro Engine Manager.
- "Use Visual Correction" option: In the Color Proof Pro Engine Manager, you can visually correct the linearization data for color output with your proofer. If you have such linearization data, you can enable them for output with this option.



Note: More details about Color Proof Pro settings can be found in the Online Help of the Color Proof Pro Engine Manager or in the "MetaDimension Color Proof Pro" manual.

General Settings

You define general settings for proofing in this section.

- "Two Side Printing": This is where you set how the proof sheet will be used. Settings are only possible if the device has a duplex unit.
 - "Off": Only one side of the proof sheet is used.
 - "Tumble": The two sides of the proof sheet are used. For example, the sheet is turned from front to back, with the page marks remaining on the page, but the front mark going to the back.
 - "Turn": The two sides of the proof sheet are used. For example, the sheet is turned from right to left, with the page marks going from right to left, and the front mark remaining at the front.

Output Plan Editor

- "Center Sheet": The settings in this section can be used for the front/back output. By inputting vertical and horizontal shift values in the selected dimensional unit, you can attain the front/back prints perfectly spaced one above the other. This allows you, for example, to perform an exact formproof for front and back.
 - "Back": Enter the values here in horizontal and vertical direction for a shift of the back page in order to center the output.
 - "Shift Front": Enter the values here for a shift of the front page in order to place the front page identically over the back page.
- "Copies": Enter the desired number of proof copies.
- "Print Color Bar" A color bar is also printed during proof output.
 - "HD Proof": The preinstalled Heidelberg Proof Color Bar is used with this option.
 - "User-Specific": You can load a self-defined color bar file in the TIFF or EPS format.
 - "Use Colormatching for the Color Bar": Color bars are output with color management.
 - "Position": This is where you can set whether the color bar will be positioned vertically or horizontally.
- "Proof Directly Without Scattering": If you have set and enabled the scatter proof option for your device, you can prevent jobs that are processed with this Output Plan from being output as a scatter proof. This means that each job has its own printout. You can find more details about scatter proof in [section "Operating Mode", page 111](#).

Settings for Proof Open_PS/Proof Open_TIFF/Proof Open_JPEG

Proof Open Settings ☐ No Change

Proofer Parameter:

Proofer Resolution: 400 dpi

Output Directory: C:\MD_DATA\ProofOpen_Output Browser...

☐ Overwrite existing files

General Settings:

☒ Print Color Bar ☒ HD Proof ☐ User Defined

File: Browser...

☒ Use Colormatching for the Color Bar

Position: Automatic

Antialiasing 1x1

☒ Optimize Step and Repeat

Proofer Parameters

The following proofer parameters can be configured in this section.

- "Proofer Resolution": This is where you select the resolution of your proof output. Set a resolution that is supported by the target output device.
- "Output Directory": This is where you define the path for the output directory that will hold the proof data. You can enter the path manually or select it with the "Browser" button.
- "Overwrite existing files": Any proof files that are in the output directory are overwritten by files of the same name if you check this option. If this option is left unchecked, a number is added to the new file name to tell it apart from the previous file.

General Settings

You define general settings for proofing in this section.

- "Print Color Bar" A color bar is also printed during proof output.
 - "HD Proof": The preinstalled Heidelberg Proof Color Bar is used with this option.
 - "User-Specific": You can load a self-defined color bar file in the TIFF or EPS format.
 - "Use Colormatching for the Color Bar": Color bars are output with color management.
 - Position: This is where you can set whether the color bar will be positioned automatically or vertically or horizontally.
- "Antialiasing" Antialiasing is used when calculating the proof data if you set 2x2 in the box. Otherwise (1x1), there is no antialiasing.
- "Optimize Step and Repeat": In print jobs where a number of identical pages are placed on one sheet (multiple copies), repeated objects are interpreted just once to shorten processing time if this option is enabled.

PDF Export Settings



Note: You can only see the "PDF Export Settings" section in the Output Plan template when you edit an Output Plan template for a "PDF export" "device". This device is available only if you enabled the "PDF Export" license option.

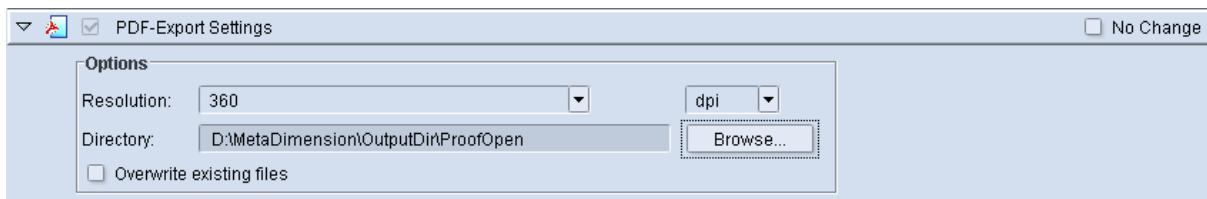
You can use PDF generation for remote proofing, for example. You create a PDF document out of your print job for this. You can output this document locally to your proofer and check it. Ideally, your customer will also have a similar proofer that can output true-color proofs. He/she is then able to proof the data that you send as a PDF document. If such a proofer is not available, your customer can at least check the data on the screen. If necessary, correction comments can be added to the PDF document.



Note: Spot colors can be retained in the exported PDF documents.



Note: PDF export is set up in the Proofing Engine Manager. The "CMYK + Spotcolors" option must be enabled there in "Settings > Color Space" so that the exported PDF documents can have spot colors at all. You must select "All Colors" in the "Color Handling Mode" list box in "Color Handling" in the Output Plan if you wish to output the spot colors in a PDF file generated with "PDF Export". The "Convert spot colors to CMYK" option may not give you the results you want (see [section "Color handling", page 250](#)).



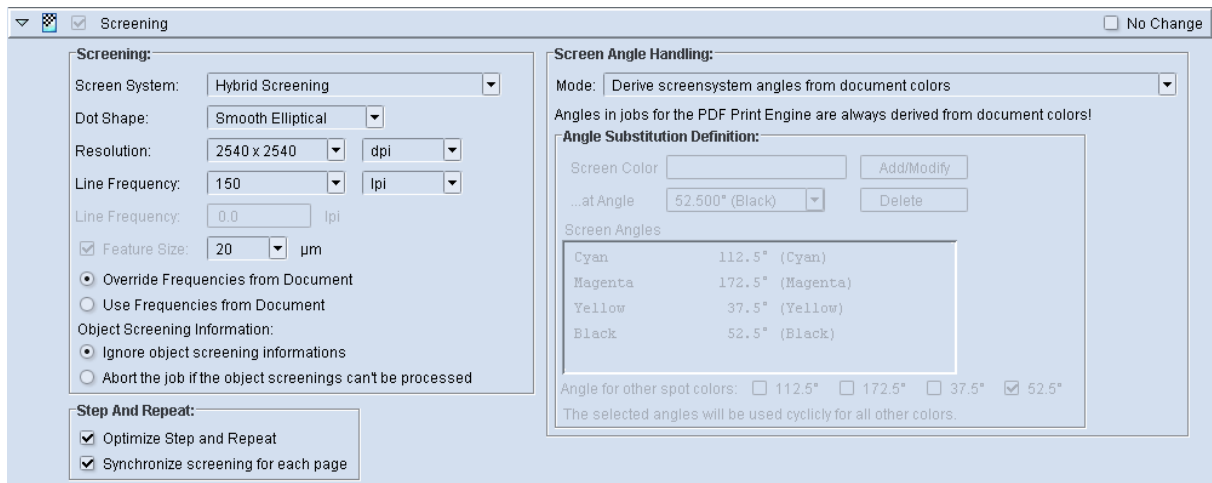
Options

You can set the following proof parameters in this group:

- "Resolution": You can select a resolution for other output devices in this box. If you know which resolutions a target device has, you should select a suitable resolution for it.
- "Output Directory": An output path set up during installation displays by default in this box. If necessary, use the "Browse" button to select a different directory or to create a new one. The exported PDF files are filed in this directory. From time to time, you should manually delete PDF files that are no longer needed.
- "Overwrite existing files": Any PDF output files of the same name are overwritten if you enable this option.

Screening

This is where you define screening parameters for all devices that output screened data (imagesetters, DI presses, TIFF-B export). This section is divided into "Screening" and "Screen Angle Handling".



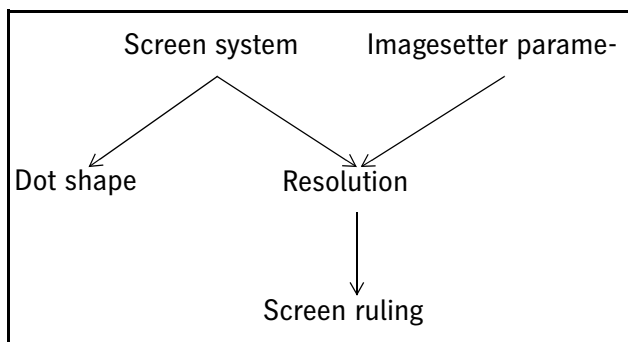
The Screening section

In "Screening", you set the individual screening parameters for the output. The following parameters are interrelated:

- Type (screen system)
- Dot Shape (screen dot shape)
- Resolution (output resolution)
- Screen Ruling (frequency)
- Spot Size (screen dot size)

are mutually dependent on one another. Additionally, the selections that can be made depend on the connected recorder.

The dependencies are displayed in the diagram below:



The resolution depends on the current imagesetter parameters and the screen system selected ("Screen System" box). The selection of screen rulings depends upon the resolution selected.

Screening:

Screen System: Hybrid Screening

Dot Shape: Smooth Elliptical

Resolution: 1000 x 1000 dpcm

Line Frequency: 60.0 lpcm

Line Frequency: 0.0 lpi

Feature Size: 20 µm

☒ Override Frequencies from Document
☐ Use Frequencies from Document

Object Screening Information:
☒ Ignore Object screening informations
☐ Abort the job if the object screenings can't be processed



Note: The following tips are valid for "Document Controlled Screening", "Hybrid Screening", "Stochastic Screening Starter", "Stochastic Screening fine", "Stochastic Screening medium", "Stochastic Screening II Medium", "Stochastic Screening II Fine", "Satin fine" and "Satin medium" screen systems:

- "Document Controlled Screening": The "Document Controlled Screening" system is suitable for the output of dummy samples. The system automatically switches to "Document Controlled Screening" for screen frequencies up to 15 lines per centimeter. In this case it is assumed that a dummy sample is being output, not a quality screening. "Document Controlled Screening" is the screening method that is the least accurate. The technique is not recommended for multi-color reproductions (color separations).

The screen frequency is entered manually for the "Document Controlled Screening" system. The second input box, "Line Frequency", is activated for this purpose.

- "Hybrid Screening": The frequency and the dot size are relevant for amplitude-modulated "Hybrid Screening". The "Line Frequency" and "Feature Size" list boxes are enabled.
- "Stochastic Screening Starter", "Stochastic Screening fine", "Stochastic Screening medium", "Stochastic Screening II Medium", "Stochastic Screening II Fine": The dot size is important for frequency-modulated "Stochastic Screening". The "Feature Size" list box is enabled and the "Line Frequency" boxes disabled.
- "Satin fine" and "Satin medium": The dot size is important for the "Satin" frequency-modulated screening method. The "Feature Size" list box is enabled and the "Line Frequency" boxes disabled.
- You can also set the dot size for "IS Classic" like for "Hybrid Screening" if the "Hybrid Screening" option is not enabled.



Note: The "Feature Size" parameter is not a calibration parameter. This means that calibration data records cannot be differentiated solely on the basis of different minimum dot sizes. This affects calibration of the "Hybrid Screening" and "IS Classic" screen systems if these are selected in Output Plans with different dot sizes but otherwise the same parameters. You must create different calibration groups for linearization and for process calibration if you are going to use different calibrations whose only difference is their dot sizes. These calibration groups must contain the calibration data records that are required for the various dot sizes.

For more information on the individual screen systems, refer to the "Prinect MetaDimension - Screen Frequencies" manual.

"Override Frequencies from Document" option

The screen frequency in the edited document (set in the DTP application) is overwritten by the screen frequency set in the Output Plan.

"Use Frequencies from Document"

The screen frequency in the edited document (set in the DTP application) is used.

Generally, it is advisable to use the screen frequency of the Output Plan as this gives you a reliable output.

Object Screening Information:

These options affect jobs that were created with "Object Screening" (see [section "Support of Object Screening", page 32](#)). The Prinect Screening Selector lets you create documents that have objects with different screen settings. The RIP and the connected imagesetter must be able to process these screen settings in order for such documents to be processed. To avoid faulty imaging because of incompatibilities, you can only choose between the following options:

- "Ignore Object screening information"

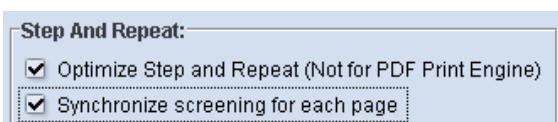
Information about object screening in the edited document is ignored, and the screen settings of the Output Plan are used.

- "Abort the job if the object screenings can't be processed"

The job is aborted if the edited document has information about object screening that the RIP or output device cannot process. If they can, the document is output with object screening.

Step and Repeat

These options are designed for print jobs that have several identical pages placed on one sheet (copies). The aim of step-and-repeat optimization is to interpret each of the objects that are repeated just once to shorten processing time.



Output Plan Editor

This function is enabled with the "Optimize Step and Repeat" option. Then each of the objects that are repeated in jobs that have copies is interpreted just once.

When "Synchronize screening for each page" is enabled, the screen is synchronized at every multiple object (on every page). This option is required for packaging printing and for security printing (e.g. bank notes). The screen transitions can be seen in the printed result if the single pages about each other.

The screen always starts at the top left corner of the sheet if the "Synchronize screening for each page" option is disabled, and there is no renewed synchronization within the sheet. This is the same as processing without step-and-repeat optimization.

Restrictions:

Step-and-repeat optimization is not applied even if the option is enabled if you have one of the following conditions:

- The multiple pages are rotated and rotation is not a multiple of 90° (e.g. 1° to offset errors during cutting).
- The pages are split for proofing by enabling the "Proof > Page Size Settings > Page Size Policies: Tiling" option (see [section "Page Size Settings", page 268](#)).

Screen Angle Handling

With the help of the "Screen Angle Handling" function, you can assign new screen angles to the process colors (cyan, magenta, yellow and black) and to spot colors. In other words, the angles set in the PostScript or PDF data of the job are changed to new angles that you define in this section when they are output. In addition, you can assign screen angles to spot colors.



Note: You can also use angle substitution on frequency-modulated screens. You can use the "Angle Substitution Definition" group also for these screens but there is no sense in substituting the angles of process colors for these screens.

You can select in the "CMYK angle" selection list between three procedures:

- Derive Screensystem Angles from Document Angles (not PDF PrintEngine)
- Derive Screensystem Angles from Document Colors
- Angle Substitution based on Document Colors

Derive Screensystem Angles from Document Angles (not PDF PrintEngine)



Note: If you use the PDF PrintEngine for rendering (see also [section "Adobe PDF PrintEngine \(APPE\)", page 28](#)), you cannot determine the screen system angles from the document. In this case, there is no angle substitution.

The screen angles are evaluated from the screen instructions of the document. These screen angles are each allocated one of the angles 0°, 15°, 45° or 75° or the variants of these angles rotated several times by 90° while taking a "capture area" into account. Each of these angles is allocated one of the four process colors:

Document angle:	Process color:
75°	Magenta
15°	Cyan
45°	Black
0°	Yellow

The allocation to the angles screen system is made via the process colors system.

Derive Screensystem Angles from Document Colors

This is the default for angle substitution and is matched to rendering with the PDF Print Engine. All screen commands from the document are ignored when this option is selected. A detection of the screen angles available in the document does not take place. The colors of the color separations are allocated directly to the colors and the associated angels of the screen system.

The angle of 45° is set by default for spot colors.

Angle Substitution based on Document Colors

The color separations of the document are assigned to the angles set in the Output Plan. The colors of the document are allocated here to the set colors of the screen system.

Output Plan Editor

Document angle:	Process color:	Allocated angle:
75°	Magenta	45°
15°	Cyan	165°
45°	Black	105°
0°	Yellow	0°

The procedure for handling screening in Prinect MetaDimension will be explained taking the "IS Classic" screen system as an example. It is assumed that no changes have been made to the angle assignment at the front end.

Using the assignment of the default output angles to the color names as a starting point, angles can be substituted and known spot colors can be assigned particular output angles.

To assign another angle to a color, proceed as follows:

1. Select the color that will be assigned a new screen angle in the "Screen Angles" list. The color is then displayed automatically in the "Screen Color" input field.
2. Select the desired substitution angle in the "...at Angle" selection list.
3. Click the "Add/Modify" button to set the angle setting.

To define a new spot color, proceed as follows:

1. Type the name of the spot color in the "Screen Color" text box. Please note that the name entered must be exactly the same as the one in the edited document file (PDF or PostScript).
2. Select the corresponding angle in "...at Angle".
3. Click the "Add/Modify" button to accept the setting. The new color appears in the "Screen Angles" list.

To delete a color, select it in the "Screen Angles" list and then click "Delete". You can undo the deletion by clicking "Add/Modify" as long as the name of the deleted color is still displayed in the "Screen Color" box.



Note: Spot colors which only differ by the ending in the name are treated as one color.

Example: No difference is made between the colors "PANTONE 165 C" (coated) and "PANTONE 165 U" (uncoated) and they are assigned to the same angle.

Automatic assignment of angles

In "Angle for all other colors", you can select up to four of the displayed angles for all spot colors that are not listed (unknown). These angles are assigned automatically to the spot colors. If all four angles are selected and you have a document with more than four spot colors, then the first angle marked is assigned to the fifth spot color (a cyclical assignment). If only two angles are selected, the first of the angles is assigned to the third spot color and the second angle to the fourth spot color, etc. This option is designed mainly for duotone and tritone images.



Note: Take note of the following items when you use the automatic assignment of angles:

- The names of the spot colors are irrelevant in the automatic assignment of angles. The angles are assigned if the spot colors occur in the document.
- Process colors must not be set for angle substitution if duotone and tritone images will be processed together with process colors.
- Only the cyan and magenta angles may be used for spot colors if duotone and tritone images that have black will be processed!
- Do not use any fine screens in the automatic assignment of angles. This can cause problems with yellow and black.
- Process calibration may not be correct if you use the automatic assignment of angles.
- The angle defaults for spot colors are also affected by the automatic assignment of angles. The default angle is 45° (magenta).

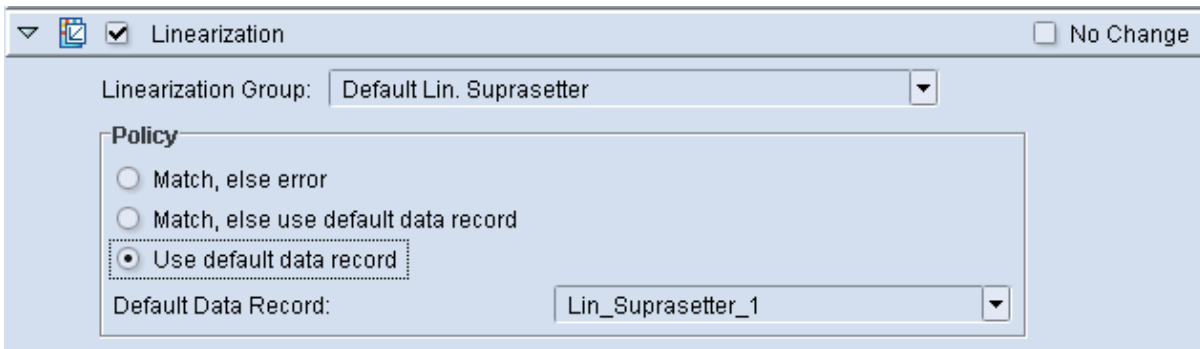
Linearization

In the "Linearization" section, you can set the parameters for the linearization of an imagesetter. Linearization itself is performed with the "Calibration Manager" software. You can find background information about linearization in Prinect MetaDimension in [section "Calibration with the Calibration Manager", page 321](#).



Note: To be able to use linearization, you must have generated a linearization calibration group with the Calibration Manager beforehand, and this group must have an active data set. If a data set is not found, a message pointing this out will appear when you enable this group. In this case, go to "Calibration" (see [section "Calibration", page 146](#)) and launch the Calibration Manager there.

Output Plan Editor



Check the "Linearization" option. Then, in the "Linearization Group" list box, select a generated group of linearization data sets that you want to set for this Output Plan. The selected group contains the calibration datasets that are to be used for linearization.

Policy for Linearization

This is where you can specify how linearization will be selected and used on the jobs. The names of the calibration data sets or the parameters in the job (screen system, dot size, resolution, etc.) that are compared with the parameters in the data sets of the set group form the basis for selecting suitable linearization curves.

- Match, else error

The set group is searched for linearization curves that match the parameters contained in the print job. Here, the screening system, dot size, screen ruling, resolution, polarity, orientation and output medium are taken into account. If no suitable linearization is found in the set group, for example, because there are differences in one of the job parameters compared to the parameters of the data sets in the selected group, the job is canceled with an error message. In such a case, you can view details in the "Job Details" tab (see [section "Job Details Tab", page 66](#)) about the reason why the job was canceled.



Note: In order to be able to use the datasets on the print jobs, they must be enabled in "Calibration Manager".

- Match, else use default data record

The group is searched for linearization curves that match the parameters contained in the print job. Here, the screening system, dot size, screen ruling, resolution, polarity, orientation and output medium are taken into account. If no suitable linearization is found in the set group, the default dataset that is set in the "Default" section is used.

- Use default data record

If this option is selected, the default dataset is always used.

Process Calibration

This is where you set how process calibration affects job processing. Process calibration is performed with the "Calibration Manager" software. You can find background information about process calibration in Prinect MetaDimension in [section "Calibration with the Calibration Manager", page 321](#).



Note: To be able to use the process calibration settings, you must have generated a process calibration group with the Calibration Manager beforehand, and this group must have an active data set. A general default data set is defined during the installation of the Prinect MetaDimension software. It's important that you customize this data set to the connected imagesetter or replace it by another one in the Calibration Manager. If a data set is not found, a message pointing this out will appear when you enable this group. In this case, go to "Calibration" (see [section "Calibration", page 146](#)) and launch the Calibration Manager there.

Process Calibration Option

If you activate this option, the calibration data that were generated with Calibration Manager are used for this Output Plan.



Note: You can enable the "Process Calibration" option only after you generated a group of calibration curves and if calibration data sets for process calibration are enabled in this group.

"Group" list box

This list shows you the available calibration groups for process calibration. With the Calibration Manager, you can create new calibration groups or edit existing ones. Select the group that you want to use for process calibration.

The "Policy" and "Print Parameter" groups are enabled after the "Process Calibration" and a group has been selected.

Output Plan Editor

Policy for process calibration

This is where you can specify how process calibration curves of the selected calibration group will be used on the jobs. The names of the calibration data sets or the parameters in the job (screen system, dot size, resolution, etc.) that are compared with the parameters in the data sets of the set group form the basis for selecting suitable calibration curves.

- Match, else error

The set group is searched for process calibration curves that match the parameters contained in the print job. The following parameters are taken into account during this process:

- the colors,
- screening parameters (screen system, dot size, screen frequency or dot size, resolution, polarity), output medium and
- the settings selected in the "Print Parameter" section.



Note: Make sure that all relevant calibration datasets are activated; otherwise, they are not taken into account!

- Match, else use default data record

The set group is searched for calibration curves that match the parameters contained in the print job. If no suitable curve is found in the set group, the default data record that is set in the "Default Data Record" box is used. If there is no calibration curve in the default data set for a color from the print job, the calibration curve assigned to the default color is used instead.

- Use default data record

If this option is selected, the default dataset is always used. If there is no calibration curve in the default data set for a color from the print job, the calibration curve assigned to the default color is used instead. Or the calibration curve of a spot color data set is used.

- "The selected default data record contains the colors" box displays the colors that have calibration data in the selected default data set.
- Use the "Calibrate colors not contained in the default data record as if they were" option to set that colors not in the default data set will be calibrated like the color set in the box. For example, if you set "Cyan" in this list box and the job has spot colors, these will be edited with the calibration data for cyan.
- Use the "Calibrate colors not contained in the default data record using the spot color record" option to set a data set for spot colors that will be used to edit all colors not in the default data set. This option requires that there is at least another calibration data set for spot colors in addition to the default data set.

Print Parameter Section

This is where you select a process curve set (the desired "calibration target") and parameters that describe the printing conditions. More information regarding these parameters can be found in the Calibration Manager documentation.



Note: You set the "Type of Printing Material for Calibration" indirectly with the "Printing Material" parameter in the "Printing Mode" section (see [section "Output mode", page 245](#)). Each printing material has an attribute in that it is assigned a type for calibration. You can view this in "Administration > System Resources > Printing Materials" (see [section "Printing Materials", page 163](#)). You will find the "Type of Printing Material for Calibration" parameter in the printing material list. This parameter is the link between process calibration and the printing material. By selecting a printing material in the "Printing Material" list box in "Printing Mode", you also indirectly select the "Type of Printing Material for Calibration".

- "Use Default Ink Series 'HD Default' for Spot Colors" option

If this option is not activated, the ink series set in the "Ink Series" field in the "Print Parameter" section is used as the basis for the search for a calibration dataset of a spot color.

If this option is activated, the predefined "HD Default" ink series is used as the basis for the search for a calibration data record of a spot color, not the selected ink series.

Output mode

You can define various settings for output of a job in the "Printing Mode" section.

Output Plan Editor

The screenshot shows the 'Printing Mode' dialog box in the Output Plan Editor. It contains various settings for printing, including material selection, paper type, compensation, polarity, cut, mirror, scale, and action after spooling/warning. A 'Postscript Header' section is also visible, showing a list of headers with 'DisableFontErosion' selected.

☒ Printing Mode

☒ Material Name: Simulation323x370 (Known) ▼

Printing Material: HD ISO Paper 1 ▼

☐ Iso Papertype Completion: 1 glossy coated ▼

Job Iso Papertype Check: Warn and use Iso Papertype from Printing Materials ▼

Paper Stretch Compensation for Front: Expert_HD_Demo ▼

Paper Stretch Compensation for Back: Expert_HD_Demo ▼

Polarity: Automatic ▼ 0.0 mm ▼

Cut: No Change ▼

Mirror: No Change ▼

Scale: Off ▼ Width: 100.0 Height: 100.0 %

Action after spooling: continue ▼

Action after warning: continue ▼

Ignore Job Orientation: Off ▼

Postscript Header: On ▼

Postscript Header:

DisableFontErosion

Name: DisableFontErosion ▼ Add Delete

Materialname Option

This option is especially suitable for platesetters and DI presses. For this reason, this option is available only if a suitable output device (e.g. Heidelberg Suprasetter) is connected.

When you enable this option, the "Materialname" list box lists plate materials that are available for the connected imagesetter. When you select the material you want for output, the Printing Mode options are adapted to the selected plate material. The material you selected must be loaded to the imagesetter.

Printing material

In this box, you can select one of the printing materials that you defined in "Administration > Resources > Printing Materials" (see [section "Printing Materials", page 163](#)).

It's important to include the printing material that will be used for printing in a standardized output process where calibration of the entire density range was made. If you select "No Change", the system behaves as described for the "No Change" option in the Introduction (see the [section "Priorities for the Setup of Output Settings", page 219](#)). This option is only available for imagesetters.

Iso Papertype Completion

At Prinect Signa Station, for example, you can define the printing material names that are not known in Prinect MetaDimension (see [section "Printing Materials", page 163](#)). These names are freely definable and do not have to include full details about the ISO paper grade. However, details about the ISO paper grade are needed if you wish to use process calibration when you output these jobs. If you checked "Iso Papertype Completion" and selected one of the ISO paper grades, the printing material matching the selected ISO paper grade will be used for process calibration. The original printing material name is then ignored for process calibration but it is written, for example, to the CIP3 parameters so that it can be assigned to the printing material at the press.

Job Iso Papertype Check

When you set this option, Prinect MetaDimension checks whether the ISO paper grade that was sent in a job as a supplementary parameter to the printing material name is consistent with the printing material table. If the printing material name is in the table but was assigned a different ISO paper grade, then the rule set for "Job Iso Papertype Check" is applied:

- No Change:

The system behaves as described for the "No Change" option in the Introduction (see [section "Priorities for the Setup of Output Settings", page 219](#)).

- Use Iso Papertype from the Printing Materials:

The ISO paper grade from the table of printing materials is used; the ISO paper grade sent with the job is overwritten.

- Abort the job if Job Iso Papertype incorrect:

The job is aborted if an inconsistency is detected.

Paper Stretch Compensation for Front/Paper Stretch Compensation for Back

If you have large formats, it may be necessary to compensate paper stretch during printing. To do this, you can define preferences for paper stretch compensation in the resources and save them as a template (see [section "Paper stretch compensation", page 127](#)). These list boxes let you select such a paper stretch compensation template separately for the front and the back. This template is applied to all jobs that are edited with this Output Plan template.



Note: In job processing, the order of processed colors is based on the order of the printing units defined in the paper stretch compensation template:

- The last parameter set in the template is used for all subsequent job colors if there are less printing units in the template than colors in the job.
- If the job has less colors than printing units set in the template, then the surplus printing units are ignored.



Note: For more details about paper stretch compensation, see [section "Paper stretch compensation", page 29](#).

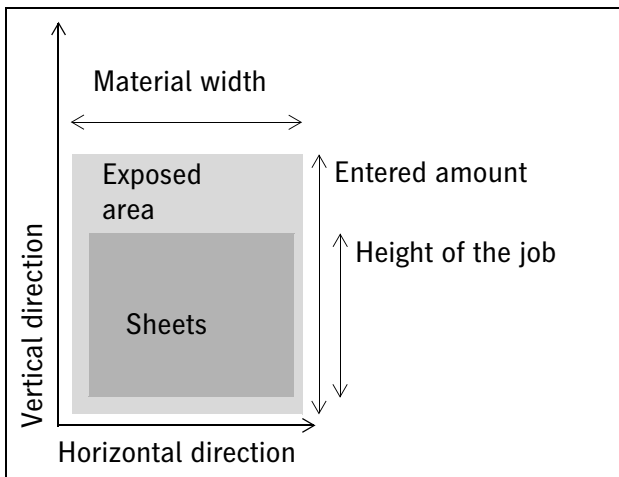
Polarity List Box

The positive or negative imaging of "Page" or "Absolute" is set in this list box.

- "Positive/Negative Page": Each individual page of a job is exposed.
- "Positive/Negative Absolute": A sheet is exposed.

If you set "Absolute", you can set a length in vertical direction in the text box beside it. Then an area will be exposed as shown in the graphic below:

- in the horizontal direction: the entire material width of the sheet.
- in the vertical direction: the entered amount, but at least the height of the job.



Additional Selection Lists

- "Cut": With "After Page", a cut after every page can be set here. This parameter is only required for film imagesetters.
- "Mirror": You can set whether imaging will be wrong-reading or not in this box.
- "Scale": Scaling is defined in percentages. The job is scaled up or down by the input value horizontally (width) or vertically (height).



Note: When scaling, pay attention whether you aligned the pages horizontally or vertically in "Layout & Marks".

- "Action after spooling": This box allows you to decide what action will be taken before output of the job starts.
 - "No Change": You apply the preferences with this option.
 - "wait": You can, for example, modify the Output Plan if you select this option.
 - "continue": The job is imaged after spooling.
- "Action after warning": This box allows you to decide what action will be taken after a warning displays during job processing.
 - No Change You apply the preferences, for example, from the Prinect Signa Station.
 - wait: The job is paused, and you can open the paused job and view details about why the warning displayed (see [section "Job Information tab", page 65](#)). You can then continue processing, cancel the job or reprint with it modified parameters as needed.
 - continue: Job processing is continued even after a warning. In some cases, this setting may give you results you might not want.
 - cancel: The job is canceled after every warning.
- "DI Bitmap Standard Status": (only for DI presses). This option allows you to lock DI jobs from processing with a DI press.
- "Ignore Job Orientation": Some PostScript jobs may contain orientation information in PostScript code that can produce faulty results. With this option, you can make sure that any orientation information in PostScript is ignored and that only the orientation settings defined in Prinect MetaDimension are used.
 - No Change: This parameter does not affect job processing. In the "layer model", the settings of the layer lower down are applied (see [section "The Layer Model", page 220](#)).
 - Off: Any orientation settings in the PostScript code of the edited job are used.
 - On: All orientation settings in the PostScript code of the processed jobs are ignored, and the orientation settings defined in Prinect MetaDimension are used. We recommend that you set this option to "On" to make sure that you have good output results.

PostScript Header Settings

You can enable the "PostScript Header" function in the "PostScript Header" list box. When this function is enabled and a header file selected, one (or more) PostScript headers are integrated into the PostScript code of the print jobs. This option is to provide you with special, supplementary output options for the Output Plan.

You can select a PostScript header from the "Name" list box. Click the "Add" button after selecting the PostScript header. The selected PostScript header is added to the "PostScript Header" list. Repeat this selection for all required PostScript headers.

Click the "Delete" button to delete a selected PostScript header from the list.

Output Plan Editor

Description of the header files:

- DisableFontErosion

Some older fonts can contain outline descriptions that are faulty. While the results are still good on the screen or with laser printers, artifacts can occur on the outlines of the fonts if a higher resolution is used. This has to do with a process (Font Erosion) that runs internally in the RIP and that is supposed to improve the font quality if a higher resolution is used. When enabled, this PS header indeed does not give you the optimal quality you want but the font engine is then more tolerant towards imperfect outlines.

We recommend that you do not leave this PS header permanently on.

- IdiomRecOff

"Idiom Recognition" is a feature of PostScript 3. In Prinect MetaDimension (PostScript 3 interpreter), all the shadings of certain applications are normally set to "Smooth Shading". The disadvantages of this may include:

- All shadings are converted even if you don't want it for particular cases.
- Because of the higher quality with "Smooth Shading", output will take somewhat longer than one with normal shadings.

The purpose of the "Idiomrecoff" PostScript header is to prevent PostScript Level 1 or Level 2 shading routines from being automatically replaced by the PostScript 3 "Smooth Shading".

- MMSupport

This header file makes sure that Multiple Master Fonts are also supported by older printer drivers that otherwise do not fully support Multiple Master Fonts.

- PS500DuotonePatch

Duotone images that were created with Photoshop version 5.0 are output to CMYK devices in inverse colors. This header solves this problem. This behavior was corrected by Adobe in version 5.02 (and later) and, as a result, this header file is no longer required.

- XtendedDebugInfo

This header file provides detailed information about PostScript errors and is designed for support purposes. In particular cases, the instructions of this PostScript header may be overwritten by other PostScript instructions and, consequently, no error information may be generated.

Color handling

You can define how colors will be handled and the color table order in this window.

Color Handling Mode

This is where you select how the colors will be processed.

- "No Change": The settings that were defined elsewhere are used. This can be at your DTP workstation, at the Prinect Signa Station, in the default Output Plan or at the recorder.
- "Use color handling template": You can define settings for handling process and spot colors and save them as templates in "Administration > Resources > Color Handling" (see [section "Color handling", page 155](#)). You can select this option only if you saved one or more templates. In this case, the "Color handling template" list box is enabled and you can select a template.
- "Convert to gray": All the colors are converted to gray values. InRIP separation remains disabled.
- "All colors": InRIP separation is enabled if you select this. All the separations are processed, including the spot color ones.
- "Convert spot colors to CMYK": InRIP separation is enabled if you select this. Spot colors are converted to CMYK values. As a result, there are no spot color separations.

"Overprint Emulation (Only for PDF Print Engine)"

You can use the "Overprint Emulation (Only for PDF Print Engine)" option if you use the PDF Print Engine for rendering and if you set "Convert spot colors to CMYK" in the "Color Handling Mode". Overprint of the original spot colors is simulated for the spot colors converted to CMYK if this option is enabled. There is no overprint of the spot colors following conversion if this option is not enabled.



Note: You cannot use this option (or it is ignored if it is set) if the CPSI interpreter is used for rendering (see [section "Rendering", page 225](#)).

Color Handling Template

The "Color Handling Template" list box is enabled if you created one or more color handling templates in "Administration > Resources > Color Handling" (see [section "Color handling", page 155](#)) and you checked the color handling mode. You can select a template in this box, enabling it for the Output Plan.

Color Table Order

You can select between "No Change", "On" or "None" in the "Modify Color Table Order" list box.

- With "No Change" the settings that were defined elsewhere are used. This can be at your DTP workstation, at the Prinect Signa Station, in the default Output Plan or at the recorder.
- The list of color tables is enabled if you select "On". The "Name" list box displays the color tables that were set up in "Administration > Resources > Color tables". It also displays the device color tables (proof only), DSC (Document Structuring Convention), JDF (Job Definition Format) and Alternate Color Space. In the list box "Name", select the color table(s) that you want to use for the color handling. The selected color table is added to the list by clicking "Add".

When you select a color table in the list, you can change its position using the arrow buttons below "Order". "Alternate Color Space" is always the last table in the list. It cannot be moved. During job processing, the color tables are browsed in the order defined here in order to assign the color data in the tables to the appropriate color names in the job. In this way, you can define priorities for the color tables.

You can mark one or more color tables (multiple selection with Ctrl or Shift key) and delete them from the list with the "Delete" button. These color tables are then not used for this Output Plan.

- Select the entry "None" under "Modify Color Table Order"; the "Color Table Order" section is deactivated. In this case, a set order that cannot be changed is used. This is as follows:
 - JDF:

The spot color substitute specified in the Job Definition Format will be used.
 - User-defined color tables
 - DSC:

A spot color substitute can be created in the Document Structuring Conventions. Such DSC comments are only found in PostScript files. It depends on your DTP application whether a spot color substitute will be written to the DSC comments of the PostScript code.
 - New PANTONE® tables
 - Old PANTONE® tables
 - New HKS® tables
 - Old HKS® tables
 - Alternate Color Space:

You must specify the "Alternate Color Space" for spot colors in a PDF or a PostScript document. An "Alternate Color Space" can be in different formats, with Prinect MetaDimension supporting "DeviceCMYK" and "DeviceRGB" formats.

Layout & Marks

You must first decide in "Layout & Marks" whether the schemes that were already set in "Resources > Page Positioning" are to be used ([section "Page Positioning", page 141](#)). If you want to work with an existing scheme, check the "Page Positioning" option and select the scheme you want in the list box beside it.

Only when you select the "Automatic Page Positioning" can you assign the following layout and marks parameters. The functions available here provide the optimum film utilization based on internal utilization calculations.

The functions include:

- Assignment of punch setups that were created in the Engine Manager or details about positioning during imaging, for example, at the Trendsetter or Topsetter.
- Automatic front/back.
- Orientation of the pages.
- Setup of the number of pages in horizontal and vertical directions.
- Entry of the vertical and horizontal gutter width.
- Assigning marks parameters. This is required if register marks or format marks are needed for a PostScript file that does not contain these marks.

The individual parameters are described in the following.

Page Positioning

In the "Page Positioning" list box, you can switch off page positioning, enable automatic page positioning or enable a page positioning created in "Resources > Page Positioning".

- If "Off" is selected, positioning does not take place and the individual pages are output sequentially.
- With "No Change" the settings that were defined elsewhere are used. This can be at your DTP workstation, at the Prinect Signa Station, in the default Output Plan or at the recorder. The field below is enabled when you set "On".
- When you select "Automatic Page Positioning", you enable this group and you can define your settings there.

Automatic Page Positioning

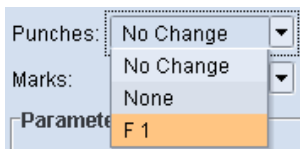
- "Automatic front/back": This function lets you set on which sides of the sheet the job pages will be positioned.
 - On: The pages are positioned automatically on the front and back of a sheet.
 - Front only: The pages are positioned only on the front of a sheet.
 - Back only: The pages are positioned only on the back of a sheet.
- "Orientation": The orientation of the pages in a sheet layout is defined in this box. Page orientation is initially crosswise to the horizontal orientation of the sheet. The "Best fit" option automatically determines the optimum orientation.
- "Max. Number of Pages Horizontal/Vertical": The maximum number of pages in the horizontal and vertical directions is entered here.
- "Vertical Gutter Width / Horizontal Gutter Height": These text boxes are enabled if values greater than 1 are entered in "Max. Number of Pages Horizontal/Vertical". The page distances in horizontal and vertical directions are involved here. The page size is based on the net page, including the cut. In other words, the gutter width indicates the distance between the trim edges.

Automatic Optimum Material Utilization

In Prinect MetaDimension, it is possible to position the pages automatically for optimum material utilization. To do this the "Automatic Page Positioning" must be selected and the "Rotation" parameter must be set to "Automatic". For optimum utilization in horizontal direction, you must set a high value for "Max. Number of Pages Horizontal". The value must be so high that the number of pages in the horizontal direction can not be limited by this value. The "Max. Number of Pages Vertical" value must be "1". Then a material feed occurs after each row of pages. This ensures that additional rows which are not actually filled with pages later in horizontal direction are not reserved for pages.

Placement of Punches

- "Punches": Here, you can select the punch parameter sets that were generated with the Engine Manager (F1 to F10). With "No Change" the settings that were defined elsewhere are used. This can be at your DTP workstation, at the Prinect Signa Station, in the default Output Plan or at the recorder.



Note: The "Center" and offset settings option only appears if the Engine Manager doesn't have a punch setup for the device you selected, as for example at the Trendsetter and Topsetter. The positioning of the exposure can be centered here and offset values can be set. These inputs may be necessary to create enough space for the punches.

- "Center": The page is centered on the horizontal axis for imaging when you check this option.
- "Offset Horizontal/Vertical": You can define an offset in horizontal and/or vertical direction in these boxes. Zero point is the start of imaging. If you selected "Center" as well, the offset zero point is the horizontal center of the plate.
- "User-defined": "User-defined" is also listed if punch settings were set at the Prinect Signa Station and sent with the job to Prinect MetaDimension. You can only see this item if you are reprinting a job (see the [section "Restarting, Pausing, Continuing and Reprinting Jobs", page 54](#) or in the job settings (see the [section "View of the Job-specific Output Plan Setup", page 66](#)).

Marks

If you switch on the marks parameterization in the "Marks" list box, the "Parameter" section can then be used. The marks settings that you make here are valid for this Output Plan. If you set "No Change", the settings that were defined elsewhere are used. This can be at your DTP workstation, at the Prinect Signa Station, in the default Output Plan or at the recorder.

You can find important information about setting marks in the [Positioning Marks, page 144](#).

Trimmed size

If you do not select this option or set the "Width" and "Height" parameters to zero, the trimming marks are set as specified by the page size.

If you select the "Trimmed Size" option, you can set values for the width and height of a page. The trimming marks are then placed at the specified positions. This positioning overwrites all other marks settings and does not depend on any page sizes or page positions that have been defined elsewhere.

Trapping



Note: For basic information about trapping, please see the [section "Trapping", page 323](#).

Trapping in Prinect MetaDimension is implemented with the Adobe InRip Trapper. Trapping only works with non-separated (composite) PostScript files or PDF files. The trapping parameters do not have any effect on separated PostScript files. Trapping can be used on separated PDF files with the CPSI renderer as well as the PDF PrintEngine.

Trapping can take place on the basis of vector data (graphics) or pixel data (images). It is possible to trap graphic to graphic, graphic to image, image to image and within an image.



Note: The following prerequisites must be met to use trapping:

- Trapping must be licensed.
- There are two printer drivers available for each output device, each with and without InRIP trapping. The printer driver (PPD) for InRIP Trapping must be assigned to every virtual printer at the DTP workstation in order for trapping to work.



Note: Make sure that you select "All colors" or "Convert spot colors to CMYK" in "Color Handling Mode" in "Color Handling".

The trapping parameters are divided into "Trap Width", "Trap Appearance", "Trap Thresholds" and "Images".

Trapping ☒ No Change

Trap Width

Default: 0.25 points

Black: 0.144 points

Image: 0.25 points

Minimum Black: 0.5 points

Trap Appearance

Join Style: Miter

End Style: Miter

Trap Thresholds

Step: 10 %

Black Color: 100 %

Black Density: 1.6

Sliding Trap: 70 %

Trap Color Reduction: 100 %

Images

Trap Placement: Center

☒ Trap Images to Objects

☒ Trap Images to Images

☐ Trap Images Internally

Trap Width

The size of the trap width for black and for the other inks ("Default" text box) is set in points in this group.

- "Standard": Trap width for all default cases that are not covered by the options below.

Default: 0.25 points

- "Black": "Black" sets two different trapping processes. One is normal trapping, if black is adjacent to a lighter ink and traps it. The other one is trapping when printing with rich or fat black. Rich or fat black consists of a color that has a large amount of black plus other amounts of at least one other separation. With register inaccuracies, color borders may occur when shifting the black color separation in relation to the other separations. This problem is avoided if all non-black color separations are choked for bold black.

Default: 05 points

- "Image": This is where you set the trap width for the case that trapping is between two images.

Default: 0.25 points

- "Minimum Black": You set a minimum trap width for black in this box. The greater of the values for "Black" and "Minimum Black" is used.

Default: 05 points



Note: If very narrow black objects are to be trapped, the value defined by "Black" and "Minimum Black" could be bigger than the width of the object. In this case, the trap width is limited to half the width of the object.

Images

Settings made here affect trapping at the transition points between graphics (vector data) and images (pixel data) and between several images as well as trapping within images.

- "Trap Placement": Determines the trap direction at the transition from graphic to image or from image to image. This setting is only important if the "Trap Images to Objects" and/or "Trap Images to Images" options are set.
 - "Center": The trap is set symmetrically to both sides at the graphic/image or image/image transition.
 - "Choke": The graphic is always trapped to the image if graphic objects are adjacent to images.
 - "Spread": The image is always trapped to the graphic if graphic objects are adjacent to images.
 - "Neutral Density": The normal trap rules apply as set in the parameters in "Trap Thresholds". This means that the trap direction depends on the neutral density values of adjacent objects.

Output Plan Editor

cent colors (this is quite normal). As the neutral densities are adjusted pixel for pixel, the result can be a noticeable saw-toothed border.

Default: "Center".

- Trap images to Object: Trapping at image-graphic transition points is enabled with this option.

Default: On

- "Trap Images to Images": Trapping at image-image transitions is enabled with this option.

Default: On

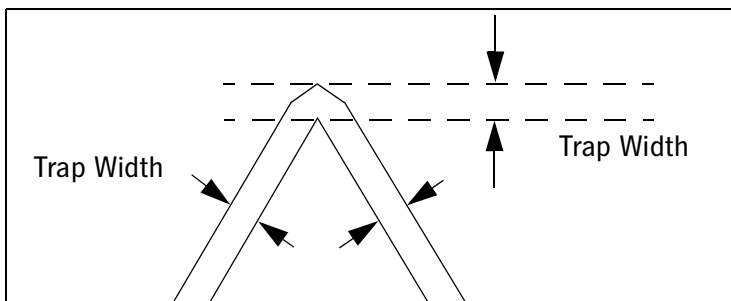
- "Trap Images Internally": Trapping within an image is enabled with this option. As trapping is done pixel for pixel, the calculation time is long. For this reason, this option should normally be deactivated. It is used for images with heavy contrasts, such as screenshots or caricatures.

Default: Off

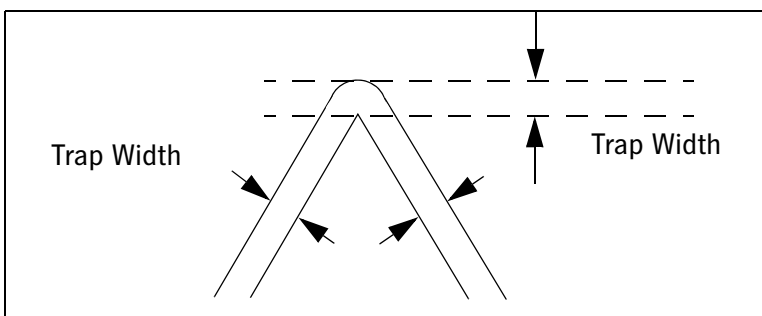
Trap Appearance

You define the shape of the trap lines in this group.

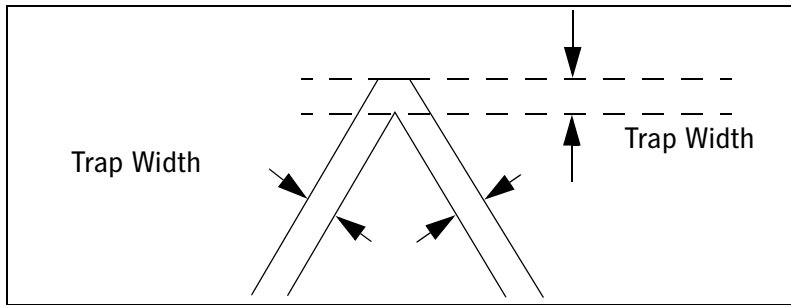
- "Join Style": You define the line join of the trap lines with this parameter. Possible settings:
 - "Miter": The line ends are mitered, i.e. the ends form a bisector with the adjacent lines.



- "Round": The line ends are rounded.



- "Bevel": The line ends are beveled.



Default: "Miter".

- "End Style": You define the shape of the ends of the trap lines with this parameter. Possible settings:
 - "Miter": The corners are mitered, i.e. the two lines abut at the corners each with half the corner angle.



- "Tiling Overlap" The two lines overlap at the corners so that, at the corners, the color density is the sum of the color densities of the lines.



Trap Thresholds

Settings made here affect trapping at the transitions between graphics (vector data).

- "Step": Determines the screen percentage density portion that adjacent inks must differ from each other so that a trap is created.

Value range: 0% ... 100%

Default: 10%

Lower values cause traps to be created even with slight differences in color. The number of traps increases accordingly. Larger values cause traps to be created only with greater color differences, thus reducing the number of traps.

Output Plan Editor

Adobe recommends values of between 8% and 20% to achieve good results.

- "Black Color": Determines the screen percentage density content of the black separation so that the color is treated as solid black during trapping. Special treatment for solid black ensures that all non-black separations are trapped under black.

Threshold range: 0% ... 100%

Default: 100%

For good results, full black should be defined in such a way that the black content amounts to at least 80%.

- "Black Density": Two conditions must be fulfilled so that a color is treated as solid black during trapping:
 - The neutral density of the color (dimension for opaqueness) must be greater than the value set in "Black Color".
 - The screen percentage density of the color must be at least the same as the value in "Black Color".

If the color is seen as solid black, the setting in "Trap Width > Black" is used for trapping.

Threshold range: 0.1 to 10

Default: 1.6

- "Sliding Trap": When trapping with shades or blends, a noticeable change in the trap direction can occur at the border between two objects. You can use the "Sliding Trap" value to set that the trap gradually goes in another direction.

Sliding trap is put out of action if a value of 100% is set. The smaller the values, the more gradual the trap transition to the other direction. At 0% , the trap is set symmetrically.

Threshold range: 0% ... 100%

Default: 70%

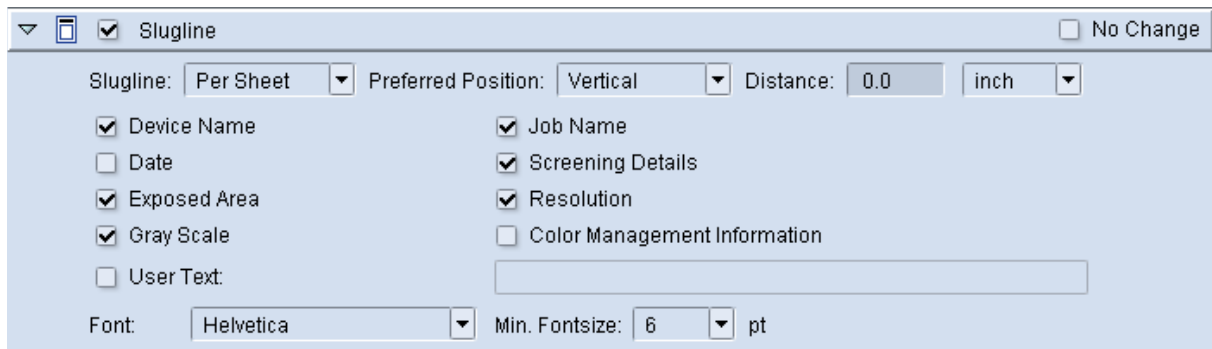
- Trap Color Reduction

The trap color can be lightened using the "Trap Color Reduction" box. 100% corresponds to the calculated trap color. Continual reduction of this value towards 0% tones the trap color up. With a value of 0% , the neutral density of the trap corresponds to the neutral density of the darker color. The color content change is not proportional and incorporates the neutral density thresholds.

Threshold range: 0% ... 100%

Default: 100%

Slugline



Slugline: ☒ Slugline ☐ No Change

Slugline: Preferred Position: Distance:

☒ Device Name ☒ Job Name
☐ Date ☒ Screening Details
☒ Exposed Area ☒ Resolution
☒ Gray Scale ☐ Color Management Information
☐ User Text:

Font: Min. Fontsize: pt

- Slugline: The following three options are available:

- No slugline is printed
- A slugline is printed for every sheet or
- after every page.

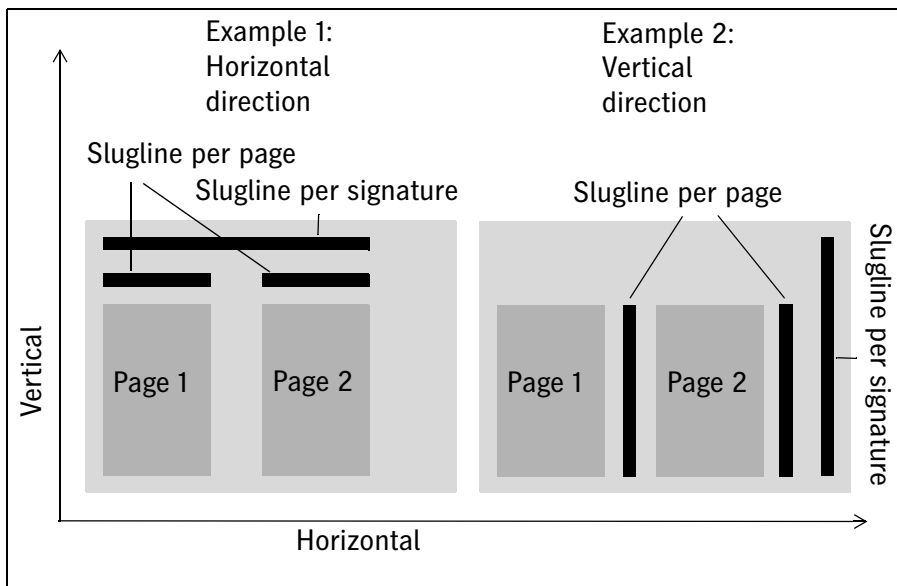


Note: For scatter proof, you should label every single page, e.g. "Job Name" or "Color Management Information".

- "Preferred Position": Where possible, the slugline is positioned vertically or horizontally at the desired position.
- "Distance": "Distance" defines the distance between the slugline and the page if the slugline is printed after each page.

Example 1 in the diagram below displays horizontal slugline printing per job and per page, example 2 shows it in vertical direction.

Output Plan Editor

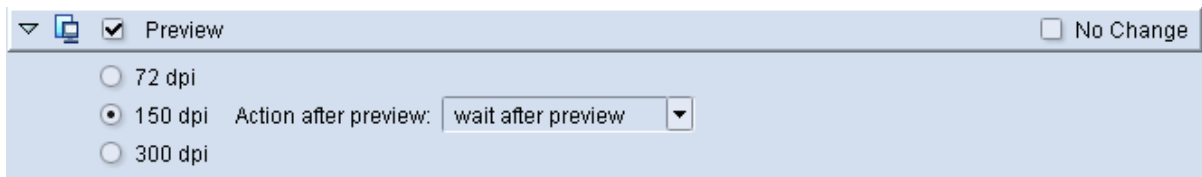


Example 1 in the diagram below displays horizontal slugline printing per job and per page. Example 2 shows the sluglines in vertical direction.

The slugline contents are defined by the following parameters:

- "Device Name": Name of the output device
- "Date": Date and time
- "Material": Material usage (only for film imagesetters)
- "Exposed Area": The imaged area is specified.
- "Gray Scale"
- "User Text": User-defined text
- "Job Name": Job Name
- "Screening Details": Output of screening parameters , "Screen", "Dot Shape", "Frequency"([section "Screening", page 234](#))
- "Resolution": Screen parameter "Resolution"([section "Screening", page 234](#))
- "Color Management Information": Details about the ICC profiles
- "Font/Min. Font Size". You can select which font and minimum font size the information will appear in.

Preview



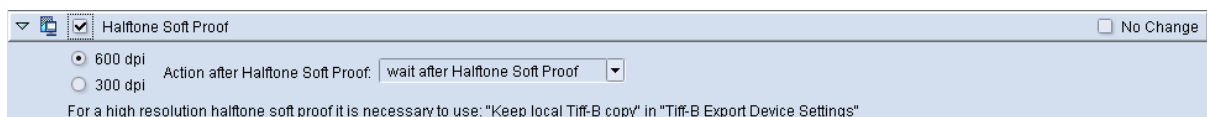
You can enable a job preview (softproof) for every selected device. Exception: A preview is not possible for a TIFF-B import. You can generate a preview for a proof and an imagesetter output.

You can view the preview in the "Preview / Color" tab (see [section "Preview / Color Tab", page 69](#)).

Enable the job preview and then select the resolution you want:

- "72 dpi": An overview image with a resolution of 72 dpi will be generated.
- "150 dpi": An overview image with a resolution of 150 dpi will be generated.
- "300 dpi": An overview image with a resolution of 300 dpi will be generated. If you enable this option, you can, for example, view the traps in the preview.
- "Action after preview": This is where you set how Prinect MetaDimension reacts to job processing during the "Job Preview":
 - "Preview only": Job processing is stopped after every preview. You can then output the job again by means of the "Start" button (if necessary, with different output parameters).
 - "wait after Halftone Soft Proof": Job processing is paused after every preview. You can then continue processing using the "Start" button.
 - "continue": Proofing and/or imaging starts immediately after the preview data are created. The system does not stop for you to view the preview.

Halftone Soft Proof



When this option is enabled, halftone softproof data are created for the jobs that are processed with this Output Plan.

You can view the preview in the "Halftone softproof" tab (see [section "Halftone Soft Proof tab", page 89](#)).

Output Plan Editor

Enable the "Halftone Soft Proof" option and enter the resolution for the preview:

- "300 dpi": A preview image with a resolution of 300 dpi will be generated.
- "600 dpi": A preview image with a resolution of 600 dpi will be generated.
- "Action after preview": This is where you set how Prinect MetaDimension reacts to job processing during the "Halftone Softproof":
 - "Halftone Soft Proof only": Job processing ends after every halftone softproof. You can then output the job again by means of the "Start" button (if necessary, with different output parameters).
 - "wait after Halftone Soft Proof": Job processing pauses after every halftone softproof. You can then continue processing using the "Start" button.
 - "continue": Imaging starts directly after halftone softproof.

Proof

The "Proofer Workflow" in Prinect MetaDimension is set up in the "Proof" section (see also the [section "Proofer Workflow", page 359](#)). You should only enable this section if you are going to create an Output Plan template for a filmsetter or platesetter, a TIFF-B export device or a DI press and you want to have a proof in addition to a print (and use the proofer as your secondary device).

You can set up a "ROOM Proof Workflow" for TIFF-B export devices by enabling the "Proof based on high resolution bitmap" option. You can find detailed information about this in the [section "ROOM Proof", page 273](#).

You must have installed at least one proofer or a TIFF, PostScript or JPEG export with "Color Proof Pro" or with the "Proofing Engine Manager" before you can define any proof settings. Select the device you want from the "Proofer" box. For a proofer workflow in Prinect MetaDimension where you will have a proof in addition to a print, you need to assign an Output Plan with the proof option enabled to any virtual printer that will be used for proofing.



Note: Since various proofers may be connected to Prinect MetaDimension, some settings might be enabled, others not, depending on the proofer that has been installed.



Note: For detailed information about proofing with Prinect MetaDimension, see the Online Help of Color Proof Pro or the Proofing Engine Manager or the Prinect MetaDimension - Color Proof Pro or Prinect MetaDimension - Proofing Engine Manager manuals.

Proofer

Select an installed proofer here.

The various settings for different proofers will now be described. The settings for the Epson Stylus Pro 7600 driven by Color Proof Pro will be described since you can drive proofers in Prinect MetaDimension 4.0 using the "Proofing Engine Manager" and "Color Proof Pro". Other proofer settings that will be described below refer to control using the "Proofing Engine Manager".

Color Proof Pro Device (e.g. Epson Stylus Pro 7600):

The "Epson Stylus Pro 7600" proofer is controlled via Color Proof Pro. This description can be used as an example for all devices that support Color Proof Pro.

The screenshot shows the 'Color Proof Pro' settings window for the 'Epson Stylus Pro 7600'. The window is organized into several sections:

- Proofer:** Epson Stylus Pro 7600. There is a checkbox for 'Proof based on high resolution bitmap'.
- Proofer Parameter:**
 - Size:** 24 inch. **Material Size:** 1728.0 x 42519.69. **Print area:** 1710.99 x 42519.69 pts.
 - Paper Name:** HD_SaphiraNP.
 - Proofer Resolution:** 720 x 720 dpi.
 - Interpreter Resolution:** 720 x 720. **Antialiasing:** unchecked.
 - Ink:** UltraChrome Photo.
 - Tray:** Roll.
 - Profile:** Ep7600_HD_SaphiraNP_mG_LK_PK.icc. Below it, 'More than one profile available.' and 'Use Visual Correction:' are shown.
 - Overwrite existing files:** unchecked.
- General Settings:**
 - Action after proof:** wait after proofing. **Supervised Output:** unchecked.
 - Proof Directly Without Scattering:** unchecked. **Copies:** 1.
 - Page Proof:** checked. **Rotation:** None.
 - Mirror Print:** unchecked. **Two Side Printing:** Off.
 - Cut after page:** checked.
 - Print Color Bar:** unchecked. **Position:** Vertical.
 - HD Proof / User Defined:** HD Proof selected.
 - File:** (empty field) with a 'Browser...' button.
 - Use Colormatching for the Color Bar:** checked.
- Page Size Settings:**
 - Page size matching:** Final Output (selected), Document (unchecked).
 - Page Size Policies:** Reduce to fit (selected).
 - Crop Marks:** unchecked. **Center Output:** unchecked.
 - Allow Automatic Rotation:** unchecked.
 - Tiling Overlap:** 2.54 cm.
 - Center Sheet:** unchecked. **Back:** 0.0 x 0.0. **Shift Front:** 0.0 x 0.0 cm.
- Color Matching:**
 - Print Profile Selection:** Use the output process press profile (selected).
 - Press Profile:** ISOcoated_v2_eci.icc.
 - Proofer Profile:** Automatic Proof Profile.
 - Rendering Intent:** Absolute Colorimetric.
 - Preserve Black Generation:** Special.

At the bottom, there are three expandable sections: 'Color Management' (checked), 'CIP 3' (unchecked), and 'Policies' (checked). Each has a 'No Change' button.



Note: The "Proof based on high-resolution bitmap" option is designed solely for the ROOM Proof option (see the [section "ROOM Proof", page 273](#)) and can only be enabled for TIFF-B export.

Proofer Parameters



Prerequisite: In this group, you can only select data in the various lists if you have installed one or more paper profiles matching your output device in the profile database in Color Proof Pro. You can find more details about installation of paper profiles in the "Prinect Meta-Dimension - Color Proof Pro" manual.

You can set the following parameters here:

- **Size:** This is where you set the paper size to be printed. The dimensions of the selected material size and printable area are shown in the appropriate boxes (dimmed). You can set the unit of measure for these values in a list box. You can choose between "Millimeter", "Centimeter", "Inch" or "Points".
- **Print borderless:** You can enable this option if your proofer supports borderless printing.
- **Paper Name:** Select the paper that will be used for proofing. The list displays those papers that were installed for this proofer in the Color Proof Pro profile database. Make sure that you select the paper that is loaded in the proofer.
- **"Proofer Resolution":** The resolutions that are available in the paper profile for the paper you selected are presented in this box. You manage paper profiles in the "Profile Keeper" of the Color Proof Pro software.
- **Interpreter Resolution:** Select the resolution you want for the interpreter from the list box. With some printers, it's possible for you to set a different interpreter resolution to the printer resolution. For example, you can set a lower interpreter resolution to increase the job processing performance.
- **"Antialiasing"** Antialiasing is used when calculating the proof data if you enable this option.
- **Ink:** One or more inks that match the paper you selected are presented in this box. The various ink items describe the properties of the ink.
- **Tray:** If your output device has different paper feeds, you can select one in this box. For example, you can choose between "Single Sheet" and "Roll" for the Epson Stylus Pro 7600.
- **Profile:** You can select a profile if several paper profiles were set up in the Color Proof Pro Engine Manager. This option is disabled if only one profile is available.
- **Use Visual Correction:** In Color Proof Pro, you can manually influence the way the proofer reproduces color in "Visual Re-Linearization". To do this, you can manually change the gradation curves of single separations or groups of separations, based on the visual assessment you made of your print and proof results. You can save the settings as a file (*.lvc).

To use the linearization correction for proofing, check this option and select the ".lvc" file you want using the "Browser" button.

- **Overwrite existing files:** You can only use this option if you selected "PDF Export", "PostScript Export", "TIFF Export" or "JPEG Export" as your proofer. Export files that are in the export directory are overwritten by files of the same name if you check this option. If this option is not

enabled, new export files are renamed by a consecutive number being added to the beginning of the name, e.g. 01_filename.tif, 02_filename.tif, etc.

General Settings

General settings for the proofer workflow are made here.

- "Action after the proof": Here you set how the Prinect MetaDimension behaves after the proof output with regard to job processing:
 - "Stop after proofing": Job processing is finished after every proof. You can then reprint the job by means of the "Start" button (if necessary, with different output parameters).
 - "Wait after proofing": Job processing is paused after every proof. You can then continue processing using the "Start" button.
 - "continue": Imaging starts directly after proofing.
- "Monitored output": Some proofers can report their status (printing, ready, etc.) back to MetaDimension. If this option is activated, MetaDimension waits until the "Ready" status is reported by the proofer before a new proof output is sent to the proofer. If this option is switched off, the next proof job is sent without waiting for the feedback from the proofer. This option is irrelevant for proofers that do not send status reports to MetaDimension.
- "Proof Directly Without Scattering": If you have set and enabled the scatter proof option for your device, you can prevent jobs that are processed with this Output Plan from being output as a scatter proof. This means that each job has its own printout. You can find more details about scatter proof in [section "Operating Mode", page 111](#).
- "Page Proof": A page proof and not a form proof of the entire sheet is performed (e.g. for color proof). This is also done if page positioning for several pages was selected for a high-resolution output.
- "Mirror Print": The proof output is mirrored compared to the job settings.
- "Cut after page": This option is only enabled with devices that have a fixture for cutting paper.
- "Print Color Bar" A color bar is also printed during proof output.
- "Copies": Enter the desired number of proof copies.
- "Rotation": You can specify whether and in what way a job will be rotated.
 - "None": The job is not rotated.
 - "Automatic": To save material, an upright job will be rotated automatically by 90° if it fits the material.
 - 90° Clockwise: The job is rotated by 90° in clockwise direction (to the right).
 - 90° Counter Clockwise: The job is rotated by 90° in anti-clockwise direction (to the left).

Output Plan Editor

- "Two Side Printing": This is where you set how the proof sheet will be used. Settings are only possible if the device has a duplex unit.
 - "Off": Only one side of the proof sheet is used.
 - "Tumble": The two sides of the proof sheet are used. For example, the sheet is turned from front to back, with the page marks remaining on the page, but the front mark going to the back.
 - "Turn": The two sides of the proof sheet are used. For example, the sheet is turned from right to left, with the page marks going from right to left, and the front mark remaining at the front.
- "Print Color Bar" A color bar is also printed during proof output.
 - "HD Proof": The preinstalled Heidelberg Proof Color Bar is used with this option.
 - "User-Specific": You can load a self-defined color bar file in the TIFF or EPS format.
 - "Use Colormatching for the Color Bar": Color bars are output with color management.

Page Size Settings

- "Page size matching":
 - "Final Output": The page size of the proof is matched to the page size for the final output (sheet size).
 - "Document": The page size of the proof is matched to the document page size defined in the job.
- "Page Size Policies": Here you can set the behavior of the Prinect MetaDimension when proofing pages that are bigger than the proofer can output:
 - "Abort the Job": The job is aborted.
 - "Reduce to fit": The page is scaled (minimized) so that it can be output as a whole by the proofer. This means that the page is not tiled.
 - "Clip to max. Page": The page is centered on the proofer and not scaled but is trimmed so that the proofer can output the data.
 - "Tiling": The page is printed in several parts. If you select this option, the following parameters are also available:

Crop Marks: If a document with crop marks is output, the layout of the page for the proof is based on the trim box and not on the media box. Crop marks for mounting the single pages are added to the document during output if this option is enabled.

"Center": The parts of the page are output in the center of the proof pages, i.e., if a job page is distributed on four proof pages, the proof appears in the center of the four combined proof pages.

"Allow Automatic Rotation": The parts of the page are automatically rotated 90° if this action leads to a better utilization of the proofer's page format.

"Overlap": This is where you specify the extent to which the parts of the page are allowed to overlap.

- "Center Sheet": The settings in this section can be used for the front/back output. By inputting vertical and horizontal shift values in the selected dimensional unit, you can attain the front/back prints perfectly spaced one above the other. This allows you, for example, to perform an exact formproof for front and back.
 - "Back": Enter the values here in horizontal and vertical direction for a shift of the back page in order to center the output.
 - "Shift Front": Enter the values here for a shift of the front page in order to place the front page identically over the back page.

Color Management

The Color Management functionality is vital for color proofing. In the Prinect MetaDimension proofer workflow (see [section "Proofer Workflow", page 359](#)), a job can be output to an imagesetter and a proofer at the same time. The Color Management settings for the imagesetter are defined in the Color Management section (see [section "Color Management", page 275](#)). Since proofing generally has different Color Management settings to imaging (different device color spaces, different proofing options, e.g. media white simulation), you can set up proof Color Management in this group.

You can set the following parameters:

- "Print Profile Selection": To match offset printing and proofing, you can set the ICC profile of the offset process as the press profile for proofing in this box. The following options are available:
 - "Use the output process press profile": When printing to the imagesetter, the same press ICC profile that was set in the "Color Management" section is used in the proofer workflow (see the [section "Press Profile", page 283](#)).
 - "Ignore the output process press profile": The target profile that is set for imagesetter output is ignored in the proofer workflow. In other words, there is no matching the color profile used in offset printing.
 - "Use following press profile": The "Press Profile" list box is enabled if you select this option:

"Press Profile": The ICC profile that you select here will be set for output on the imagesetter in the proofer workflow. As a result, the press profile set in "Color Management > Output" (see the [section "Output Section", page 283](#)) is ignored.
 - "Proofer Profile": Select the output profile for the proofer you want to use in the proofer workflow. With some proofers, the color profile is managed by the Color Proof Pro Engine Manager. Then only "Automatic Proof Profile" is available.
 - "Rendering Intent": This is where you set the rendering intent for proofing (see the [section "Rendering Intent", page 276](#)).

- "Preserve Black Generation": This option has an effect on proofing and behaves like the corresponding option in the "Color Management" section (see the [section "Preserve Black Generation \(Press Profile to Proofer Profile\)", page 281](#)).



Note: You should use "Relative Colorimetric" rendering intent if you do not need paper white simulation for your color proof.

You should use "Absolute Colorimetric" rendering intent if you need paper white simulation. Consequently, all colors in common of the source and target color space are rendered identically. It makes sense to use this rendering intent since a proofer normally has a wider gamut than the print process it simulates. In case colors in the color file you want to proof extend beyond the proofer's gamut, these colors will be mapped to the "edge" of the proofer color space. This means, all colors not covered by the proofer's color space are rendered with those colors the proofer can just about support. As a result, shadow areas may lose detail.

The "Perceptual" and "Saturation" rendering intents are not suited for proofing.

- "Print Opaque as Transparent for Overprint Check" When you enable this option, all the spot colors are transparent in printing and the opacity with which they originally were defined in the color tables is not used. In the proof this lets you see objects that were defined in process colors but are covered by spot color objects. An unwanted effect of this is that such covered objects could "disappear" in the print.



Caution: You should disable this option only for special cases where it is absolutely necessary for the spot colors to be output as opaque colors in the proof. Disable this option only if you are sure that opaque spot colors are really needed in the proof. Otherwise, you run the risk that objects defined in process colors will be covered by opaque spot colors and in the proof covered by spot colors defined as opaque and yet can still be seen later in print (they "shine through").

Concept Proof

Concept Proof lets the Proofing Engine Manager support printers controlled by Windows drivers. In other words, the Proofing Engine Manager does not use its own driver-specific parameters as is the case with the Color Proof Pro Engine Manager, for example.

The screenshot shows the 'Proof' tab of the Output Plan Editor. At the top, the printer is set to 'Epson Stylus Photo 950'. A checkbox for 'Proof based on high resolution bitmap' is present but unchecked. The 'Proofer Parameter' section includes settings for Tray (Automatic), Material Size (1728.0 x 42519.69), Print area (1710.99 x 42502.68), Current Material (A4 297 x 210 mm), Resolution (360 dpi), and options for Antialiasing, Use Visual Correction, and Overwrite existing files. The 'General Settings' section includes Action after proof (wait after proofing), Supervised Output, Proof Directly Without Scattering, Copies (1), Rotation (None), Two Side Printing (Off), Mirror Print, Cut after page, Print Color Bar, HD Proof (selected), User Defined, File, and Use Colormatching for the Color Bar. The 'Page Size Settings' section includes Page size matching (Final Output), Document, Page Size Policies (Abort the Job), Crop Marks, Center Output, Allow Automatic Rotation, Tiling Overlap (2.54 cm), Center Sheet, Back (0.0 x 0.0), and Shift Front (0.0 x 0.0). The 'Color Matching' section includes Print Profile Selection (Use the output process press profile), Press Profile (ISOcoated_v2_eci.icc), Proofer Profile (HDM sRGB Print Profile.icm), Rendering Intent (Absolute Colorimetric), and options for Preserve Black Generation (Special) and Print opaque colors as if they were transparent to check overprinting. At the bottom, there are checkboxes for Color Management and Policies, both unchecked.



Note: The "Proof based on high-resolution bitmap" option is designed solely for the ROOM Proof option (see the [section "ROOM Proof", page 273](#)) and can only be enabled for TIFF-B export.

Proofer Parameters

You can view parameters (depending on your proofer) such as "Tray", "Current Material" or "Resolution" in this group. The settings come from the installed Windows printer driver and can vary according to device. You must change the printer driver's device settings to change these parameters.

- "Antialiasing" Antialiasing is used when calculating the proof data if you enable this option.

Other Options

You can set the other options as described for the Epson Stylus Pro 7600 that is controlled via Color Proof Pro:

- ["General Settings", page 267.](#)
- ["Page Size Settings", page 268.](#)
- ["Color Management", page 269.](#)

Proof Open: Proof Open: PostScript Export, TIFF Export, JPEG Export

The Proofing Engine Manager uses Proof Open to create proofing data as PostScript, TIFF, JPEG or PDF files. You can find more details about PDF export in the [section "PDF Export Settings", page 233](#). You can copy these proof files later, for example, to another computer that is connected to a proofer and output the files there.

You can also open, view and output proof files in TIFF or JPEG format with an image editing application such as Adobe Photoshop. In this case, make sure that you disable all the Color Management functions of the application because the image data already have the correct Color Management data.

The screenshot shows the 'Proof' dialog box in the Proofing Engine Manager. The 'Proofer' is set to 'PDF Export'. The 'Proofer Parameter' section includes 'Material Size' (1728.0 x 42519.69), 'Print area' (1710.99 x 42502.68 pts), 'Resolution' (360 dpi), and 'Output Directory' (I:\berg\MetaDimension\OutputDir\ProofOpen). The 'General Settings' section includes 'Action after proof' (wait after proofing), 'Supervised Output' (checked), 'Page Proof' (unchecked), 'Mirror Print' (unchecked), 'Cut after page' (checked), 'Print Color Bar' (unchecked), and 'Use Colormatching for the Color Bar' (checked). The 'Page Size Settings' section includes 'Page size matching' (Final Output), 'Page Size Policies' (Abort the Job), 'Crop Marks' (unchecked), 'Center Output' (unchecked), 'Allow Automatic Rotation' (unchecked), 'Tiling Overlap' (1.0 inch), 'Center Sheet' (unchecked), 'Back' (0.0 x 0.0), and 'Shift: Front' (0.0 x 0.0). The 'Color Matching' section includes 'Print Profile Selection' (Use the output process press profile), 'Press Profile' (ISOcoated.icc), 'Proofer Profile' (Proof Generic.icc), 'Rendering Intent' (Absolute Colorimetric), and 'Preserve Black Generation' (Special). At the bottom, there are tabs for 'Color Management', 'CIP 3', and 'Policies'.



Note: The "Proof based on high-resolution bitmap" option is designed solely for the ROOM Proof option (see the [section "ROOM Proof", page 273](#)) and can only be enabled for TIFF-B export.

Proofer Parameters

The following proofer parameters can be configured in this section.

- "Resolution": This is where you select the resolution of your proof output. You should select the resolution so that it matches the output device you intend to use and gives you the quality you need.
- "Antialiasing" Antialiasing is used when calculating the proof data if you enable this option.
- "Output Directory": For the export of proof files, you need an output directory that will hold the proof data. If you already set up an output directory, you can select the path to this directory in this box or select one using the "Browse" button. You can also create a new directory in the "Select a directory" dialog that you opened with the "Browse" button.
- "Overwrite existing files": Export files that are in the output directory are overwritten by files of the same name if you check this option. If this option is not enabled, new export files are renamed by a consecutive number being added to the beginning of the name, e.g. 01_filename.tif, 02_filename.tif, etc.

Other Options

You can set the other options as described for the Epson Stylus Pro 7600:

- ["General Settings", page 267.](#)
- ["Page Size Settings", page 268.](#)
- ["Color Management", page 269.](#)

ROOM Proof



Prerequisite: The following license options must be enabled for the ROOM Proof workflow:

- A format-independent TIFF-B Export license must be enabled on the License Server for the export of TIFF-B files. You must assign this license option to the MetaDimension workstation on which the TIFF-B files will be created ("Prepstation").
- A format-independent TIFF-B Import license and a ROOM Proof license must be enabled on the License Server for the import and descreening of ROOM Proof TIFF-B files. You must assign these license options to the MetaDimension workstation on which the imported TIFF-B files will be descreened and on which proofing will be done ("Proofstation").



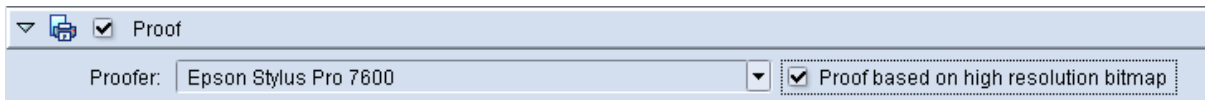
Note: The tasks of the Prepstation and the Proofstation can run on a single MetaDimension PC by first creating the TIFF-B files and then importing them for descreening and proofing. In this case, the licenses must be assigned to the same MetaDimension PC.

Output Plan Editor

ROOM Proof ("RIP **O**nce, **O**utput **M**any") lets you output screened TIFF-B data to a proofer in addition to the high-resolution output to an imagesetter without having to go through the RIP again. In this process, the screened data are descreened, converted to contone images and output to the proofer.

This process gives you proofs that are calculated fully from the high-resolution imagesetter data, giving you an exact reproduction of the original data. This avoids any errors that may result from a repeat RIP process for proofing.

You can set up ROOM Proof solely in an Output Plan for a TIFF-B export device. This option is not enabled for all other devices. You activate the ROOM Proof workflow by enabling the "Proof based on high resolution bitmap" option beside "Proofer":



Set "Proof high resolution bitmap on ProofWorkstation" in the "Proofer" list box if you have a workflow with a separate Prinect MetaDimension proofing station. You can find more information about the ROOM Proof workflow with a separate proofing station in the [section "ROOM Proof with an Additional Prinect MetaDimension Proofing Station", page 363](#).



Note: Remember the following constraints when using the ROOM Proof option:

- The ROOM Proof option can only be used in conjunction with TIFF-B export devices because the proof data is calculated from TIFF-B files.
- The proofer used can only be used as a secondary device in a proofer workflow.
- Process calibration (see the [section "Process Calibration", page 243](#)) or linearization (see the [section "Linearization", page 241](#)) is applied to the high-resolution imagesetter data during the RIP process. Consequently, these corrections also affect the proof data that are calculated from them. As a result, color shifts can occur during a ROOM Proof output if process calibration or linearization was run. This means that ROOM Proof is not so much suited as a color proof for checking a true-color output but more as a layout proof (imposition proof).
- The ROOM Proof workflow does not replace proofing with "Color Proof Pro" or the "Proofing Engine Manager" but rather supplements them.

Restrictions in the Setup

The following parameters in the "Proof" section are no longer available for your workflow if you enable "Proof based on high resolution bitmap":

- In "General Settings":
 - "Page Proof"
 - "Antialiasing"
 - "Print Color Bar"

- In "Page Size Settings"
 - "Page size matching":
 - "Page Size Policies" > "Tiling"

You can find more information about the ROOM Proof workflow in the [section "ROOM Proof Workflow", page 363](#).

Color Management

In the "Color Management" section, you can set the parameters for InRIP Color Management in Prinect MetaDimension. You can also select "PostRIP" color management if you selected a proofer as your output device. The possible settings change accordingly.



Note: For detailed information about Color Management in Prinect MetaDimension, see the [section "Basics of Color Management", page 313](#)..

Enabling Color Management

Enable the Color Management function by selecting the "Color Management" option.

When Color Management is activated, all jobs that are processed with this Output Plan undergo Color Management functions.

The Color Management in Prinect MetaDimension can distinguish between the following data types and handle these data differently in terms of Color Management:

Output Plan Editor

- RGB image data,
- RGB graphics/text data,
- CMYK image data,
- CMYK graphics/text data,
- Grayscale image data,
- Grayscale graphics/text data.

ICC profiles

You can set one ICC profile (see the [section "Color Management in Prinect MetaDimension", page 319](#)) for each object type: RGB images/RGB graphics, CMYK images/CMYK graphics and grayscale images/grayscale graphics.

The following ICC profile types exist:

- Input profiles, for e.g. scanners and digital cameras
- Display profiles, for e.g. monitors
- Output profile, for e.g. color printers, imagesetters
- Additional profile formats, e.g. Device Link profiles, color space conversion profiles, etc.

These ICC profiles determine how Color Management transforms each object to the device-independent L*a*b* color space (exception: Device Link profiles). From the viewpoint of Prinect MetaDimension, these profiles determine the input behavior of Color Management, even if the respective profiles were already generated for the output devices. The print profile matches the data to the output process.

A few default ICC profiles have already been installed with the Prinect MetaDimension software; these can be selected from the corresponding selection lists. If you have generated your own ICC profiles, e.g. with Prinect Profile Toolbox, you can transfer them to the Prinect MetaDimension PC. The ICC profiles are stored in the appropriate subdirectories in "C:\Programs\Heidelberg\MetaDimension\UserDir\ICC Profiles" (C: is the MetaDimension installation drive). You can import your ICC profiles by means of the Prinect MetaDimension Printmanager. Just click the "New" button in "Administration > Resources > ICC Profiles". Then, you can load the ICC profiles from the selection lists.

Rendering Intent

In addition to selecting ICC profiles, you can set the rendering intent for the individual graphics/image types. Rendering intent determines how the color space adaptation should be executed: Since losses always occur during a color space transformation, it can be helpful to, for example, retain the photographic perception of an original and to accept a limit on the number of color values. The following parameters are available for rendering intent: absolute and relative colorimetric, saturation and perceptual.

Absolute colorimetric

Colors are rendered taking the light source and the medium illuminant (e.g. the color of the unprinted paper). For example, the illuminant of a newsprint paper which is shifted from illustration printing paper towards yellow compared to the illuminant of paper is rendered with a yellowish cast. That is why "Absolute colorimetric" is the default setting for a proof output. All colors that lie outside of the output color space are displayed on the margin of the output color space. The advantage of this rendering intent is that the exact color values are retained when switching from one output medium to another. The disadvantage is that any colors that lie outside of the output color space cannot be distinguished. This rendering intent is especially suitable for logos or monochrome objects which must be reproduced exactly the same way on different output media.

Perceptual

When you use the "Perceptual" parameter, you obtain an output, that essentially contains the perceptible impression of the original. This means that the precise, colorimetric rendering of the colors is modified in favor of the retention of the relative color relationships. Here, the output color space is compressed, i.e. "fewer" colors are output as existed in the original. This option is especially suitable for photographs.

Relative Colorimetric

Colors are rendered taking solely the light source into account. The rendering intent of the print medium (e.g. the color of the unprinted paper) is not taken into account. For example, the illuminant of a monitor would be correctly rendered on the print medium. All colors that lie within the output color space are rendered identically. All colors that lie outside of the output color space are displayed on the margin of the output color space. The advantage of this rendering intent is that different illuminants of different output media are taken into account. The disadvantage is that the color adaptations are not exactly retained when switching from one output medium to another. This rendering intent is suitable for all vector graphics.

Saturation

In the output, the colors are rendered in such a manner that the color saturation is retained or even emphasized. The colorimetrically precise rendering of colors can be retained or not. This option is suitable for business graphics where the color saturation is the most important attribute in color rendering.



Note: You should define the following settings for rendering intent if you want true-color proofing:

You should use "Relative Colorimetric" rendering intent if you do not need paper white simulation.

You should use "Absolute Colorimetric" rendering intent if you need paper white simulation. Consequently, all colors in common of the source and target color space are rendered identically. It makes sense to use this rendering intent since a proofer normally has a wider gamut than the print process it simulates. In case colors in the color file you want to proof extend beyond the proofer's gamut, these colors will be mapped to the "edge" of the proofer color space. This means, all colors not covered by the proofer's color space are rendered with those colors the proofer can just about support. As a result, shadow areas may lose detail.

Output Plan Editor

The "Perceptual" and "Saturation" rendering intents are not suited for proofing.

Source ICC Profile

You can set the following parameters in this group:

RGB Image

If this option is activated, Color Management is used for pixel-based RGB images. Select an appropriate profile and the desired option for the rendering intent.

RGB Graphics

If this option is activated, Color Management is used for vector-based RGB graphics. Select an appropriate profile and the desired option for the rendering intent.

CMYK Image

If this option is activated, Color Management is used for pixel-based CMYK images. Select an appropriate profile and the desired option for the rendering intent.

CMYK Graphics

If this option is activated, Color Management is used for vector-based CMYK graphics. Select an appropriate profile and the desired option for the rendering intent.

Grayscale Images

Normally, Color Management should not be applied to grayscale images and grayscale graphics when they are output (option is deselected). In certain cases, it may make sense to use ICC profiles for the output of grayscale images, for example, if you are going to output grayscale images with CMYK offset that are otherwise prepared for a newspaper process. Generally, such grayscale images have very little contrast when output without any matching. In this case, you can enable the "Grayscale Images" option and select a CMYK output profile matching the offset process as the profile (e.g. Offset Euro or Offset SWOP). This can cause a slight "coloring" of the grayscale images.

The use of special grayscale profiles ("Gray") instead of the CMYK profiles is a better alternative in this case. In this case, contrast is also improved without any color shifts. Some grayscale profiles are included in the MetaDimension shipment.

Grayscale Graphics

What was described for [Grayscale Images](#) applies basically to grayscale graphics as well.

"Black Point Compensation" option (BPC)

You can enable black point compensation (BPC) for rendering intent "Relative Colorimetric" "Perceptual" and "Saturation" rendering intents. However, the effect of this option can only be seen for the rendering intent "Relative Colorimetric".

Black point compensation is similar to Photoshop's "Use Black Point Compensation" option.

Black point compensation enhances the reproduction area when the "Relative Colorimetric" rendering intent is used for color space conversion to the L*a*b* color space or from the L*a*b* color space to the device color space. The L*a*b* color space has more lightness levels for dark image parts than the CMYK color space because the L*a*b* color space is larger than the CMYK device color space. In a color space conversion from the L*a*b* to the CMYK color space with "Relative Colorimetric" rendering intent, the color space is cut off or reproduced without definition in the shadows because they are located outside the displayable range. As a result, details in dark parts of the image are often lost, especially if ICC profiles for uncoated papers are used for color space conversion.

Black point compensation matches the black point during color space conversion, causing the definition in such dark image parts to be kept. This "elongates" the shadows causing color shifts to occur also in the lighter color values. For that reason, this method is not always suited to true-color proofing.

We recommend that you use "Perceptual" rendering intent with black point compensation and not "Relative Colorimetric" rendering intent. This rendering intent makes it possible for the various details in dark image parts to be reproduced, while keeping color shifts to a minimum. In principle, differences cannot be fully avoided because of the different sizes of the color spaces.

Options

You can set the following options in this group:

Match Black Graphics Objects

This option affects all (CMYK) graphic objects of a job that are defined with the "100% black" property. If the "Match Black Graphics Objects" option is activated, black objects are included in the Color Management calculation. As a result, black graphic objects may be brightened in certain cases.

If the option is not enabled, black graphic objects are output as follows, depending on their color definition in the print job:

C	M	Y	K	Black generation
0%	0%	0%	100%	K=100% , rest=0%
100%	100%	100%	100%	all=100% (e.g. marks)

R	G	B	Black generation
0%	0%	0%	K=100% , rest=0%

Preserve Black in CMYK Images / Graphics

You enable that black is kept by checking the box next to "K" (separately for images and graphics).

Jobs are often created deliberately with a "long" or "short" black, for example, with a short black to improve the impression of smooth screening in skin tones or with a long black to stabilize gray balance when reproducing black or metallic-colored technical equipment. If a job involves a process

conversion (Color Management from CMYK to the CMYK of the planned output device), the length of the black channel in the output normally depends only on the makeup of the press profile. However, Heidelberg Color Management is able to modify black in the press profile during process conversion in such a way that it is similar to black in the input profile. This only works if the original black in the press profile is longer than black in the input profile.

This option affects the black portions in CMYK graphics and images. If the option is activated, black generation is retained as far as possible so that it matches that in the job. Color Management makes adaptations only when they are required to retain the visual impression of the black tone.

"Special", "Basic" and "K=K" options:

- Special (default)

This is a special setting that works as follows:

- C, M, Y are converted to the target CMY color space for mid-range and light hues. K is converted by means of a gradation curve.
- A special four-dimensional model keeping K is used for dark hues.

Extensive tests have shown this process to be the best. The "Special" parameter eliminates most of the problems in complex documents. This parameter is only available in the Heidelberg CMM. This setting is suitable for documents with text, color and gray images.

- Basic

C, M and Y are converted to the target CMY color space, K is converted to the target density with the help of a gradation curve. The gradation curves solve any problems you may have with differing black ink densities. This setting is suitable for documents with grayscale images.

- K=K

Only C, M and Y are converted to the target CMY color space, K is not converted. Black remains identical. This setting is ideal for documents with a large amount of text and line art.



Note: This setting can cause problems during an output if the black inks have different densities in the original and target color spaces.



Note: We recommend that the "Preserve Black in CMYK Images/Graphics" option is always enabled, even if the jobs take slightly longer to calculate.

Preservation of primary and secondary colors

This option keeps solid tint single-color or two-color image parts. You enable this option by checking the box next to "CMY" (separately for images and graphics).

In addition to the options for keeping black in CMYK images and graphics, you can set that primary and secondary colors are kept in CMYK images and graphics. You can enable these options only if you selected "Preserve Black in CMYK Images/Graphics" beforehand.

Normally, if Color Management is used, C=100, M=0, Y=0, K=0 becomes, for example, C=96, M=12, Y=8, K=2. In other words, "dirtying elements" creep in. These elements are fully correct if you have a true-color display. However, this behavior may not be wanted in technical diagrams because color margins occur at the mainly clearly defined edges, for example, due to register errors or if the maximum color of the original printing process is to be retained for this color area.

Secondary colors are colors that result from mixing two primary colors (100% in each case). C, M, Y and K are the primary colors in the CMYK color model. Secondary colors are "red" (C=0, M=100, Y=100), "green" (C=100, M=0, Y=100) and "blue" (C=100, M=100, Y=0). These colors are not "real" RGB colors but result from superposing the respective pairs of CMYK colors.

When secondary colors are preserved, blue (C=100, M=100, Y=0, K=0), for example, doesn't change. The influence of Color Management causes C=100, M=100, Y=0, K=0 to become C=97, M=94, Y=3, for example. The selection of "+secondaries" makes sure that this blue stays C=100, M=100, Y=0, K=0. The preservation of secondary colors is always in addition to the preservation of primary colors. This is highlighted by the plus sign.

Primary and secondary colors with smoothing:

Breaks can occur at edges if objects where primary and secondary colors are kept and objects affected "normally" by Color Management are printed side by side. To avoid this, you can select the "Primaries, smooth" or "+ Secondaries, smooth" options. Then the objects affected by the preservation of primary/secondary colors are smoothened at the edges so that there are no breaks.



Note: You should enable the preservation of primary / secondary colors only if, for technical reasons, the colors really have to be kept without any influence from Color Management. You should never enable these options by default as otherwise you can have results that you may not want in your printing.

Preserve Black Generation (Press Profile to Proofer Profile)

This option is only available if you are editing an Output Plan for a proofer. The "Output" section must also be enabled so that you can use this option. This option affects the black portions in CMYK objects. If the option is activated, black generation is retained as far as possible so that it matches that in the job. Color Management makes adaptations only when they are required to retain the visual impression of the black tone.

"Special", "Basic" and "K=K" options:

- Special (default)

This is a special setting that works as follows:

- C, M, Y are converted to the target CMY color space for mid-range and light hues. K is converted by means of a gradation curve.
- A special four-dimensional model keeping K is used for dark hues.

Extensive tests have shown this process to be the best. The "Special" parameter eliminates most of the problems in complex documents. This parameter is only available in the Heidelberg CMM. This setting is suitable for documents with text, color and gray images.

Output Plan Editor

- Basic

C, M and Y are converted to the target CMY color space, K is converted to the target density with the help of a gradation curve. The gradation curves solves any problems you may have with differing black ink densities. This setting is suitable for documents with grayscale images.

- K=K

Only C, M and Y are converted to the target CMY color space, K is not converted. Black remains identical. This setting is ideal for documents with a large amount of text and line art.



Note: Your color proof will no longer give you a correct colorimetric reproduction when output if the "Preserve Black Generation (Press Profile to Proofer Profile)" option is enabled. This means that you cannot be sure to have a quality proof. For this reason, you should always disable this option if you selected "Absolute colorimetric" as the rendering intent for your color profiles.

It is recommended that the "Match Black Graphics Objects" option always be deactivated. This ensures that black graphic objects are always output with K=100% (and, if required, with CMY=100%). This is an advantage for example with small black text or black lines that would be separated from the K-channel in all four CMYK channels or at least screened with Color Management, which causes unsharp contours and/or register problems.



Note: If "Match Black Graphics Objects" is enabled, breaks in shades can occur during proofing if the shades have considerable amounts of K because black is handled differently to the other colors.

"Turn R=G=B Graphics into Gray" and "Turn C=M=Y, K=0 Graphics into Gray"

These options let you convert graphics (e.g. fonts, line art, smooth shades) whose R, G, B or C, M, Y values (with K=0) are the same into gray objects. These gray objects display in the CMYK color space only with K. This means that all color portions are mapped to the K separation. Conversion is based on the following scheme:

Before	After
R=G=B=n	C=M=Y=0, K=n
C=M=Y=n, K=0	C=M=Y=0, K=n

The "R=B=G Tolerance Limit" and "C=M=Y Tolerance Limit" boxes let you specify a tolerance (in percent) that defines when color data will be considered the same even if they differ slightly. Too high a percent in these boxes, however, can result in the loss of colors that are deliberately wanted.

Device Independent Colors Group

The settings checked in this group only affect device-independent images and graphics.

"Device-independent" means that the image data already have ICC profiles that define the conversion from the device-dependent color space to the device-independent L*a*b* color space. Consequently, the settings in this group refer to the way the embedded ICC profiles will be used in the workflow. For that reason, you cannot select any ICC profiles in this group.

If the Color Management option is activated, Color Management is applied to all device-independent objects. This is also the case if no other option is enabled in the "Color Management" section.

You can select the rendering intent (see the [section "Rendering Intent", page 276](#)) for the device-independent objects in this list box, thus defining the conversion to the output color space. The rendering intent defined in the job is used if it is defined in the documents of the job.

Output Section

You can set the following parameters in this group:

Profiles that you set in "Output"

In this group, you match your data to the output process by assigning press profiles.

These ICC profiles determine how Color Management transforms each object from the device-independent L*a*b* color space to the color space of the printing process.

Press Profile

You must select a press output profile (ICC profile) from the "Press Profile" list box. You can use this print output profile to determine which color adjustments the Color Management will make for the printing process. A number of standard print output profiles are already installed in Prinect MetaDimension.

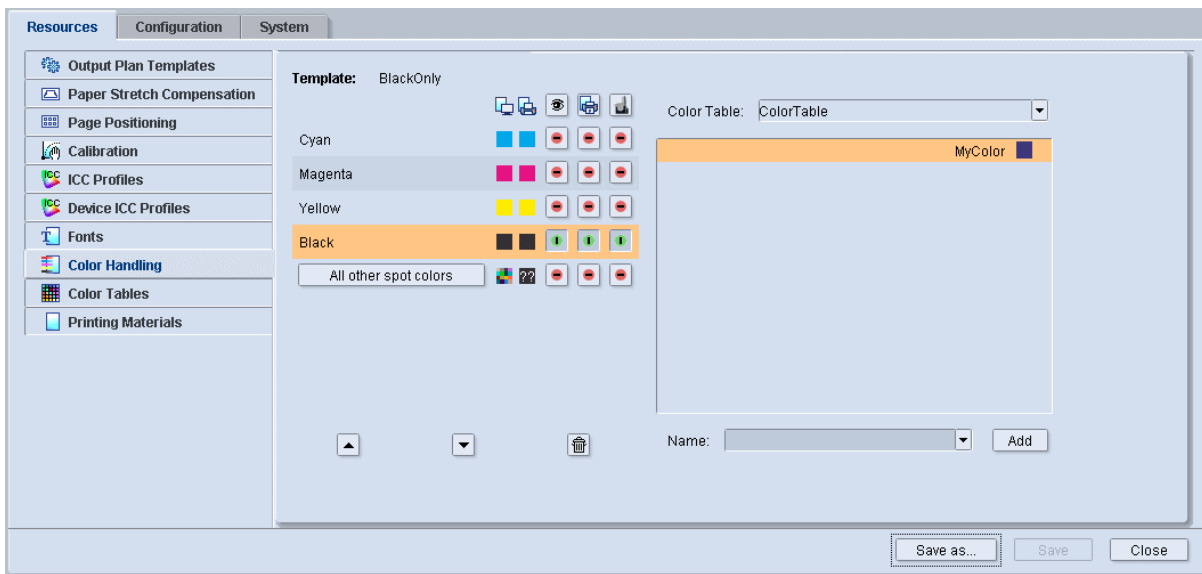
Optimal gray conversion with special output press profile

To enhance quality during gray conversion, you can set up an Output Plan with the help of Color Management where all the CMYK color channels are mapped to the black channel. As a result, you have a black separation that contains cyan, magenta and yellow as grayscales in addition to black.

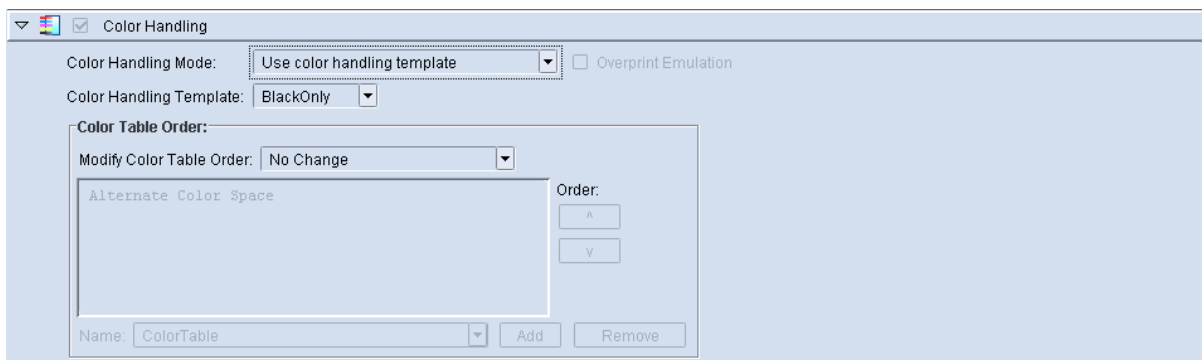
Procedure:

1. First of all, create a new color handling template in "Resources > Color Handling". In this template, all colors except for black are suppressed for imaging and proofing. You can save this template, for example, as "BlackOnly".

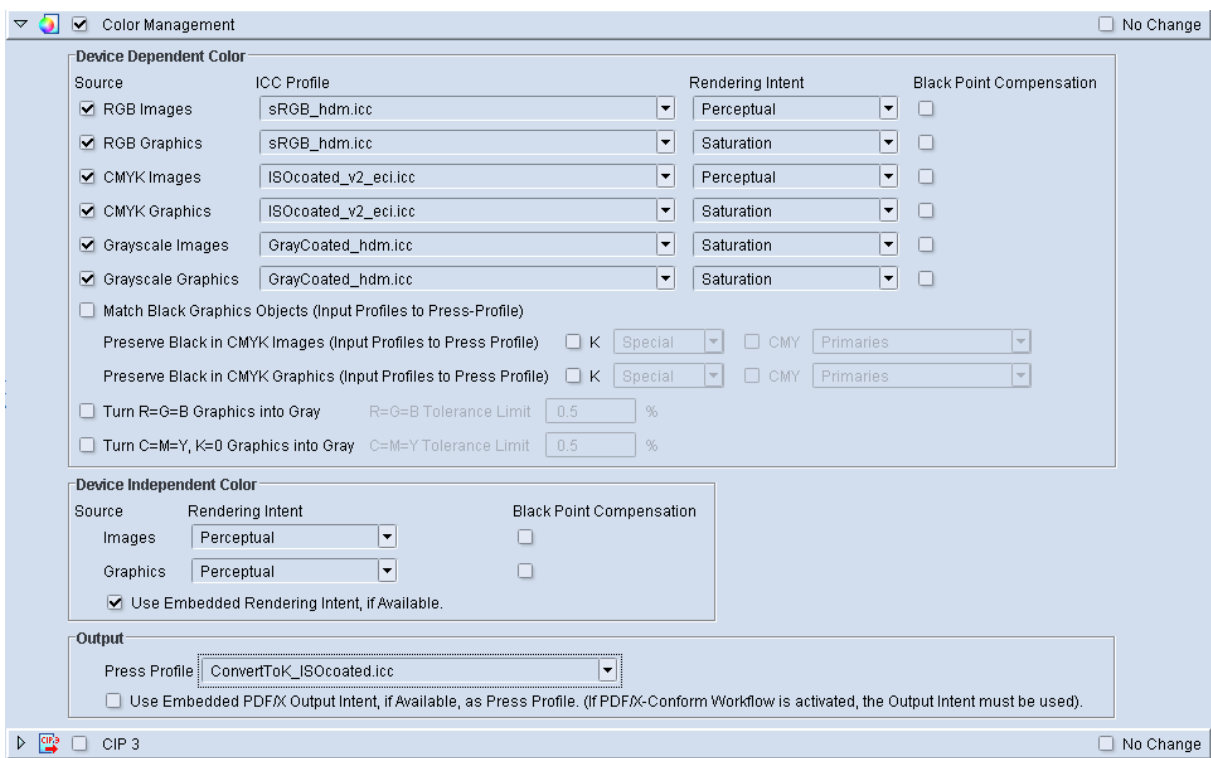
Output Plan Editor



2. Create an Output Plan template with the output parameters you need. Select "Use color handling template" in the "Color Handling Mode" list box and the "BlackOnly" template you just created as the color handling template.



3. Check the "Color Management" option in the Output Plan and select the "ConvertToK_ISO-coated.icc" press profile in "Output".



In "Device Dependent Color", select the source ICC profile options for CMYK images and CMYK graphics and select the suitable source ICC profiles (normally, the default preferences will do. However, you can also use your own profiles that you matched optimally to gray conversion).

4. Make sure that "Use Embedded PDF/X Output Intent, if Available, as Press Profile..." in "Output" is disabled.

Because of the Color Management setup with the ConvertToK_ISOcoated profile, the process colors (cyan, magenta, yellow and black) are all weighted when mapped to the black channel. The color handling template prevents the now empty cyan, magenta and yellow separations from being output as well.

Spot colors are ignored like in a normal ConvertToGray (through the appropriate color handling setting).

What lies behind this advanced option for gray conversion is that process colors are mapped more accurately to grayscales with this method. This enhanced gray conversion can now be influenced by setting suitable source profiles and, to a great extent, by creating a custom ConvertToK profile with the properties that you want. This makes extremely flexible and high-quality gray conversion possible.

Use Embedded PDF/X Output Intent, if Available, as Press Profile (If PDF/X-Conform Workflow is activated, the Output Intent must be used)

When a PDF/X file with an embedded ICC profile as its Output Intent is processed, the embedded press profile is used for color space conversion. The profile set in "Press Profile" is ignored for this file.

If there is no Output Intent, the ICC profile set in "Press Profile" will be used, however it will not be embedded during the export. Any embedded PDF/X Output Intent will not be used for output and also will not be embedded during export.

Output Plan Editor

The press profile set in "Press Profile" is used for conversion if this option is not activated.

If you process jobs with Prinect MetaDimension in accordance with the PDF/X policies, you must always activate this option.

You will find information on PDF/X in the [section "PDF/X", page 286](#)

Use Embedded Rendering Intent, if Available

If the edited documents have Output Intent information, but not PDF/X Output Intent information, rendering intent is set in keeping with the information in the documents.

This option is not available for proofers.

Proofer Profile

This option only appears if you selected a proofer as your output device. Select a proof output profile (ICC profile) from the "Proofer Profile" list box. You can use this proofer output profile to determine the color matching Color Management will make for proofing. Some standard proof output profiles are already installed in Prinect MetaDimension. Some proofing devices offer automatic selection of the proof profile. The proof profile is automatically selected here by the printer driver.

Print Opaque as Transparent for Overprint Check

This option only appears if you selected a proofer as your output device. When you enable this option, all the spot colors are transparent in printing and the opacity with which they originally were defined in the color tables is not used. In the proof this lets you see objects that were defined in process colors but are covered by spot color objects. An unwanted effect of this is that such covered objects could "disappear" in the print.



Caution: You should disable this option only for special cases where it is absolutely necessary for the spot colors to be output as opaque colors in the proof. Disable this option only if you are sure that opaque spot colors are really needed in the proof. Otherwise, you run the risk that objects defined in process colors will be covered by opaque spot colors and in the proof covered by spot colors defined as opaque and yet can still be seen later in print (they "shine through").

PDF/X

PDF/X is an ISO standard for the reliable exchange of digital data in prepress.

The standardization of the PDF, based on defined criteria, allows PDF files to be created that meet all of the prepress requirements exactly. In other words, PDF/X is a PDF that is used specifically in prepress.

The format is defined from ISO standard 15930 (PDF/X-3) for the exchange of digital data and files in the graphic arts industry. The standard is based on the Adobe Portable Document Format (PDF Version 1.3).

The PDF/X format is available basically in versions PDF/X-3:2002 and PDF/X-1a:2001. PDF/X-1a only supports CMYK. In addition, PDF/X-3 also supports other color spaces such as RGB and CIEL*a*b*. PDF/X-3 is designed as the basic format of a future, device-independent Color Management workflow.

You can find a description of the versions and more details in the Internet at: <http://www.pdf3.org/>.

PDF/X-3 supports Color Management workflows, and PDF/X-1a supports CMYK workflows.

PDF/X allows data to be used without having to check them in detail. These files have precisely defined properties.

A PDF/X file ought to contain all the data that are required for a high-quality output of a digital original. The person receiving the PDF/X file must be able to process it further without the need for any extra information from the person who created it.

PDF/X is a data exchange format that contains all the elements required for printing data.

The standard comprises the following rules:

- Only composite data are permitted, no separations
- Fonts must be embedded
- Image data must be available as part of the PDF
- All color spaces used must be defined
- The trim or bleed box must be defined
- LZW and JPEG2000 compressions are not allowed
- There are restrictions with regard to transfer functions and annotations. They are allowed only outside the printable area and cannot be evaluated.
- The PDF/X files must not contain any PostScript or TIFF data.
- Enabling any of the document security options is not allowed, i.e. you also cannot use PDF files if they have a password for opening them.

PDF/X contains a press profile that describes the color space of the printing process to which the PDF file is matched. This profile should be the same that was used when working in the image processing program.

The output color space is described in an ICC profile. This alone is not enough to describe the output process for the PDF/X format. A PDF file is not necessarily a PDF/X file if an output process is defined in this PDF file.

PDF/X supports color management-oriented workflows and conventional CMYK-oriented workflows.



PDF/X in Prinect MetaDimension

Prinect MetaDimension checks compliance of the PDF/X data only if this is set in the Policies (see the [section "PDF/X Conformity Check", page 311](#)). However, this check is limited to the key aspects needed for processing with Prinect MetaDimension. For a full check of PDF/X conformity, you can use

Output Plan Editor

a special preflight tool or Adobe Acrobat's Preflight function in advance or you can use, for example, the Preflight functionality of the Prinect Integration Manager. This allows faulty PDF/X files to be detected and in many cases to be corrected.

As alternatives to this, you can use either the "Heidelberg Prinect Color Editor" software or the free "Pdf/X-3 Inspector" software (they are both Acrobat plug-ins). You can download "Pdf/X-3 Inspector" from the Internet at:

<http://www.pdfx.info/download.html>

Prinect Color Editor also makes it easy and fast for you to convert PDF/X-3 files with ICC-based colors or L*a*b* colors to CMYK. Prinect MetaDimension processes PDF/X as set in the Output Plan. The only difference to Prinect Color Editor is the use of the ICC profiles from the PDFs for the required printing conditions. Some settings in the Output Plan must be customized for processing that complies with PDF/X.

- "Color Management": "Use Embedded PDF/X Output Intent, if Available, as Press Profile" (see also the [section "Use Embedded PDF/X Output Intent, if Available, as Press Profile \(If PDF/X-Conform Workflow is activated, the Output Intent must be used\)", page 285](#)).
- "Screening": Working with Heidelberg screen systems is recommended.
- "Color Handling": The order for handling spot colors must be set only as an "Alternate Color Space" in keeping with the PDF/X specification. For that reason, you must set the "Modify Color Table Order" option (see also the [section "Color Table Order", page 252](#)) to "On" in "Color Handling" in the Output Plan and make sure that "Alternate Color Space" (and only this color space) is entered in the list. If "Alternate Color Space" is not in the list, select this color space in the "Name" list box. Remove any other color spaces from the list.
- "Policies": The "Apply" option must be set for "PostScript Color management" in this box. See also [section "PostScript Color Management", page 301](#). Furthermore, the "Do not check the PDF/X file" option may not be selected in the "PDF/X Conformance Violation" list box.
- "Spread": Do not select "Trapping" if the PDF/X documents are already trapped.
- Jobs with layout data (job ticket or JDF) should not be sent to a virtual printer as the output profile is not evaluated in such a case. Prinect MetaDimension cannot evaluate all the output profiles of the various PDF/X jobs that you wish to position on one sheet at the Prinect Signa Station.

CIP 3

In offset printing, problems may arise when individual areas of a signature are to be printed with a very high color density since so much ink is applied that the paper is "oversaturated" and becomes too wet (paper tends to jam!). For this reason, the ink density distribution on an exposed and developed printing plate is examined before printing and, if necessary, the ink feed is reduced in printing ("ink zone control"). The printing plate is scanned following the normal procedure so that the correct values for ink zone control can be determined.

However, this procedure is very complex, and attempts to simplify it brought about the introduction of CIP 3 PPF files.

The main idea behind the introduction of PPF files was to transfer information already available in the Prepress stage to production stages further on (printing process, cutting, folding). The International Cooperation for Integration of Prepress, Press and Postpress (CIP 3) was founded with the purpose of defining a general format which is independent of manufacturers and machines.

PPF files are created during impositioning at the prepress stage and in the RIP when the print job is being processed. The information contained in a PPF file is used in printing for the ink zone default setting, for register control and color quality control. While the printed signatures are being processed, cutting, folding and wire-stitching data is taken from the PPF files and assessed and applied by the presses.

CIP 3 Parameters

In the CIP 3 section, you can make settings to generate CIP 3 data.

To set the parameters for CIP 3 generation, select the CIP 3 check box.

"Simple PPF" option

This option is designed for the case that printing and finishing are done on equipment of other manufacturers. There are CIP3 consumers that can neither evaluate nor process "CIP3BeginPrivate....CIP3EndPrivate" blocks. You can hide such blocks by enabling the "Simple PPF" option.

All Heidelberg-specific CIP3 parameters are disabled if you select this option:

- In ["Orientation Section", page 291](#), orientation settings of the Prinect Signa Station are not used. Instead, you can choose between all eight possible orientations. The orientation you select is used for CIP3 generation.
- The ["Original Reference Image", page 290](#) option cannot be enabled.
- Heidelberg Color Management is not used. For that reason, you cannot select the [""PPF Print Profile" Group", page 292](#).

PPF Image Code section

This is where you can specify if you want the CIP 3 images to be generated in binary code or in ASCII hex decode. We recommend using the binary code as it is faster.

You can select the compression for the binary code. The file size of the CIP3 files is reduced by the compression.

Parameter Section

Here, you can set basic CIP 3 parameters.

- Suppress Final Output

The job is stopped after the CIP3 data are generated. No films or plates are imaged and no proof is output. This setting is useful, for example, when a job is output and it is started a second time only to generate the CIP3 data.

- Original Reference Image

Check this option if you wish to create additional Heidelberg-formatted image data that are used by an electronic measuring station, e.g. ImageControl, for more accurate measuring. In such a case, image data without process calibration are used. The PPF file becomes noticeably bigger if this option is selected. The file size can be reduced by enabling compression in the ["PPF Image Code section", page 290](#).

- Resolution

Here, you can set the resolution of the CIP 3 image data. The default setting of 50.8 dpi complies with the CIP 3 standard and should not be changed.

- Front and Back in one File

Normally, there is a PPF file for each output (signature). In the case of double-sided printing (front and back) with automatic turnover, a PPF file containing the data for the front and the

back of the page is required. A joint PPF file for the front and back page is created when this option is checked. Settings made on the Prinect Signa Station have priority.

- Create back as front (force front)

If documents that have been predetermined as two-sided printing for front and back are required as PPF file one-side, by selecting this option you can enable generation of the back pages in the PPF document as front pages. You can use this option, for example, if you wish to print on both sides (in succession) on presses that have no perfector.

- Output directory

Click the "Browse..." button to select an output directory where you want the CIP3 PPF data to be written to. You can select a directory on the Prinect MetaDimension PC or in the network, e.g. on the Prepress Interface PC. A local directory should be shared for network access.

You must create a process with the PPI Process Editor if PPF data are to be processed automatically by PrepressInterface (PPI). When you create a process, a hot folder is automatically generated for the PPF data as a subfolder of the "PPFIn" folder. The "PPFIn" directory is automatically created during the installation of PrePressInterface.

PrePressInterface regularly scans the hot folder for new data and, if any are found, automatically starts data processing.

To make automatic processing by PrePressInterface possible, you must set up this hot folder in Prinect MetaDimension as the output directory for the PPF files. You must place the PPF file manually in this hot folder of the PrepressInterface if you define a different folder as the output directory.

- Overwrite existing files

If you select this option, files that have the same name as the current file will be overwritten without consultation.

- File extension

Here, you can set the file extension of the generated CIP 3 data. In some cases, the downstream processing software may require a different file extension than .PPF. If not, leave the defaults as they are.

Orientation Section

Here, you can set the orientation of the CIP 3 image data. Select the "Signa Workflow" option if you use a Prinect Signa Station for impositioning and want to output at Prinect MetaDimension. Only one of the four optional orientations may then be selected. Any 90° rotation is defined by the Prinect Signa Station.

FTP Output Parameter Section

You can also transfer the CIP3 PPF files via an FTP connection to a forwarding workstation. This can be helpful with transfer to non-Windows operating systems or for the transmission outside a network work group or domain.

1. Activate the "Used FTP Output" option
2. Enter the address (computer name + path) of the target folder under "FTP Address".
3. Enter the username and the password for the FTP access to a target folder.

If necessary, ask your system administrator about the address and access data.

"PPF Print Profile" Group

You can set the following values in this group:

Print Profile Selection

You can set the ICC profile of the offset process as the press profile for CIP3 ink zone control in this box in order to match CIP3 ink zone control to the Color Management settings of the Output Plan. The following options are available:

- "Use the output process press profile": When printing to the imagesetter, the same press ICC profile that was set in the "Color Management" section is used for the PPF files (see the [section "Press Profile", page 283](#)).
- "Use following press profile": If you select this option, the "Print Profile" list box is enabled and you can set one of the available press profiles. The file you set here is used to generate CIP3 ink zone control files. As a result, the press profile set in "Color Management > Output" (see the [section "Output Section", page 283](#)) is ignored.

Use Embedded PDF/X Output Intent, if Available, as Press Profile (If PDF/X-Conform Workflow is activated, the Output Intent must be used)

- Prinect MetaDimension behaves as follows if this option and the "Original Reference Image" option (see the [section "Original Reference Image", page 290](#)) are enabled at the same time:
 - When a PDF/X file with an embedded ICC profile as its Output Intent is processed, the embedded press profile is used for color space conversion. The press profile set in "Press Profile" is ignored. Information about the used ICC profile is written to the CIP3 PPF file.
 - If there is no Output Intent, the ICC profile set in "Press Profile" will be used. However, information about the ICC profile used for color space conversion is not written to the CIP3 PPF file.
- The press profile set in "Press Profile" is used for conversion if this option is not checked.

Any embedded PDF/X Output Intent will not be used for color space conversion during output. Information about the ICC profile used for color space conversion is not written to the CIP3 PPF file.

If you process jobs with Prinect MetaDimension in accordance with the PDF/X policies, you must always activate this option.

You will find information on PDF/X in the [section "PDF/X", page 286](#)

Policies

In the "Policies" section, on the one hand you can set how the Prinect MetaDimension should react in situations in which a job with ambiguous or contradictory properties is to be processed. On the other hand you receive support for typical problem cases of the everyday Prepress. Most of the policies function in line with "What happens if?":

- There are hairlines
- Low-resolution images occur
- The flatness policy is too small or too big
- The overprint settings in the job deviate from the wanted settings
- RGB colors occur in the job
- There is information about PostScript Color Management in the job
- Composite images (e.g. RGB JPEGs) occur in separated jobs
- High-resolution images are missing for OPI
- Fonts are missing
- The job is bigger than the possible output area
- A PDF document will not be trimmed during output on the basis of the media box
- There are empty separations in the job
- Screen angles are defined in the job that do not match the output options you want
- PDF/X documents are to be output that do not comply with the PDF/X standard

Instead of taking the viewpoint "If hair lines occur, the designer has made a mistake" or "If you can overprint in an Office application, you've had bad luck", try the policies to provide a solution for many of these cases. There is, however, never only one correct solution, but rather the desired behavior is definitely different from case to case, depending on the print shop and print job. The settings must therefore be selected according to the application. Settings can probably be found within limits, which would in many cases provide the required behavior. Many policies have a setting that performs only one job check and cancels the job where required.

Output Plan Editor

If all print jobs were error-free, then they would neither contain hairlines nor unwanted RGB colors or if they had correct overprint settings, then most policies would be unnecessary. In an environment in which these faults can be ruled out, it is safest to disable the policies or to set the setting in which no interventions are made by Prinect MetaDimension.

Some policy procedures could only be implemented in such a way that in the PostScript Interpreter the execution of certain commands deviate from its actual behavior predetermined by Adobe, so that, for example, a black RGB rectangle becomes an overprinting rectangle in the black separation. The change in this behavior unfortunately also always involves a certain amount of risk. Consequently, in individual cases (e.g. when jobs are generated with an unusual program; when jobs were generated with an unusual combination of programs; when jobs were generated with a new version of a program), the print job may be canceled or output with faults. Unfortunately it cannot be ruled out that occasionally a policy will simply remain ineffective with a certain constellation. It is therefore recommended that all policies not be enabled "just to be sure", but rather only those that are required.

The screenshot shows the 'Policies' dialog box with the following settings:

- Hairline Policy:** Increase line width to specified width. Minimal Line Width: 0.07056 mm.
- Low Res. Images Policy:** Generate a warning if resolution is too low. Minimal Image Resolution: 28.74 pixel/cm.
- Flatness Policy:** Correct flatness accord. to the values specified. Min.: 1 pixel, Max.: 10 pixel.
- Overprint:** According to document (for CMYK and spot colors). Level: 98 %.
- RGB Color Policy:** Generate a warning when a color is specified in RGB.
- PostScript-Colormangement:** Apply.
- Composite Images Policy:** Separate.
- Images (Only CPSI):** Replace only (Do OPI).
- Fonts:** Replace missing fonts with: Courier.
- Page Size Policy:** Clip to specified size. Offset X: 0.0, Width: 0.0, Offset Y: 0.0, Height: 0.0 cm. Includes checkboxes for Crop Marks, Center Output, and Allow Automatic Rotation. Tiling Overlap: 2.54 cm.
- PDF trimmed sheet:** Media Box. If an formatbox error occurs: Use Media Box.
- Empty Separation:** output empty separation anyway.
- Check Screen Angles:** Do not check the screen angles in separted jobs.
- PDF/X Conformance Violation:** Generate a warning if a PDF/X does not conform.

Hair lines

So-called hairlines occur if a line is not assigned a size in a DTP application. Hairlines are defined as the narrowest possible lines and can still be easily seen on the monitor (72 dpi) and are possibly wide enough for a proof (300 dpi). However, on a plate they can be so narrow that they can no longer be seen in print or break off.

Prinect MetaDimension offers various procedures for handling hairlines.

First, you select the procedure which is to be used for hairlines and then in the box below you define the line width as of which a line is considered to be a hairline. The unit of measure can be set to "pts" or "mm". Any values that have already been entered are converted when the unit of measurement is changed.

- Do not check line width

The line width is not checked. The function is disabled.

- Abort the job if a line is too thin

The job is aborted if line widths below the specified minimum value are encountered.

- Generate a warning if a line is too thin

An alert message appears if the line width falls below the given value. However, the job is still processed. To display the alert message, go to the "Jobs" section, then select the job in the job list, click "Open" and select the "Job Information" tab (see also the [section "Job Information tab", page 65](#)). A list of different line widths that were detected as too thin is displayed.

- Increase line width to specified width

All lines with widths below the specified value are automatically set to this minimum line width.

Low Res. Images Policy

If you use OPI image data inclusion (i.e. low-resolution layout files are included in the DTP documents instead of the high-resolution images) when creating layouts to speed up your workflow, you should normally replace the layout files with the corresponding high-resolution images before the actual final output.

In practice, however, there are often cases where this OPI workflow doesn't work because, for example, the high-resolution data was moved to a different location in the file system. This does not become evident until the unsatisfactory quality of the end result is viewed.

It can also occur that print jobs contain general images in a resolution that would not be classified as insufficient for the print.

With the help of the "Low Res. Images Policy", you can create a check routine that detects such "errors" during job processing in the RIP and reacts accordingly.

In the lower row, you can specify the minimum resolution for the images used in the job, either in dpi or l/cm.

- Do not check the image resolution

The image resolution is not checked. The function is disabled.

- Abort the job if resolution is too low

The job is aborted if the resolution falls below the specified minimum resolution.

Output Plan Editor

- Generate a warning if resolution is too low

An alert message is issued if the resolution falls below the specified minimum limit. However, the job is still processed. To display the message, go to the "Jobs" section, then select the job in the job list, click "Open" and select the "Job Information" tab (see also the [section "Job Information tab", page 65](#)).

The specified minimum resolution should correspond to your usual working habits or the image material is used. For example, if you frequently output print jobs which contain screen shots in normal screen resolution then a setting of 300dpi will hinder operations. If you want to avoid outputting coarse images with incorrect OPI then a minimum resolution value just above the resolution of the LowRes data is suitable (e.g. 110 dpi).

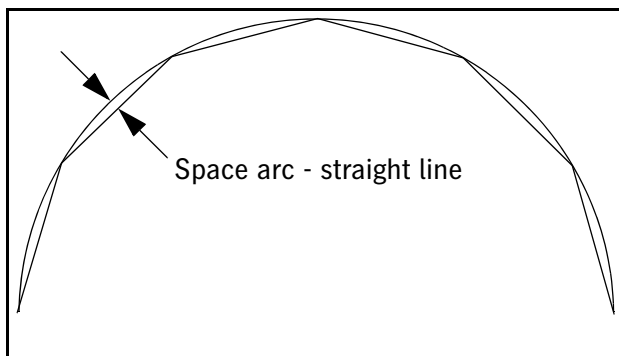
Flatness policy

This function allows you define the accuracy of the round forms in curves or arcs. This applies to curves or arcs in graphics but not to fonts or round forms in images.

For your information: An arc is created by lining up straight lines. The longer a straight line is, the more angular the arc is, and the arc turns into a polygon. The arc becomes rounder the shorter the straight lines are.

This function allows for a compromise between the round form of the arc and computing time.

The value for the flatness policy defines the maximum space permitted between arc and straight line. This is specified in pixels of the output device. A value of 2 pixels with an imagesetter with a resolution of 1000 lpcm means that a lining up of straight line will be divided even thinner where the spacing between straight line and arc would otherwise be greater than 2 pixels, that is then, $2/1000$ cm.



The value used to check the "Flatness Policy" is taken from the DTP application. If there is no value there, the PostScript interpreter uses a default value of 1 and no check is made.

To restrict the "Flatness Policy", you can type the minimum and maximum value in pixels. The highest value is 10. You will see a warning if you don't enter an integer or enter a value greater than 10.

- Do not check the flatness

The "flatness" is not checked. The function is disabled.

- Abort the job if the flatness is too coarse

The job is aborted if the specified value of the DTP application doesn't lie within the specified range (min. 0, max. 10).

- Generate a warning if the flatness is out of range

An alert message appears if the specified value of the DTP application doesn't lie within the specified range (min. 0, max. 10). However, the job is still processed. To display the message, go to the "Jobs" section, then select the job in the job list, click "Open" and select the "Job Information" tab (see also the [section "Job Information tab", page 65](#)).

- Correct flatness accord. to the values specified

Values of the DTP application that are too small are set to the minimum value provided here; too big to the maximum value.

Overprint

The "Overprint" function is mostly used to avoid register problems and flashes in black fonts and other black graphic objects that lie on top of a colored background. For design purposes, overprint is also used with hard shadows or colored CMYK objects. You can control overprint best if it is set directly in the application that creates the job.

The overprint policy in the Prinect MetaDimension Output Plan settings on the one hand compensates for application shortcomings and on the other processes faulty jobs so that you get the overprint effect you want. It's not possible to detect on a page which object is to overprint and which not. For that reason, the policies are not sufficient in some individual cases.

Another problem is that different applications, different RIPs and different users have different ideas about which objects on a page will overprint.

In older versions of the Adobe PostScript interpreter, only spot color objects could overprint following the PostScript Specification that was then applicable. Objects that were created in the "device" color spaces (gray, RGB, CMYK) couldn't overprint. Such objects were always knocked out in a pure CMYK output.

More recent versions of the Adobe PostScript interpreter, such as is found in the current version of Prinect MetaDimension, use an additional, new overprint mode. CMYK vector graphic or font objects (not images) where the color data in some channels is zero can overprint background colors if this new overprint mode is used. The new overprint mode is referred to as "Overprint Mode 1" to distinguish it from the previous PostScript overprint mode called "Overprint Mode 0". In Adobe Acrobat Distiller 5, Overprint Mode 1 is known as "Illustrator Overprint Mode". Adobe refers to this functionality as "Nonzero Overprinting".

Example: In QuarkXPress, an object is created with a CMYK value of "0/0/0/100" and the "Overprint" property is set. This object overprints the other separations if the job is output as separated PostScript from QuarkXPress. This means that the objects lying lower down in cyan, magenta and yellow are unaffected. If the document is output as composite PostScript, the object doesn't overprint if the PostScript document is output to a RIP that complies with the Adobe PostScript Specification. However, a user is sure to assume that an object overprints if "Overprint" is set in QuarkXPress.

Output Plan Editor

In older versions of the Adobe PostScript interpreter, only spot color objects could overprint following the PostScript Specification that was then applicable. Objects that were created in the "device" color spaces (gray, RGB, CMYK) couldn't overprint. Such objects were always knocked out in a pure CMYK output.

More recent versions of the Adobe PostScript interpreter, such as is found in Prinect MetaDimension as of version 6, use an additional, new overprint mode. CMYK vector graphic or font objects (not images) where the color data in some channels is zero can overprint background colors if this new overprint mode is used. The new overprint mode is referred to as "Overprint Mode 1" to distinguish it from the previous PostScript overprint mode called "Overprint Mode 0". In Adobe Acrobat Distiller 5, Overprint Mode 1 is known as "Illustrator Overprint Mode". Adobe refers to this functionality as "Non-zero Overprinting".

Example: A CMYK rectangle with the data 100/0/0/0 would only manipulate the cyan separation if the object is set to overprint and "Overprint Mode 1" (OPM 1) is enabled.

If a white object where all the color data is zero is output, Overprint Mode 1 causes this object to disappear in the output. However, this only happens if the white object was set to overprint when created. This problem can be solved with the overprint policy in Prinect MetaDimension.

As of Adobe Acrobat version 5 (not Adobe Reader!), PDF documents that have CMYK objects with Overprint Mode 1 enabled can be displayed correctly. You must enable this option explicitly. RIPs that use the current Adobe PostScript Interpreter can also process such PDF documents correctly.

The "Overprint" policy in Prinect MetaDimension allows you to use Overprint Mode 1 also with older PDF documents where Overprint Mode 1 is not explicitly defined or enabled.



Note: Often applications may output objects differently to the way they were created by their user. For example, an object that was created as a black, overprinting CMYK object could be output by the application as an overprinting, black spot color. The same holds true if, in Prinect MetaDimension, a PDF document is first converted to PostScript before the PostScript job is processed by the Overprint policy and the PostScript interpreter. If your output is not what you expect or if there are output differences in apparently identical jobs from different applications, then the reason is often the conversions in the applications and from PDF to PostScript.

- Definition: "Black objects"

In the policy, "black objects" are objects where the dot percentage of black is at least the value set in ["Level", page 300](#). Normally, this value is set to 98% . This applies to objects in the following color spaces: DeviceGray, DeviceRGB, DeviceCMYK, Separation (Black) and a single or multi-channel DeviceN where in effect only the channel named "Black" prints (other channels whose color data are zero and channels named "None" are recognized as non-printing). CMYK objects where the data for cyan, magenta and yellow are not all zero are not considered black. Objects in the device-independent color spaces CIEBasedA/-ABC/-DEFG are also recognized if corresponding values can be applied in one of the device color spaces DeviceGray/-RGB/-CMYK. (For example, a L*a*b* value of 0/0/0 would not be recognized as black, on the other hand, an sRGB value of 0/0/0 would be. This is because in some color spaces the policy cannot recognize what color values are considered "black". There may be unusual color spaces where this applies, for example, with values of 100/0/0.)

- Definition: "White objects"

"White objects" are those that are created fully white. In other words, there is no threshold as is the case with black objects. White objects can be detected in gray, RGB, CMYK and spot colors. Technically, we are talking about the color spaces DeviceGray, DeviceRGB, DeviceCMYK, Separation and DeviceN. Separation and DeviceN require that the objects are created so that no ink is applied to paper with them. The color channel(s) must have a value of zero or be named "None".

Grayscale images in DeviceGray and smooth shadings in DeviceGray or DeviceCMYK with an empty C, M and Y channel are not viewed as black or white objects because they can have all grayscales from white to black. It would be wrong to set a light gray shading to overprint if you selected a policy with which "black objects" are to be overprinted. It would be too time-consuming to try and recognize whether an image or a shade only has dark grayscales corresponding to 98 - 100% black.

Nevertheless, grayscale images and smooth shadings are manipulated by the Overprint policy, for example, when it can be seen that they were created incorrectly by an application. In all other cases, they are excluded from being categorized as "black", "white" or "all other" objects and are reproduced as created in the job, except for the "Overprinting disabled" policy.

The following policies are available:

- No change (standard PostScript behavior)

The PostScript interpreter reacts as described by Adobe in the PostScript Specification. The processed document must contain all specifications relating to overprint.

This policy should be used if an overprint action in the job is not necessary or not desired for other reasons, for example, because overprint can be controlled more accurately using a suitable application.

- According to document (for CMYK and spot colors)

This setting activates Overprint Mode 1, with the CMYK objects output so that the background is not knocked out in separations where the color data are zero. In this way, CMYK objects created with an "overprint" property overprint. Gray objects created with an "overprint" property also overprint when output. Objects created without an "overprint" property don't overprint. Grayscale images in DeviceGray and smooth shadings in DeviceGray or Device CMYK that are created with an "overprint" property are converted in such a way that they overprint correctly.

No change is made to all other objects. Consequently, only spot colors can overprint if they are created accordingly in the job.

This policy is the default setting. It hardly affects the job and is the policy that is most likely to give you the output results you expected. It eliminates the most common error where CMYK objects created with an overprint property in QuarkXPress don't overprint because Overprint Mode 1 is missing.

Output Plan Editor

- Overprint all black objects, knockout all white objects

All black objects in the job are set to overprint when output. Objects set to "overprint" in the job remain set to overprint. This setting also enables Overprint Mode 1 for CMYK objects so that CMYK objects set to overprint when output. Gray objects created with an "overprint" property also overprint. However, overprint is disabled for white CMYK objects. Grayscale images in DeviceGray and smooth shadings in DeviceGray or Device CMYK that are created with an "overprint" property are converted in such a way that they overprint correctly.

This policy can be used if you know that the job doesn't have overprint settings (for black objects) or that white CMYK objects were set by mistake to overprint when created.

- Overprint all black objects, knockout all others

All black objects are set to overprint, irrespective of how they are created in the document. All other objects don't overprint, not even spot colors. Gray objects created with an "overprint" property overprint when output. Grayscale images in DeviceGray and smooth shadings in DeviceGray or Device CMYK that are created with an "overprint" property are converted in such a way that they overprint correctly.

You can use this policy to make appropriate corrections to a job.

- Build gray and black with K only

This option is designed for jobs that were created with Office applications and where gray and black are shown by RGB colors with the same R, G and B value. Graphics and text with such colors are converted to CMYK objects with C=0, M=0, Y=0 and a suitable K, e.g. an RGB color with R=80%, G=80%, B=80% in CMYK with K=20%.

In addition, black CMYK colors are mapped to pure K=100 without CMY. This applies for CMYK colors where

- C, M and Y have 100% and K any value or where
- K=100% and C, M and Y have the same values.

There are applications and printer drivers that create jobs with such objects. Gray displayed by RGB is mainly caused by Office applications; the named cases of black CMYK colors with CMY are caused sometimes by low-cost tools that create PDFs directly or from PostScript.

After the conversion of gray and black to pure K, this policy acts exactly like ["Overprint all black objects, knockout all others", page 300](#).

- Overprinting disabled

No object in the job is set to overprint.

Level

In this box, you set as of what dot percentage in the black separation an object will be handled as a "black object" (see the [section "Definition: "Black objects", page 298](#)).

RGB colors

This function is applied if a job has an RGB image that was pasted in a DTP application. You can set the following behavior for this case:

- Process RGB colors as Printer's default

The job is not checked for RGB images. If an RGB profile is not selected in Color Management, a very simple computed conversion from the RGB to the CMYK color space takes place, which almost always causes an unexpected and unwanted result when RGB images are included in the print job.

- Abort the job when a color is specified in RGB

The print job is aborted if the job has RGB images.

- Generate a warning when a color is specified in RGB

An alert message appears if a job has RGB images. However, the job is still processed. To display the message, go to the "Jobs" section, then select the job in the job list, click "Open" and select the "Job Information" tab (see also the [section "Job Information tab", page 65](#)). However, there is a simple conversion of the RGB data to CMYK data by the PostScript interpreter.

PostScript Color Management

Understanding the procedures with the PostScript Color Management requires some knowledge of some background information. The exact understanding of this policy is therefore a little more difficult than with some other policies. For this reason, not only the basic function of the policy will be provided here, but rather basic background information will also be provided, e.g. on the terms "CSA" and "CRD".



Note: For more information about Color Management, see the [section "Basics of Color Management", page 313](#)

The logic of this policy is based on the following properties:

- Jobs are detected when they contain device-independent colors (warning or abort).
- In the case of CMYK, for example, all Color Management can be prevented, although the job contains a CSA for CMYK.
- Heidelberg's Color Management can be used instead of PostScript color management, e.g. if you suspect that a print job contains false CSAs (e.g. a CSA for Adobe RGB, although the image data of an image are in sRGB, which would make the output too colorful). Heidelberg's Color Management in Prinect MetaDimension can then be set regardless of the CSAs in the job.
- Heidelberg's Color Management can be used instead of PostScript color management because a special functionality of Heidelberg's Color Management will be used.
- PostScript color management can be used if a print job contains different color spaces and different rendering intents.

Output Plan Editor

The Adobe Postscript Interpreter can perform a color management, e.g. conversion from RGB to CMYK, from CMYK to CMYK, etc. The processed PostScript (or PDF) job contains the information to determine whether or not this functionality should be used. This shows whether a job only uses device color spaces (these are gray, RGB and CMYK - in these cases no PostScript color management is made), or whether device-independent colors are used, which require a color management.

Device-independent colors are colors that are either directly present in a color space, such as $L^*a^*b^*$ or XYZ (color spaces that affect physical definitions), or can be clearly converted using a color profile into such a color space. One input color profile is called "CSA" (Color Space Array) in PostScript. An $L^*a^*b^*$ value can, for example, be measured with a spectrophotometer and presents unambiguous color data. A CMYK value allows an unambiguous $L^*a^*b^*$ value to be converted if a color profile is available for the print process, with which the CMYK color is to be printed.

If a job contains device-independent colors, this normally means that with the creation it has been taken into account to output the job with enabled Color Management, whereby the Color Management uses the appropriate color profile for the output device. In order that the output color profile is provided by the RIP, the output can be flexibly adapted to another output device or changed properties of an output device.

As already mentioned, the difference is made in PostScript between device-independent and device-dependent color spaces. Device-independent colors normally pass through PostScript color management (except when this policy prevents this with the appropriate setting); device-dependent colors pass through Heidelberg Color Management, or even through none if Heidelberg Color Management is disabled.

The mode of operation of the PostScript and the Heidelberg color management is identical with regard to the basic concept. An input RGB profile and on output CMYK profile are required for the transformation of colors from an input color space (e.g. RGB) into the color space of the output device (e.g. CMYK). With the Heidelberg color management, these are color profiles that are set up in accordance with the specifications of the ICC (International Color Consortium). With the PostScript color management, the input profile is called CSA (Color Space Array) and the output profile is the CRD (Color Rendering Dictionary). The difference between the two solutions is merely that a CSA and a CRD present a formulation of color transformations with the resources of PostScript and consequently can occur as "absolutely normal" PostScript in the middle of a PostScript file. ICC profiles are often separate files on the hard drive that are used by the Heidelberg color management. The Heidelberg color management is not part of the Adobe PostScript specifications, but rather was integrated by Heidelberg as a module into the Adobe PostScript Interpreter.

The software module that makes the link between input and output profile and then converts the color values is called "CMM" ("**C**olor **M**anagement **M**odule"). Unlike the Adobe PostScript CMM, the Heidelberg CMM contains some additional functions, such as the retaining black composition, for example.

One typical instance of device-independent colors in a PostScript job are files that are in the sRGB color space. In this case the job contains RGB data, e.g. that of an RGB image. At the same time the conversion from this RGB format to the $L^*a^*b^*$ color space is delivered in the form of a CSA. The PostScript Interpreter can consequently use the CSA from the job (more or less the input profile) and the CRD of the RIP (more or less the output profile) to perform the color management. The RIP provides the CRD as it generally "knows" the output device and its color properties (unlike the job).

Similar to the situation with the RGB colors, it reacts with jobs that contain device-independent CMYK colors with the associated CSA: The CMYK colors can be converted with the help of the CSA in the L*a*b* color space and transformed with the CRD of the RIP in the color space of the output device.

The "PostScript Color Management" policy makes it possible to ignore CSAs that occur in the job. Colors that occur in the job that are actually device-independent colors can consequently be handled as device-dependent colors. The jobs can then pass through Heidelberg Color Management instead of the PostScript color management. Here the Heidelberg color management can or must be set as required by the output. The settings of the Output Plan therefore apply (input, output profiles, rendering intent, special features); the CSAs in the job are ignored in this case.

Use of the Output Plan settings also means, however, that all job objects of the same kind, e.g. all RGB images, are processed with the same settings. If on the other hand the PostScript color management is used, it is possible that from object to object in a job, another CSA may be used. Images in sRGB and in Adobe RGB can consequently occur mixed in a job and different rendering intent can also be mixed in the job if the generating application supports this or corresponding objects (e.g. EPS files) are contained in a job.

Ignoring the CSAs in the job only works, however, if the device-independent colors in the job can be directly mapped onto a device color space. Device color spaces are gray, RGB and CMYK. If, for example, a job directly contains L*a*b* data (the policy detects this through analysis of the CSA), then the PostScript color management must be used for these colors, instead of Heidelberg Color Management. This is because the policy cannot detect what color space is actually involved here. The PostScript specification does not just enable L*a*b* colors, but rather almost every other color space e.g. YCrCb, L*u*v*, XYZ, etc. In the PostScript job, however, this color space is not named but rather only one (e.g. mathematical) color description in the form of a CSA is provided. As there are innumerable possibilities to formulate this description, the policy cannot detect what these cases are about. It must therefore leave it up to the PostScript Interpreter to interpret the CSA. With gray, RGB and CMYK, the policy does however detect this reliably in all currently known cases.

You can choose from the following settings for the "PostScript Colormanagement" policy:

- Apply

The job is processed without any changes or corrections just as it was created by the application used. If a job has device-independent colors, then they are used, i.e. Color Management is always used. (The exact behavior, e.g. which output profile will be used as the CRD, depends on what is set in the Color Management options.)

- If embedded abort the job

The job is canceled if it has device-independent colors.

- If embedded generate a warning

A warning is issued if a job has device-independent colors. However, the job is still processed. To display the message, go to the "Jobs" section, then select the job in the job list, click "Open" and select the "Job Information" tab (see also the [section "Job Information tab", page 65](#)).

- Ignore

Device-independent colors in the job do not go through PostScript color management but are mapped to device color spaces if this is possible (is so in most cases with Gray, RGB and CMYK, but not for example with L*a*b*). Such objects in the job are treated as if they were created in device-dependent color spaces in the job. For that reason, they can go through Heidelberg Color Management if it is enabled. You can use the "Ignore" setting, for example, to prevent Color Management from being applied to CMYK colors although they are in the job as device-independent CMYK objects. In addition, Heidelberg Color Management must be disabled for CMYK colors. Another use of "Ignore" is when the job has RGB data as device-independent colors but with the wrong CSA. These data then don't go through PostScript color management. The input profile needed and the rendering intent for RGB data can be set in the Heidelberg Color Management.

Composite Images

This policy may help you if you wish to process separated jobs that have composite images (in other words, RGB or CMYK for example). Normally, a separated job should have only gray single pages that are combined together later in the press to a multi-colored page again. However, if a color EPS file is placed in a layout program, it will be embedded in every page of the job as it is during a separated output. The whole idea of the EPS format is precisely that EPS files can have any objects that, encapsulated as PostScript, are placed in a layout application and pasted unchanged to the job during interpretation by a PostScript interpreter without the layout application evaluating or "understanding" the content. As a help during placement, EPS files can have a low-resolution preview (pixel image) of its contents.

In principle, it is basically wrong to place color EPS files in a document and to output the document as separated data. In most cases, placed EPS pixel images cause problems. The DCS format is designed for their use in a separated output. The EPS format is best used mainly for the composite output of documents or with gray documents.

Because the PostScript interpreter interprets each page in a separated job as a single gray page, a color EPS would be converted each time to gray and would be output identically in every separation. The result would be an unwanted overlap with probably too much ink.

This is the reason why layout applications frequently try to determine the properties of the placed EPS objects from the PostScript code of the EPS in order to integrate the EPS object only into the relevant separations during a separated output. This process, however, is not enough. The layout applications modify the interpreter in such a way that, in each separation with a placed EPS object, the color component of the EPS object is used. If the color for an EPS graphic object is set to CMYK 50/100/0/0, this produces a color of 50% gray in the cyan separation, 100% gray in the magenta separation and 0% in yellow, black and any spot colors.

"Intercepting" colors for (vector) graphic objects and text of a color EPS is more or less an easy matter but color pixel images present a greater challenge. If a separated job has an EPS object with an RGB image in every separation, it is not possible to filter out the relevant components because the image must be separated first to CMYK and only then do the components have to be filtered out. Images can be found in a PostScript job in a great number of ways (different bit depths, line or pixel-interleaved, etc.) and, because of that, there is no general strategy for reliably separating embedded EPS images the way you want.

The standard procedure commonly used by layout applications is to convert the image to gray for the black separation as described above and to "hide" it in all other separations, for example, by manipulating the output transfer curve so that the image appears as a white area in these separations. In difficult cases, InDesign tries rather to remove the image fully by reading and "throwing away" the image data line for line. The PostScript job continues then after the image data are handled this way.

The problem with the attempt to separate composite images in separated jobs correctly is that there is no uniform format that a composite image in an EPS object must have. Each application that can create EPS does this in a different way, and often there are even differing results from version to version of the same application. For example, an EPS saved in Quark XPress 5 is different to an EPS saved in version 6. It also depends on the format the user selected when saving an EPS. In Adobe Photoshop it is possible, for example, to save an EPS as ASCII, binary or JPEG data.

Occasionally, layout applications add PostScript code when placing EPS objects. This makes it possible to recognize and intercept certain cases during interpretation. This happens, for example, if a composite image that was saved as EPS in Adobe Photoshop is placed in InDesign. Sometimes, when an EPS object is being created by a skilled PostScript code, the application remembers that a color image could be placed in a separated job. Often, however, EPS files and layout applications are so incompatible that a separated job with composite images has syntax errors and aborts even if the composite images policy is disabled.

The "Composite Images Policy" is also faced with the problem that the PostScript interpreter has to process a job that can have color images of an EPS-creating application (Freehand, Photoshop, XPress, InDesign, etc.) that were modified by a layout application (InDesign, XPress, etc.). Because each layout application modifies the data differently, a great number of combinations are possible given the wealth of EPS-creating applications and layout applications. It is the strategy of the policy to undo the modification of the layout application used (e.g. hide through modified transfer curve) and restore the original PostScript code of the EPS-creating application in order to separate a composite image according to the actual separation at hand. For that reason, each combination must be taken into account separately. It is utterly impossible to do this to the full extent. Moreover, in some cases, it is impossible to show the image again because InDesign, for example, has overseen the image data in the PostScript job and, consequently, the interpreter cannot detect any hidden or modified image.

A full analysis of all the applications on the market and their different versions is not possible within reason. As a result, it is unfortunately not possible to say when the policy is best used and when not. Even loading a small patch for an application can change the situation, and the policy may or may not have an effect after that. It is also possible that the policy works with another layout application when least expected.

Our advice for using this policy, therefore, is to enable it only if a composite image is known to be in a separated job or it is assumed that one is. Using the job preview (see the [section "Preview", page 263](#)), you should check before you output the job whether or not the policy has the effect you want. You can find a reference to the fact that the policy recognized (and, if necessary, separated) a composite image in "PostScript" in the "Job Information" tab (see the [section "Job Information tab", page 65](#)). ("Composite Images Policy: ...") Because of the restrictions described above, there can be no guarantee that all composite images are recognized.

Prinect MetaDimension recognizes whether a job is separated or composite and enables this policy only for separated jobs. As a result, there is no risk that a composite job will be manipulated or separated if this is not wanted.

Output Plan Editor

The following options are available for this policy:

Do not check images

The job is processed without any additional intervention. If the job has composite images, there are several items that influence whether or not the job will be output with color images as originally wanted. It depends on the layout application used, on the application with which the composite images were created and on the options used when creating the composite images. Composite images may appear as gray only in the black separation, but there are also other errors that can occur. With some combinations of EPS-creating and layout applications, the job cannot be output at all because PostScript errors occur.

Abort the job

The job is aborted if the policy detects composite images.

Generate a warning

A warning is issued if the policy detects composite images. However, the job is still processed. To display the message, go to the "Jobs" section, then select the job in the job list, click "Open" and select the "Job Information" tab (see also the [section "Job Information tab", page 65](#)). The job is output as described above.

Separate

Composite images are separated if the policy detects them. If a job has several kinds of different composite images (color space, type of compression), it is possible that not all the images will be recognized and separated. A message displays in "PostScript" in the "Job Information" tab for each image recognized in each separation. To display the message, go to the "Jobs" section, then select the job in the job list, click "Open" and select the "Job Information" tab (see also the [section "Job Information tab", page 65](#)).

Images (only for CPSI)

This policy only checks whether the CPSI PostScript interpreter is used for rendering. This policy does not affect the PDF Print Engine because the PDF Print Engine does not support OPI image data inclusion.

If you replace high-resolution images with low-resolution images in a DTP document to speed up your workflow, you should normally replace the low-resolution images with the corresponding high-resolution images before the actual final output (see also the [section "OPI - Image Data Inclusion \(not with PDF Print Engine\)", page 331](#)).

With this function you switch the behavior in image data replacement from low-resolution to high-resolution images.

- Do not replace images (No OPI)

The images are not checked. Any low-resolution images in the job will be retained and output. They are not replaced by high-resolution images. You should only enable this option if you are sure that all the images in your job have the correct resolution.

- Check images and replace

A check is made whether the matching high-resolution images are available for all low-resolution images in the job. If a high-resolution image is not found, job processing is stopped and an appropriate error message appears. To display the message, go to the "Jobs" section, then select the job in the job list, click "Open" and select the "Job Information" tab (see also the [section "Job Information tab", page 65](#)).

- Replace only (Do OPI)

The low-resolution images are replaced by high-resolution images. The low-resolution image stays in the job if a high-resolution image is not found.



Note: The "Low-Resolution Images" policy described above checks the resolution of the images after OPI replacement. This is the best way to prevent that jobs with images below a certain resolution are output.

Fonts

This function allows you to check whether all the fonts that are by reference in the job are available. A check is made whether the fonts are integrated into the code of the job or whether they are available as server fonts in the Prinect MetaDimension system. For detailed information about font management please refer to the [section "Fonts", page 151](#).

- Fail on Missing Fonts

If a used font is not available, job processing is stopped and an appropriate error message appears. To display the message, go to the "Jobs" section, then select the job in the job list, click "Open" and select the "Job Information" tab (see also the [section "Job Information tab", page 65](#)).

- Replace missing fonts with

You can select the font that will be used to replace the missing font in the box below the option. A message displays the substitute fonts.



Note: Missing fonts are replaced with Courier if "Policies" is not enabled.

Page Setup

You can define settings in this group, that are to match the rules, if the format you wish to image, including marks and control bar, does not fit on the available imaging/print area of your output device. The settings apply to devices that were selected as the main output devices (primary devices).

- "Abort the Job"

The job is aborted.

Output Plan Editor

- "Reduce to fit"

The page is scaled (shrunk) so that it fully fits on the imaging area and can be output. This means that the page is not tiled.

- "Crop to page size (centered)"

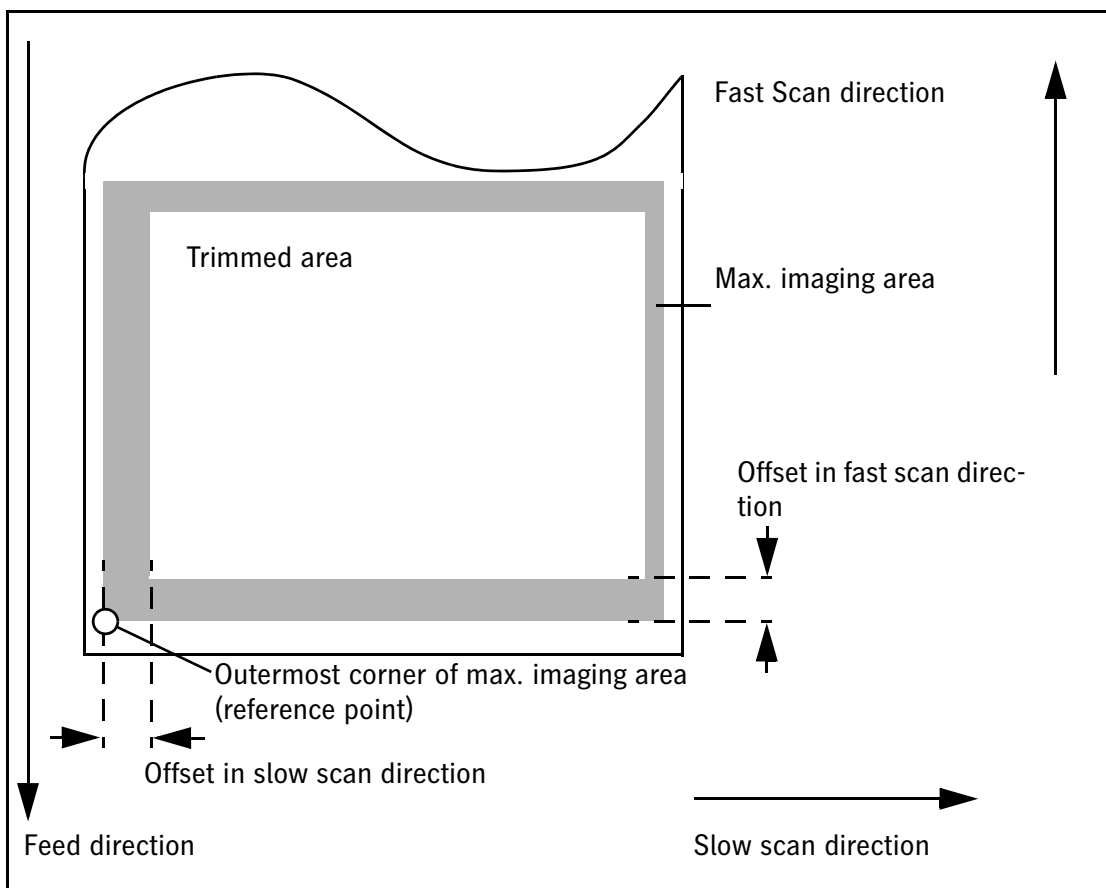
The output is centered on the imaging area and not scaled but is trimmed so that the data can be output.

- "Clip to specified size"

The boxes "Offset X", "Offset Y", "Width", "Height" and "Get values from job preview" are enabled when you select this option. Each output is trimmed to the size you defined.

You define the size of the trimmed area with "Width" and "Height".

You use the offset values to define the position of the area that will have the trimmed output. The "offset zero point" is the outer lower corner of the maximum exposable or printable area. With "Offset X", you define how far the outer, lower corner of the trimmed area is from the offset zero point in horizontal ("Slow Scan") direction. Correspondingly with "Offset Y", you define the offset in vertical ("Fast Scan") direction.



"Get values from job preview" button:

The trim data you define and save for size and offset (see the [section "Clipped output \(selecting a clipped area\)", page 80](#)) in the job preview ("Jobs > Preview / Color") first only apply to the Output Plan that you used for the job.



Note: If you save parameters in the job preview, e.g. trim data, you must close the Printmanager after you saved the data and restart it. Only then can you load the data you saved in the job preview to the Output Plan Editor.

If you wish to use these trim data permanently, you must now select the "Clip to specified size" option in the Output Plan policy and load the saved values from the job preview. The offset values are automatically converted to those of the trim as a different reference point is used in the job preview. The data are available permanently for this Output Plan after you save the Output Plan.

The trim data can only be used in the Output Plan in which they were loaded. To use trim data in other Output Plans, you must load trim data separately to each Output Plan and then save the Output Plan with these data.



Note: The options "Clip to max. Page (Centered)" and "Clip to specified size" are designed for special workflows where every output must be trimmed.

- "Tiling":

This option is advisable for proofing devices only. The page is printed in several parts. If you select this option, the following parameters are also available:

- "Crop Marks"

If the page contains crop marks, the layout of the page is based on the page size as defined by the crop marks.

- "Center Output"

The parts of the page are output in the center of the proof pages, i.e., if a job page is distributed on four proof pages, the proof appears in the center of the four combined proof pages.

- "Allow Automatic Rotation"

The parts of the page are automatically rotated 90° if this action leads to a better utilization of the proofer's page format.

- "Tiling Overlap"

Here, you specify the extent to which the parts of the page are allowed to overlap.

- Load Values of the Job Preview

If you have created and processed a job with a job preview, you can define and save the job area clipping in the job preview (see the [section "Preview / Color Tab", page 69](#)). With the "Get values

Output Plan Editor

from job preview" button you can load the size of this clipped area and use it as template for the options, "Clip to specified size" or "Tiling". Ensure that a saved file with the clipping size information for the Output Plan output device is available. This option is only beneficial if the processed jobs require the same clipping sizes as the sample job, from which the clipping was defined in the job preview.

PDF Trimmed Sheet

This policy defines how MetaDimension will react when you process PDF documents whose format will not be output fully. This may be the case for PDF documents that already have a complete sheet layout. You can select a PDF format box parameter for the trimmed sheet in the list box and then select the appropriate behavior from Prinect MetaDimension in the "If a format box error occurs" list box.

The following format boxes are available:

- Media box
- Crop box
- Trim box
- Bleed box

Any existing settings for (automatic) page positioning, marks and slugline are ignored if a trimmed sheet was selected.

You can choose between the following policies:

- Correct Formatbox:

The format box selected is automatically fitted to the size of the document.

- Abort the job:

The job is aborted.

- Use Media Box:

The media box settings in the document are used so that the complete format is output.

Empty Separations

- Do not output empty separations

It can occur that some jobs contain empty separations. A multi-page document, for example, can consequently contain special colors on individual pages, which do not appear on other pages. Empty printing plates can, under certain circumstances, be output here. To prevent this, the "Do not output empty separations" option should be selected.

- Output empty separations anyway

Select this option to output all separations in every case, even if empty sheets may be created as a result.

Check Screen Angles

Some DTP applications can generate pre-separated documents, with which all separations are set with the same screen angles. As this generally causes unsatisfactory output results, you can control the behavior of MetaDimension for such files with this rule.

- Do not check screen angles in pre-separated jobs

No screen angle check is performed.

- Output warning with the same angle in all separations

A warning is output if the same screen angle is set in all separations.

- Abort job with the same angle in all separations

The job is aborted if the same screen angle is set in all separations.

PDF/X Conformity Check

The incoming jobs can be checked at this point for PDF/X conformity. You will find information about PDF/X in the [section "PDF/X", page 286](#).

You can set the following rules.

- Do not check any documents for PDF/X conformity

Select this option if you do not require any PDF/X-compliant outputs

- Output warning if a PDF/X document does not comply with the PDF/X standard

If you select this rule, PDF/X documents that are to be processed are checked for PDF/X conformity. A warning is output if the documents do not comply with the PDF/X standard.

- Abort job if a PDF/X document does not comply with the PDF/X standard

If you select this rule, PDF/X documents that are to be processed are checked for PDF/X conformity. The job is aborted if the documents do not comply with the PDF/X standard.

- Check all documents for PDF/X conformity and output a warning if necessary

If you select this rule, all documents that are to be processed (e.g. PostScript or PDF documents) are checked for conformity. A warning is output if the documents do not comply with the PDF/X standard.

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- Check all documents for PDF/X conformity and abort job if necessary

If you select this rule, all documents that are to be processed (e.g. PostScript or PDF documents) are checked for conformity. The job is aborted if the documents do not comply with the PDF/X standard.



Note: The last two options ensure that only PDF/X-compliant documents are processed.

Basics of Color Management



Note: You will find further information on Color Management, especially on PostScript Color Management, in the [section "PostScript Color Management", page 301](#).

When processing color data from its creation (scanner, digital photography, graphics applications) up until print output, it can occur at many points that the print output result is not what has been expected due to the various characteristics of the devices concerned. The colors are often incorrectly printed and a time-consuming adjustment process is required to correct the colors.

To avoid the subsequent correction of incorrectly reproduced colors, the Color Management tool may be of assistance. To ensure this, the devices, applications and operating systems concerned must support color management and all required information (e. g. scanner characterization data) must be available at the corresponding locations.

Heidelberg provides a very efficient color management system based on ICC device profiles. In this chapter, Heidelberg Color Management will also be referred to as "ICC Color Management". This color management system is supported by Apple Macintosh (Color Sync) and Microsoft Windows (Image Color Management, ICM) operating systems.

Prinect MetaDimension fully supports the ICC-based Heidelberg InRIP Color Management (see [section "Why Should I Use InRIP Color Management?", page 318](#)).

What is Color Management?

Color Management is the general name for a process that is designed to provide correct color reproduction of digital image data from recording (scanner, digital camera) to monitor display to printer output.

Standardization of Color Reproduction

The goal of Color Management is to standardize the color reproduction of digital image data over the entire editing process. This means that a device characterization on the input side, for example, for scanners or digital cameras, must be performed so that these devices can supply reproducible results. The next step in the editing process is the image editing on the monitor. Since monitors have very different color display characteristics, they must also be calibrated.

The image editing graphic and layout applications that you use influence the colors. Color Management settings that are not optimal in these applications or version-specific features of these applications can falsify colors.

The last step is the printed output. One of the important things in this step is the adjustment of the color reproduction to the output medium (type of paper) used.

Color Management

In every characterization, device-specific or printing process-specific ICC profiles are generated. The main task of the characterization is to standardize device-specific characteristics and to produce a universal standard.

Various Procedures of Color Management

In principle, color management in Prinect MetaDimension for processing color print data can be divided into three groups:

- PostScript Color Management, if the CPSI interpreter is used for rendering. PostScript Color Management is not available with the PDF PrintEngine (see [section "Adobe PDF PrintEngine \(APPE\)", page 28](#)).
- Heidelberg InRIP Color Management
- Proofer Color Management

PostScript Color Management

PostScript Color Management is not based on ICC profiles but instead, the source data are transmitted via so-called "Color Space Arrays" (CSA) into a device-independent profile connections space ("CIE-based color space"). To adjust to the output process (print process), the data are converted via "Color Rendering Dictionaries" (CRD) into the color space of the output device (normally the printing press).

PostScript Color Management can be activated in some applications, e.g. Adobe Photoshop from Version 5.5. In Photoshop, PostScript-Color Management can be activated, e.g. when storing EPS files. Heidelberg InRIP Color Management is used if print jobs containing such EPS images are output via Prinect MetaDimension. This is made possible by a special CRD.

PostScript Color Management is only available for certain closed file formats (see [section "'Open' and 'Closed' Image/Graphics Formats", page 318](#)).

Heidelberg InRIP Color Management

The Heidelberg InRIP Color Management is based on ICC profiles. As ICC profiles describe device characteristics, then this is also referred to as device-specific color management.

More information about Heidelberg's InRIP Color Management is provided in the pages below.

Proofer Color Management

A proofer must simulate exactly the color characteristics of the output device. To be able to do this, the color space of the proofer must normally be the same size or larger than that of the output device, otherwise an identical simulation would not be possible. The Heidelberg Proofer Color Management is based on ICC Color Management. The output color process is applied to the color space of the proofer without any gamut mapping. Both the ICC profile of the output process and the ICC profile of the proofer are required for this.

If the properties of the output medium are to be simulated during proofing ("paper white simulation"), they must be included in the color conversion for the proof output.

Proofer Color Management can be used as part of a proofer workflow (see [section "Proofer Workflow", page 359](#)) that also has simultaneous image-setter output or for a workflow with a single proofer.

Hereby, a color conversion is also carried out by the proofer color management which, on the one hand takes into account the device profile of the color proofer and on the other, runs a simulation of the output medium (type of paper) used in the printing process.

Color spaces

The devices involved in the editing process of digital image data display colors in different ways: For example, monitors display individual color dots made up of one dot each of red, green and blue. Depending on the luminosity of the individual color portions, the viewer sees a different color: for example, if all three color portions are displayed with the highest brightness, the resulting color appears as white. The colors that can be displayed on a monitor are represented in the so-called "RGB color space". The term "color space" is derived from a spatial, graphical representation of the color values. "RGB" refers to the primary colors Red, Green and Blue, of which, for example, the colors that can be displayed on a monitor are composed. Scanners also work in an RGB color space, but this differs from the monitor RGB color space as the way colors are displayed on a monitor is different to the way the sensors of a scanner work. The scanner software can often convert the data to another color space right away while scanning.

In printed output, a medium, e.g. paper, is printed with a color. Unlike a monitor, paper does not light up itself; instead, the colors are seen by the viewer through reflection of the light of an external light source on the printed paper. The light that is reflected from a printed medium contains the color portions that are not absorbed by the medium. For example, a red printed paper surface absorbs all colors from a white source of light except for the color red. Due to the different origin of color effects, monitors, for example, are said to have "additive" and paper is said to have "subtractive" color scheme.

Due to the reflection-based display of colors, the primary colors for printed media are different than those for monitors, for example. The primary colors result from the physical theory of colors and are cyan, magenta and yellow. Cyan is a turquoise tone, magenta is pinkish. In order to better display contrasts when printing and to reproduce gray and black better, black is generally added as the fourth primary color. The colors Cyan, Magenta, Yellow and Key (black) provide the term "CMYK color space". In this case also, the term "color space" results from the spatial, graphical representation of the four primary colors.

The two displayed color spaces RGB and CMYK are "device-specific" since they are closely related to the physical representation of colors on the respective devices or printed media. Therefore, the colors in these color spaces heavily depend on the physical characteristics of the devices. For example, two monitors with the same controls and the same RGB values can display different colors since each monitor goes about turning the image signals into color in a different way. This is where Color Management comes into play: As a result of the characterization of the devices, the controls are influenced in such a manner that the color display is standardized.

Color space conversion

Color space conversion was introduced to achieve a standardized color representation.

Color space conversion basically matches the image or graphic data from the creator color space (e.g. color space of a scanner) to the color space of the output device or process (e.g. color space of a color printer). Scanning a reference image and printing it to a color printer seems to be the easiest way to do this. You can now scan the printed result again or measure and change the color data using suitable software until the differences between the original and the print have been eliminated sufficiently. You can save the color space conversion as a table and use it as a "profile" in future scan/output processes for gamut mapping.

This procedure would mean that you would have to create a profile for each combination of input device -> output device. This is not very feasible, especially in a complex workflow where data from a wide range of sources have to be combined with different output processes. Furthermore, the size of the individual device color spaces also varies. For example, an RGB monitor color space can display a great deal more hues and lightness values than a CMYK printer color space.

For this reason, a device-independent profile connections space was defined that enables image and graphic data whose colors are corrected to be passed on easily for further processing. This color space is the "stepping stone" between acquiring the image and its output. The CIE $L^*a^*b^*$ color space is used for this. The abbreviation "CIE" stands for "Commission Internationale de l'Eclairage". $L^*a^*b^*$ is an abstract name for a certain 3-dimensional color space model: one axis represents the brightness (L = "Luminescence") and the other two axes represent the different color values (a = red - green, b = yellow - blue), where a and b can have positive and negative values.

ICC Profiles

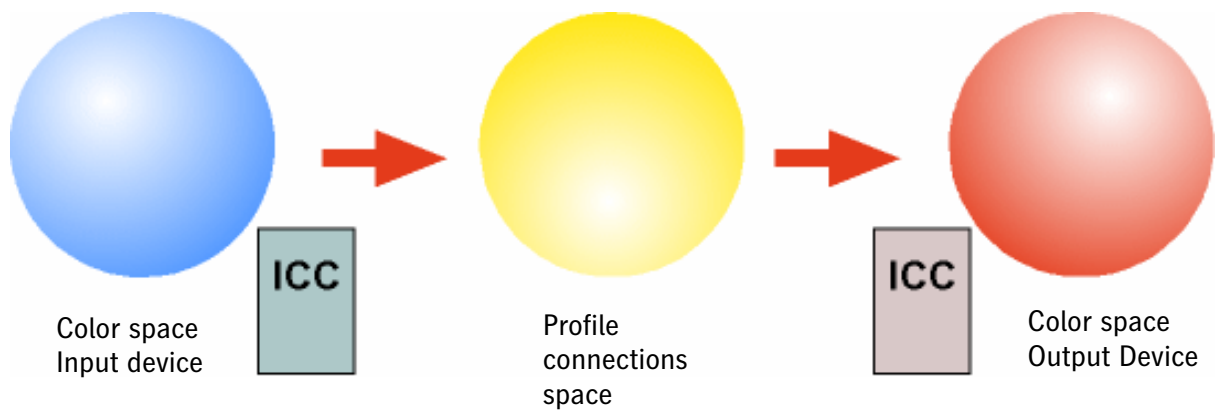
In the characterization of a scanner or a digital camera, the device-specific characteristics are standardized as a set of characterization curves. At the same time, the RGB data of the device are transformed into the $L^*a^*b^*$ color space and stored in an "input ICC profile". If this ICC profile is activated during scanning, image data with standardized colors are created in the $L^*a^*b^*$ color space. These transformed image data are now "device-independent".

An ICC profile is also created during monitor characterization and can be enabled for image display. A transformation from the standardized $L^*a^*b^*$ color space to the RGB color space of the monitor (which is different from the RGB color space of the scanner) takes place if the relevant ICC profile is activated for monitor display. The colors shown on the monitor are once again "device-specific".

An output ICC profile is generated for a print; this transforms the data from the $L^*a^*b^*$ color space to the CMYK color space of the printer or of the offset printing process taking into account the paper and colors used.

Color space conversion with profile connections space

The diagram below shows the basic principle of a color space conversion:



- First of all, the data are in the color space of the input device (scanner, digital camera, etc.).
- The data are converted to the device-independent profile connections space (L*a*b* color space) when the device ICC profile is activated.
- A suitable ICC profile for the output device is activated for the output. This profile matches the image data to the output device (monitor, printer) or output process (offset printing). As a result of this, the image data are again device-specific.

The ICC profiles can be present in different ways during gamut mapping:

- Embedded ICC profiles: The ICC profiles are embedded in the file or document (e.g. PDF) and are used during the respective transformation steps.
- ICC profiles that are not embedded: The ICC profiles must be available as separate files in Prinect MetaDimension. They are selected in the MetaDimension Output Plan editor and then used for conversion.

ICC Profiles for the Proofer Workflow

A special case is ICC profiles for the proofer workflow (see [section "Proofer Workflow", page 359](#)). The color proof that is produced should represent the print result of the printing press as exactly as possible. For this, the color of the printed medium must be included in the calculations of the characterization data of the ICC profile for the proof workflow. A color proof workflow is therefore generally constructed as follows:

- When generating data for a proof output, the proof color management matches the data to the output color space of the proofer using the proof ICC profiles. The simulation of the print medium is hereby calculated into the proof data.
- The proof data is outputted.
- After the color proof is assessed, the job continues on for imaging. In this process, the high-resolution imagesetter data is screened and output. This data is not influenced by the proof color management.

ICC Profiles in Image Processing and DTP Applications

Many applications support Color Management. For example, scanner and monitor ICC profiles can be used in Photoshop. Since color space transformations can be carried out in Photoshop, it is possible to use ICC profiles here to carry out an adaptation to an output device or to an output printing process. For example, a scanned image that is present in the RGB color space can be saved as a CMYK image. A corresponding output ICC profile that results in a true-to-color transformation to the CMYK color space can be activated here.

DTP applications such as Quark XPress also support Color Management. If printed outputs in the CMYK color space are made in Quark XPress, ICC profiles can be included in the print jobs.

In addition to image processing, graphics and DTP applications, Color Management for PDF data is also possible in Adobe Acrobat using a plug-in, e.g. Prinect Color Editor.

"Open" and "Closed" Image/Graphics Formats

Many graphics formats, such as TIFF, GIF, JPEG, etc., can not only be displayed and printed by DTP applications, but their image data can also be directly edited. Therefore, among other possibilities, Color Management calculations can be made directly on the image data. These image formats are called "open" formats.



Note: An RGB image in an open format (e.g. TIFF) is generally transformed to CMYK by the DTP application. Here, the Color Management of the application provides for a true-to-color color space transformation. An RGB ICC profile set for the InRIP color space transformation can therefore no longer be used on these (CMYK) image data. Since the CMYK transformation in the DTP application occasionally occurs without the user not noticing, it may seem that the images are RGB data on which InRIP Color Management cannot be correctly used. Since they are really CMYK data, the CMYK parameters are used on the image data if they have been activated.

Although the PostScript graphics formats EPS and DCS can be displayed and output, the image data themselves are not accessible for DTP layout applications. Therefore, these formats are called "closed formats". If ICC profiles are to be used on image data that exist in the EPS or DCS format, the profiles are not included in the image data; instead, the ICC profiles are converted and embedded in the PostScript code as "Color Space Arrays". Only during the printed output does the PostScript interpreter evaluate the color space arrays and convert the image data.

Why Should I Use InRIP Color Management?

The previous sections show that Color Management calculations can already be made in various applications before the PostScript interpretation. Now the question is: why is Color Management in the RIP still required?

Color Management for Office and Internet Documents

Generally, the common office applications (word processing, spreadsheets, charting programs, presentation programs) and simple vector graphics or image processing programs supply RGB data and do not have their own application-based Color Management. In these cases, InRIP Color Management can provide a true-to-color output. The same applies to documents from Internet applications.

Color proof workflow

During the color proofer workflow (see [section "Proofer Workflow", page 359](#)), the printed medium in the color reproduction is to be taken into account in the output on the color proofer. Since special ICC profiles that are to simulate the basic color of the printed medium (e.g. the paper-white) are used for the proof output, these profiles may only be used in the calculations for the proof data but not for the imagesetter data. Different color management settings are therefore defined for the proof output in the corresponding Output Plan (a different "Print Profile" is set especially).

Image Data with no Color Correction

Otherwise, InRIP Color Management can be used in all cases where the image data of the print jobs were not handled with the application-based Color Management methods mentioned above (see [section "ICC Profiles in Image Processing and DTP Applications", page 318](#)). In this way, a lot of picture data can be output with color correction, even when no output ICC profiles have been previously used in the picture data or when the CMYK color values are in a color space that does not match the planned printing process.

Matching Existing Output Devices or Output Processes

A further advantage of InRIP Color Management is that the printed output can be adapted precisely to existing output devices or printing processes by activating the appropriate ICC profiles in the RIP. Color matching, for example, can consequently be made for the existing output devices in a prepress service studio or in a printing shop without the customer needing access to the corresponding ICC profiles. Matching can be especially made for printing, e.g. for regional-specific processes (SWOP, EURO, etc.) with InRIP Color Management.

Color Management in Prinect MetaDimension

Color Management in Prinect MetaDimension can differentiate between the following data types:

- RGB image data,
- RGB graphics/text data,
- CMYK image data,
- CMYK graphics/text data,
- Grayscale image data,

Color Management

- Grayscale graphics/text data and
- CIE-based data (PostScript Color Management).

Prinect MetaDimension can handle these data differently in terms of Color Management.



Note: This only applies if the CPSI PostScript interpreter is used: CMYK color profiles can also be applied to grayscale images and grayscale graphics, if desired.



Note: Pay attention to the following general conditions when working with Color Management in Prinect MetaDimension:

- Printing (exposure): Color Management in Prinect MetaDimension functions only for composite jobs. There is no InRIP Color Management for separated jobs.
- Proof output: Color Management for proof output can be used for composite and separated jobs.
- Color Management always affects the entire print job. Differentiating between individual pages or objects (graphics, images) is not possible.

The Color Management is parameterized in Prinect MetaDimension at the following points:

- Color Management section (see [section "Color Management", page 269](#)) and
- In "Proof" (see [section "Proof", page 264](#))

Calibration with the Calibration Manager

Prinect MetaDimension supports linearization and process calibration. Special software, the "Calibration Manager", is provided to perform linearization or process calibration.

Concept

Linearization and process calibration are used to check and control dot gain in each processing step of the entire printing process, from the creation of films / printing plates up to printing using an offset press. Inaccuracies in the dot size – especially in color printing – lead to errors in color and tone value reproduction.

Linearization and process calibration influence the size of the dots: during output to a film imagesetter, for example, scattered light can cause larger dots ("dot gain") on the film than defined in the digital original. On the other hand, the film recopying process leads to dot reduction on a (positive) printing plate. Dot gain also occurs when printing on an offset press, caused by the ink going from plate to paper or by light absorption.

During calibration, the dot sizes on each output medium (film, plate, printed paper) are measured using a densitometer or dotmeter and compared with the digital nominal defaults. The difference between the nominal defaults and the measured values result in calibration curves, which are used to correct the digital defaults in such a way that the correct dot sizes are on the output media after output. The calibration curves are stored in datasets, which are in turn gathered together in groups. Each data set contains two areas: a parameter section in which parameters such as the screening system, dot size, resolution, etc. are stored, and a section with the corresponding calibration curves.

Linearization and process calibration in Prinect MetaDimension consists of two components: "Calibration Manager" software for generating calibration curves and a software module that includes the calibration curves in the calculations for the screening data of the print job. To guarantee a high degree of flexibility when using calibration curves, individual settings for linearization and process calibration can be made for each output plan template.

Linearization ensures that the physical dot on the film/plate has the same size as the tone value that was specified in the job. The variations in dot size that occur during exposure of the film are removed by calibration. This means that, for example, a dot percentage of 50% set in the print job is also output on the film with 50%. This is called a "linear" exposure. For this, Calibration Manager is used to generate one or more linearization curves.

Process calibration is used to calibrate the tone value transfer on the complete printing sheet. For this, the results of a proof are measured so that they can serve as the basis for the calculation of the calibration curves. The calibration curves are included in the calculation of the dot sizes for image-setting so that printing can be carried out in the end with correct tone values. The execution of process calibration requires a linearized film imagesetter in the case of film processing. Note that when a process calibration is used, the exposed film is generally no longer linear. More information regarding this subject can be found in the documentation for Calibration Manager.

Calibration Groups of Linearization or Process Calibration Data Sets

You can use "Calibration Manager" to generate calibration groups of linearization or process calibration datasets. If you have not yet created a group of calibration datasets, call up "Calibration Manager". To launch the "Calibration Manager", go to "Resources > Calibration" in the Prinect MetaDimension Printmanager and click the "Start" button. Alternatively, you can also select a group of calibration data sets and click "Start". The selected group then opens directly in the Calibration Manager (see [section "Calibration", page 146](#)). You can also launch the "Calibration Manager" from the Windows Start menu with "Start > Programs > Prinect MetaDimension > Calibration Manager". "Calibration Manager" is an independent application with its own user interface. With "Calibration Manager", you can create and edit calibration curves. Information regarding "Calibration Manager" can be found in "Calibration Manager – User's Guide" or in the Online Help for "Calibration Manager".

A group generally contains several datasets. You can use calibration data sets for the calibration of jobs. You select the data sets for the calibration of a job in the Output Plan template.

Trapping

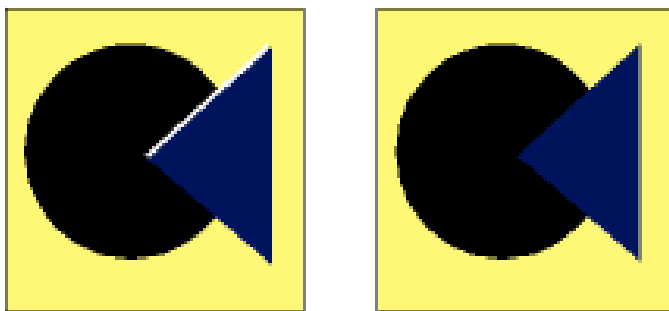
Trapping is a term that for some time has been widely used in the graphic arts industry. This term refers to the spreading and choking performed between two abutting colors.

Why Do I Need Trapping?

Despite taking great care when printing multiple colors, register differences may still occur. Slight shifts (flashes, fringes) can occur at the contours of two adjacent colors.

Minimum overlaps (traps) between objects and colors are generated in the individual color separations to avoid this undesired effect.

For example, flashes occur if the films are mounted inaccurately or if the printing presses are not adjusted precisely. Flashes are also likely to occur if the paper used is affected by the machine or by temperature, air humidity and the moisture content of inks. If the adjacent colors are relatively dark, even a very narrow flash is noticeable and cannot be overlooked.

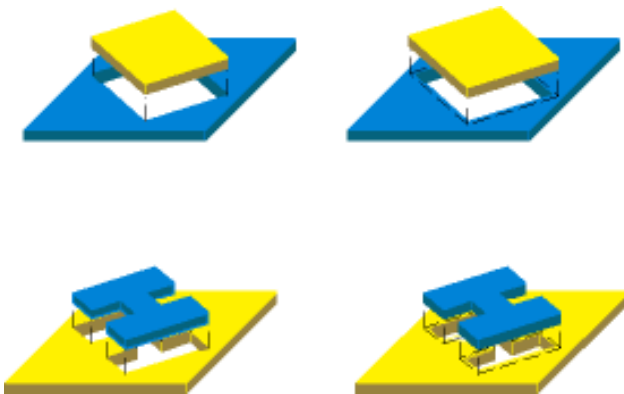


How are flashes avoided?

The simplest way of avoiding flashes is by "spreading" the lighter color into the darker color. During an overprint, the colors will overlap slightly and no flashes will occur even if there are slight shifts in color.

In the example given below, the graphics on the left are not trapped while those on the right are (by "spreading" the color).

Trapping



Example: A

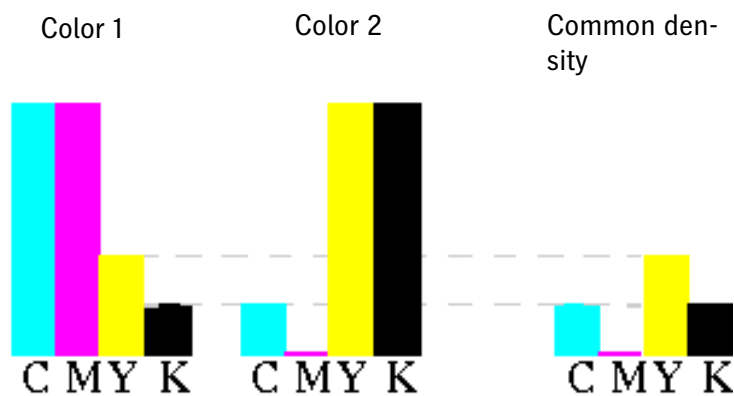
In this case, the color of the square is "lighter". By "spreading" the color, the corresponding separation on the right side is larger when exposed. The colors overlap in the overprint.

Example: B

In this case, the color of the base is lighter. By spreading the color, the knockout size of the letter "H" becomes slightly smaller in that separation. The colors overlap in the overprint.

Definition of the Neutral Density

This is the degree to which a color is found in common in each separation of two adjacent colors:



Each process color (CMYK) has a different ink strength. "Neutral Density" was defined to determine the ink strength of a process color, with media white having a neutral density of 0.

Example of the neutral density for process colors:

100% Cyan	0.61
100% Magenta	0.76
100% Yellow	0.16
100% Black	1.70



The following formula can be used to calculate the neutral density in values less than 100%:

$$ND = -1,7 \cdot \log(1 - \text{Color}(1 - 10^{(-0,6 \cdot D)}))$$

D = Neutral density value for 100% of this separation

Color = Actual value

The neutral density of all separations is obtained from the sum of the neutral densities of the single separations.

Trapping Rules

Trapping changes your page to cover up any errors that may occur during print. In other words, errors are deliberately built in to hide other errors (a case of choosing the lesser of two evils).

The way to generate a trap is marked by a number of steps which must be carried out for each transition between different object colors:

- Decide whether to trap or not to trap.

Must a trap be generated at a color transition?

Trapping

- Define the trap direction.

If a trap must be generated, in which direction must it be set?

- Define the trap color.

When the trap direction has been set, the correct color for the trap must be determined.

- Create the trap.

Finally, the trap must be generated using the parameters you defined.

To Trap or Not to Trap

The trapping algorithm of the "Adobe InRip Trapper" checks whether trapping is required for each color pair that exists (and is visible) on a page. This decision is based on the properties of the inks used in the adjacent objects.

In principle, the following rules can always be presumed:

- If one of the neighboring colors is very light, trapping is not required.
- If the neighboring colors do not contain common separations, or if the "common" color resulting from the separations present in both object colors is very light, trapping is required.

Trap Direction

The trapping color is normally darker than either of the neighboring colors. In order for the trap to remain as invisible as possible, it must be created in the darker of the two adjacent colors. Which of the two colors is darker is determined using the neutral density.

In the case of neighboring colors with the same neutral density, it is difficult to decide on the "correct" trap direction. In this case, it can be a better idea to insert a trap in both colors; such a symmetric (centered) trap changes the contours of neighboring colors of similar brightness in a less noticeable way than a one-sided trap.

Trapping Rules for Black

Black suppresses all other colors because it has such a high density that other colors become practically invisible in composite printing. Therefore, special rules are applicable for black to achieve optimum results.

Colors containing a large amount of black are called "solid black" and are given special treatment in trapping. In such a case, the non-black separations are spread under black. This exception ensures that only the black separation determines the visible edge of a color transition.

Rich or fat black refers to a color that consists of a large amount of black plus other amounts of at least one other separation. These additional color components that are used to obtain a darker (hence "fatter") black can lead to misregisters at the edges of the color.

The special treatment of fat black where the other separations are choked back under black helps to avoid such a problem.

Trap Color

Generally, the trapping color is formed as a mixed color of the two neighboring colors. For each separation in the two colors, you usually take the darker of the two and generate a new color, the trap color, from these separations.

Example:

Color A consists of 100% cyan and 80% yellow, color B consists of 100% magenta and 50% black.

According to the rule above, the trap color would consist of 100% cyan, 100% magenta, 80% yellow and 50% black.

A trap color generated in such a manner is often too dark and thus too conspicuous (e.g. in the case of pastels). Therefore, the percentages of the separation colors that are used to generate the trap color can be reduced.

Spot Color Trapping

If you want to trap spot colors, there must be a CMYK representation for every spot color that is present in the job. These can be defined as follows:

- in the job or
- in an ink table in Prinect MetaDimension. You can edit the ink tables under "Administration > Resources > Inks".

If there is no CMYK representation available, job processing will be aborted. First Prinect MetaDimension looks for a CMYK representation in the job code. If it does not find a CMYK representation there, it searches all ink colors that are available in the system. When printing from the DTP application, make sure that you make the appropriate settings for the CMYK representation of spot colors.



Note: Use the job preview option (see [section "Preview", page 263](#)) to create a preview of the trapped pages that you can then view in the "Job Preview" tab (see [section "Preview / Color Tab", page 69](#)).

Trapping must take into account how inks react to each other. The following different properties exist:

- "Normal" (translucent)
This property is assigned to spot colors that, similar to process colors, are translucent in printing.
- "Transparent"
This property is assigned to a spot color with a transparent varnish. Transparent colors do not have traps.



Note: The objects lying below transparent elements are trapped.

Trapping

- "Opaque"

This property is assigned to very opaque, contour-defining spot colors. They are treated as black and in the trap always pull the adjacent colors below it.

- "Opaque Ignore"

This property is assigned to spot colors that, although they are "Opaque", should not be trapped (e.g. gold, silver or spot colors for which unwanted separation combinations can occur in the trap).

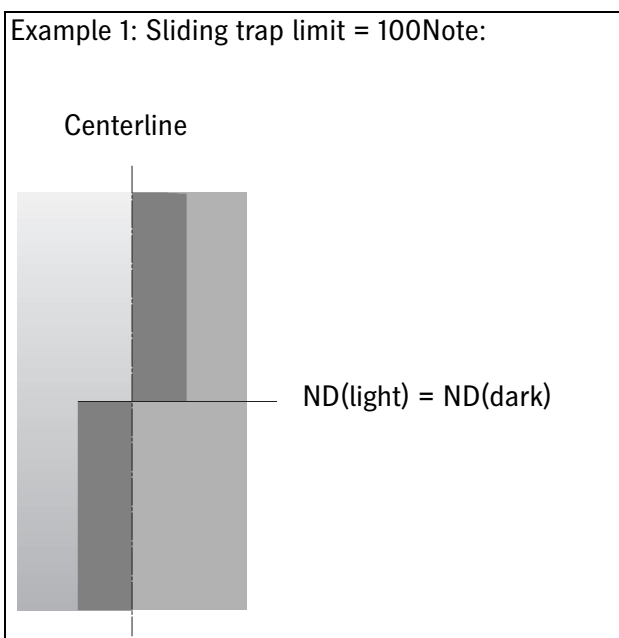
Sliding Trap

The following abbreviations apply to the text below:

ND(light): Neutral density of the lighter color

ND(dark): Neutral density of the darker color

When trapping with shades or blends, a noticeable change in the trap direction can occur at the centerline (border between two colors).

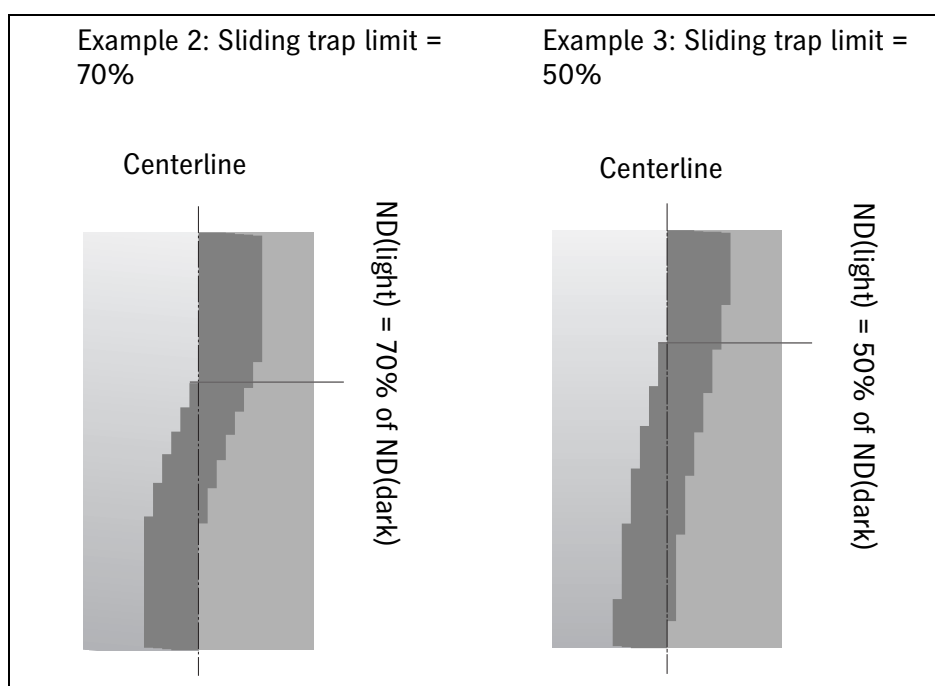


Example 1 schematically displays trapping on the border of a shade for the value "Sliding trap limit" = 100%. For each case, the trap line runs into the color with the higher neutral density. The trap direction changes abruptly at the point in the shade where the two neutral densities are the same and the trap line continues on the side with the higher neutral density.

In cases such as this, it is possible to divide the change in the trap direction into a number of smaller steps and thereby create a more gradual trap transition at the centerline. The change in the trap direction is then not at the point where the neutral densities are the same, but is stretched out over a defined area. The size of this area is defined by the relationship between the neutral densities. The relationship between the neutral densities is set with the "Sliding trap limit" value:

$$\text{ND (light) / ND (dark)} > \text{Sliding trap limit [\%]}$$

This quotient defines from where the trap line changes direction the first time and crosses the centerline. The changeover occurs when the neutral density of the lighter color has the "sliding trap limit" percent value of the darker color.

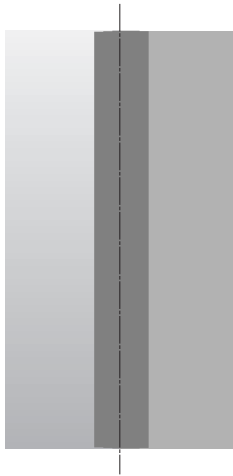


In Example 2, the "sliding trap limit" is set to 70%. The first small step in the trap line runs over the centerline at precisely the point where the neutral density of the lighter color is 70% of the neutral density of the darker color. The trap line runs symmetrically at the point where the neutral densities are the same.

Example 3 displays a trap with the "sliding trap limit" = 50%. The sliding trap is clearly larger in comparison to Example 2 and the trap transition is more gradual.

Trapping

Example 4: Sliding trap limit = 0%



In Example 4, the value of the "sliding trap limit" is set to 0%. The trap line runs symmetrically to the centerline over the whole length of the object.

The sliding trap is normally performed over the entire length of the object. The trap color changes continuously with the shade.

OPI - Image Data Inclusion (not with PDF Print Engine)



Note: OPI image data inclusion is available only if the CPSI PostScript interpreter is used. OPI image data inclusion is not possible if the PDF Print Engine is used. Jobs that have references to OPI high-resolution images and that will be processed with the PDF Print Engine will be aborted.

Various application programs (in particular layout programs) have OPI (Open Prepress Interface) image data substitution. Image data substitution means that there are no high-resolution image data in the layout documents while they are being edited on the screen. Position markers are displayed instead of the images. The image data are incorporated into the job only when it is being output. An appropriate reference is added to the PostScript code of the job so that the high-resolution image data can be allocated to the correct job.

References:

A reference is a piece of information on the "location" (to be more precise, the directory path in the file system) where the high-resolution original image is stored.

Layout files:

The Image Manager can create layout files from high-resolution image data. These layout files can contain low-resolution previews or layout proofs and are pasted into the layout instead of the position markers. The layout files also contain references to the high-resolution image data.

The document is created in the layout or image editing program with the layout files which require considerably less memory than the "high-resolution image" originals. This lightens the work load of both the DTP workstation and the network, and a noticeably higher performance is achieved. This method also ensures that the original high-resolution image is not damaged if errors occur during processing at the workstation computer.

Prinect MetaDimension makes sure that the layout files are replaced by the high-resolution image data during the output if the "Images" option in "Policies" of the active Output Plan is set to "Check and replace images" or "Replace images only" (see [section "Images \(only for CPSI\)", page 306](#)).

When working with image data inclusion, it is absolutely essential that Prinect MetaDimension can find the high-resolution images which are to be output. Prinect MetaDimension has several mechanisms to help in finding the fine images. The use of these mechanisms depends on the type of image data inclusion the job was created with. Prinect MetaDimension can differentiate between two types: DTP documents (e.g. Quark XPress files) with integrated layout files and DTP documents without layout files.

Prinect MetaDimension only performs image data substitution if either there are only references to high-resolution images or if layout files containing references to high-resolution images are recognized. Layout files created by other programs (e.g. Helios) are recognized by their file name extension or a special comment. The following extensions are considered to identify layout files: ".lay", ".sam", ".place".

DTP Documents with Layout Files

If layout files created with the Image Manager were incorporated into the DTP document, these layout files then contain references to the high-resolution fine images from which the layout files were derived.

When the document is printed in the DTP program, a PostScript code containing a layout file is created. A special printer option may suppress the layout file from being integrated into the PostScript code. We have two different cases: Printing with layout files or printing without layout files.

Printing with Layout Files

In this case, the PostScript code of the print job contains layout files. During the output, the Prinect MetaDimension decodes the reference to the fine image data which is contained in the lay-file code. Prinect MetaDimension can find the high-resolution image on the basis of this information and pastes it into the job, replacing the layout file.

If the search using reference information is not successful, e.g. because the high-resolution image is stored in another directory, Prinect MetaDimension starts a search algorithm. Prinect MetaDimension first searches the default image directories specified in "Additional OPI Image Include Paths" in "Administration > Configuration > Preferences" (see [section "Additional OPI Image Include Paths:", page 194](#)).

If a high-resolution image is not found in these directories, either printing is canceled if the "Images" option is set to "Check and replace images" in the Output Plan (see [section "Images \(only for CPSI\)", page 306](#)) or the layout file itself is output instead of the high-resolution image.

Printing without Layout Files

If layout files were included in the DTP document but not printed (e.g. by means of the "OPI: Omit TIFF & EPS" option in Quark XPress), Prinect MetaDimension tries to find a reference to the embedded layout files in the PostScript code of the job. When the lay-files are found, Prinect MetaDimension will find a reference to the fine image data here. The Prinect MetaDimension uses this information in the same way as described above. If no fine image is found, the search algorithm for finding fine images is activated again.

DTP Documents without Layout Files

In the case of OPI without layout files, the high-resolution images are usually integrated directly into the DTP document.



Note: If a document which contains high-resolution images is to be output in an external imaging studio, for example, it is possible to copy the high-resolution images from the data media directly to a folder in the Prinect MetaDimension system at the studio at the same time the DTP document is being loaded onto a DTP workstation.

Printing takes place – e.g. in Quark XPress – with the "Exclude TIFF" or "Exclude TIFF & EPS" option. However, Quark XPress will complain during printing that the embedded images cannot be found. The images must be updated. If you are working at a Macintosh, for example, with Quark XPress, you must first share the image directory in Prinect MetaDimension for the Macintosh protocol or for Windows and mount it on the Macintosh. You will find information on mounting a Windows folder on the Macintosh OS X in [section "Creating Layout Files:", page 345](#). After the images have been updated, the output can be created via Prinect MetaDimension.

It is important for this process that no layout files need to be generated and included in the document!

A further variant is that the fine images are not integrated in the DTP document and also are not displayed as a low-resolution layout file preview in the document. Position markers, which are not shown on the monitor, are reserved in the layout document for the images. References to the high-resolution image data are inserted in the PostScript code of the print job during the output.

DTP Documents with Layout Files Created by Third-party Applications

If the DTP document contains layout files (or "Viewfiles" or "Placefiles") that were created by third-party applications (for example, Helios), Prinect MetaDimension first looks for references to the high-resolution image data in these layout files. If no references are found in these layout files, Prinect MetaDimension then tries to find references to the high-resolution image data through evaluation of standard OPI comments (as originally described by Aldus).

Processing colored Layout Files

On certain conditions the Delta Printmanager is able to process print jobs which contain colored layout files. "Process" in this context means that the adjustments made, with regard to the color of the layout files, are applied to the fine images when the OPI image replacement takes place.



Prerequisites: The following conditions must be fulfilled for the processing of colored layout files:

- Foreground coloring (in Quark XPress):

This is only supported for black-and-white or grayscale images in TIFF, JPEG or Scitex-CT format.

- Background coloring (in Quark XPress):

This is only possible for black-and-white images.

- Transparency within EPS files is only supported if the Save As EPS transparent option is chosen when the corresponding high resolution images are saved from within Photoshop.

OPI (Image Data Inclusion)

- As far as black and white layout files in TIFF format are concerned setting the transparency of the background Quark XPress is supported.

Default Image Directories

If the high-resolution images cannot be found on the basis of the references in the layout files, Prinect MetaDimension uses an intelligent search algorithm to find the high-resolution images during OPI image data inclusion.

The default image directories are searched using a specific method, if the high resolution images are not found on the basis of the references included in the job. This can be the case when high-resolution images that were filed in the Prinect MetaDimension system during generation of the layout files were later moved to a different disk drive. When jobs which refer to such high resolution images are sent to Prinect MetaDimension, the search algorithm is activated.

Example:

A "CustomerImages" folder was set up on drive D: that contains a subfolder for each letter of the alphabet. Within each of these subfolders, additional subfolders are created, named according to each individual customer. So the complete path for the "TestImage" of the "FreeDesign" customer would read as follows:

D:\CustomerImages\F\FreeDesign\TestImage

If the "D:\CustomerImages\" folder was relocated to the "Images" folder on drive E: after the layout files were generated because drive D: was overloaded, the new path for "TestImage" is:

E:\Images\CustomerImages\F\FreeDesign\TestImage.

In this case, we recommend that you define the "E:\Images\" folder as the image search folder. During image data inclusion, the search algorithm tries to combine the original path of the "TestImage" with the path of an image search folder in such a way that the image can be found. The algorithm works in such a way that it successively replaces the components of the original path with those of the image search folder name until the correct match is found.

In the example above, drive D: will first of all be replaced with the path

E:\Images

so that the new search path is:

E:\Images\CustomerImages\F\FreeDesign\TestImage.

At this point, the Prinect MetaDimension will already find an image with a matching name and uses this high-resolution image for image data inclusion.

You can define the image search folders in "Administration > Configuration > Preferences > Additional OPI Image Include Paths".



Note: Although it is possible to specify any number of image search folders, you should, if possible, enter for each drive **always the highest common folder in the tree structure** for the image search folders to reduce the danger of ambiguity when searching for the high-resolution images. Otherwise it is possible that there are two high-resolution images with the same name and Prinect MetaDimension might then include the wrong high-resolution image in the job when replacing the image.

The following example illustrates how a wrong high-resolution image can be included:

Following the above example, assume that on drive E: under the Images folder, there is another folder, "ArtStudios", which also contains a high-resolution image with the name "TestImage". In this case there are two different image files with identical names in the paths:

E:\Images\ArtStudios\TestImage and

E:\Images\CustomerImages\F\FreeDesign\TestImage.

The following paths were entered as image search folders:

E:\Images\ArtStudios and

E:\Images\CustomerImages\F\FreeDesign.

Now, if the new path for the image

D:\CustomerImages\F\FreeDesign\TestImage

is to be found, it is possible that Prinect MetaDimension first tries to find the image in the image search folder

E:\Images\ArtStudios

default image directory. During the search the individual components of the path are gradually replaced resulting in the following search paths:

E:\Images\ArtStudios\CustomerImages\F\FreeDesign\TestImage

E:\Images\ArtStudios\F\FreeDesign\TestImage

E:\Images\ArtStudios\FreeDesign\TestImage

E:\Images\ArtStudios\TestImage

When the last path is examined the algorithm will "make a hit" and the incorrect high-resolution image will be inserted into the job.

To avoid such faulty behavior, in this example you should only enter the path

E:\Images

as the image search folder. This is the highest, common directory of folders

E:\Images\ArtStudios\TestImage and

E:\Images\CustomerImages\F\FreeDesign\TestImage.

Using the path

E:\Images

for drive letter D: the correct high-resolution image

E:\Images\CustomerImages\F\FreeDesign\TestImage

is located very quickly.

Image Manager

The Image Manager is a highly effective tool for administration and preparation of image data.

Definition of "Job" in the Imagemanager

When used in conjunction with the Imagemanager, the images that are to be processed are also referred to as "jobs".

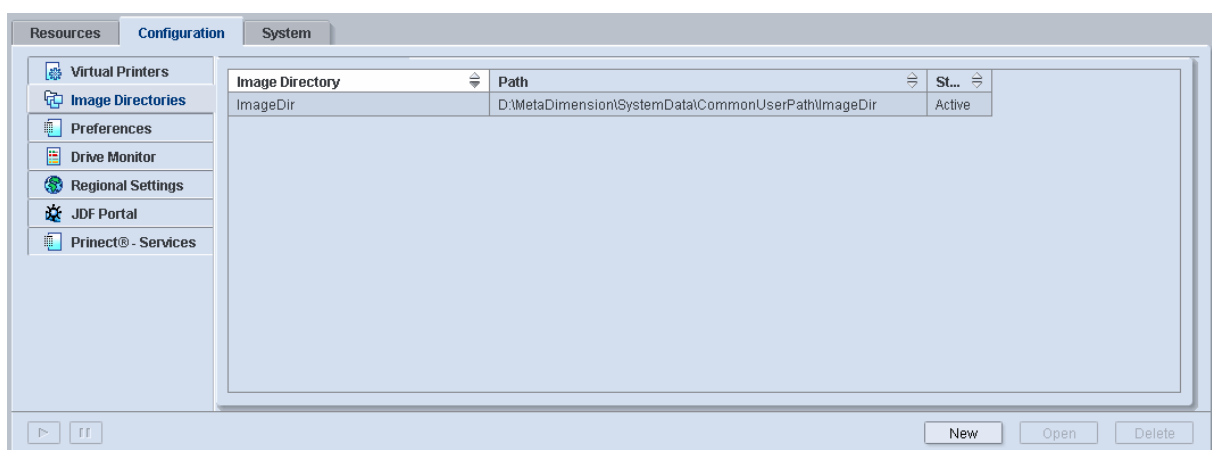
Overview of the functions of the Image Manager:

- Collecting and administrating image data.
- Supplying image data for printing out.
- Generation of layout files from high-resolution images for inclusion in layout applications or for
- output to laser printers or other proofing devices that do not work with high resolution.

File Formats

The Image Manager can edit or import the following file formats: TIFF, JPEG, Scitex-CT, EPS, DCS1, ICS, DCS2. The lay files are generated in the EPS format or, if the fine images are in a pixel format, in the original fine image file format. Special screen presentations, so called "previews" or layout proofs can be created from image files in the TIFF, JPEG or Scitex-CT format.

The user interface of the Imagemanager is integrated into the main user interface.



Elements

The Image Manager contains the following elements:

- Image Directories

Image directories are folders in the Prinect MetaDimension file system, into which the high-resolution image data can be copied. The image data are collected here.

- Layout generator

The main component of the Image Manager is the layout generator. It generates layout files from high-resolution images.

Definition of term:

- Image directory: An image directory is a configured, functional component of the Imagemanager, consisting of an image folder (and any subfolders) and the layout generator.
- Image folder: An image folder is a folder in the file system where an image directory looks for images.

Imagemanager – Concept

In the field of DTP, image data is often processed, that has been scanned at a high resolution. Such high-resolution images ensure a high output quality, but they require much more memory. As a result, this greatly increases the work load placed on the entire working environment processing these images (scanner workstation, layout station, network, etc.).

Creating Low-Resolution Layout Files

The Image Manager has been designed to collect high-resolution image files and to create low-resolution layout files from them. Layout files are special files in PostScript format (EPS) which can be used for inclusion in DTP programs (with or without screen previews) or as layout proofs when printing with a low resolution (e. g. with laser printers). The PostScript code of the lay-files always contains references (information on the path in the file system) to the high-resolution images from which the lay-files were created. A layout file may also contain screen previews or layout proofs.

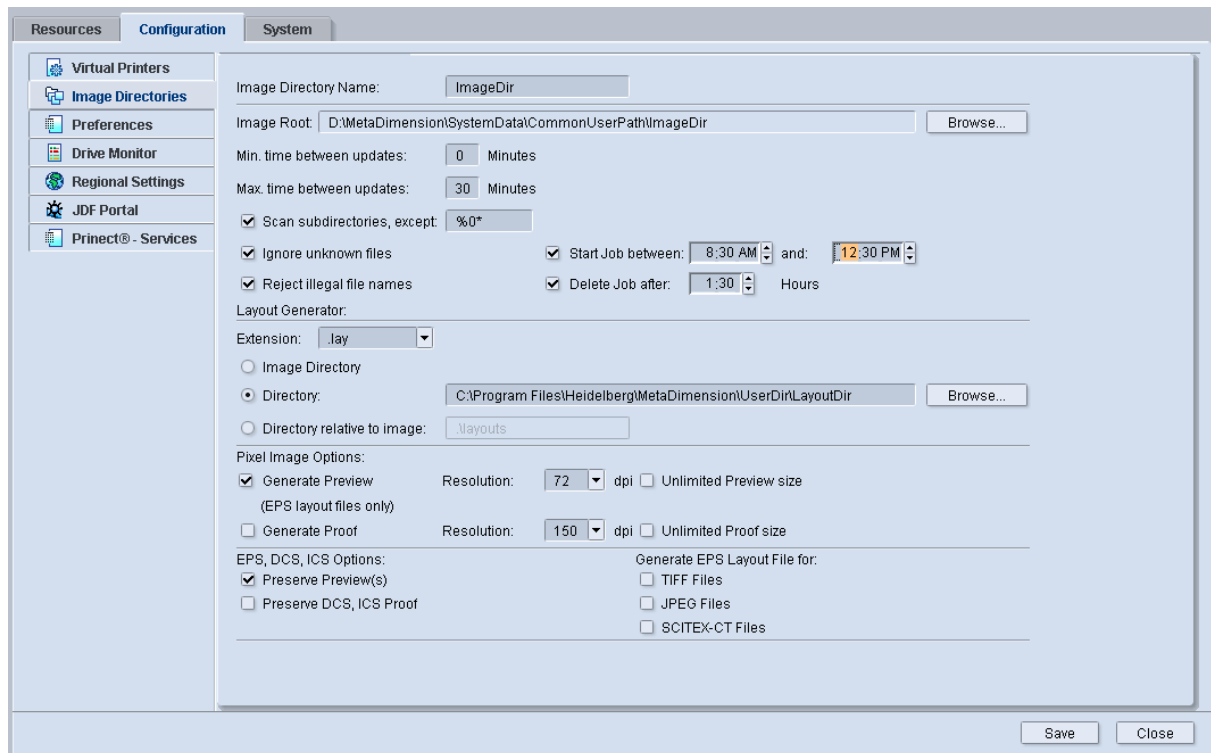
Utilization of image directories

The high-resolution image data can be collected in the Prinect MetaDimension system folder. When the job is output, the data of the high-resolution images stored in this image folder can be included to the PostScript code of the job.

You can create image directories in the following way:

1. Switch to the "Administration > Configuration > Image Directories" section.
2. Click the "New" button.

The following dialog box appears:



3. Make all the desired settings here and click the "Save" button.



Note: For more information about image directories, refer to [section "Image Directories", page 179](#).

Utilization of Layout Files in Layout Programs

When you work with image data inclusion, the layout files are incorporated into the DTP documents instead of the high-resolution images. The DTP document should contain information on the location of the high-resolution images in the system so that these high-resolution images can be found later on when the job is output. This information is saved as a reference PostScript comment in the data code of the layout file.

Screen previews can be generated when creating the layout files if the high-resolution images are in TIFF, JPEG or Scitex-CT format or if they are EPS or DCS files which contain directly readable pixel images (Photoshop EPS). These previews are normally generated with the screen resolution (typically: 72 dpi). They usually require considerably less memory than the original high-resolution images.

Image Manager

The layout files can be loaded to the relevant computer for layout or image editing without taxing the network or the resources of the DTP workstation too much. If the OPI option is activated, Prinect MetaDimension automatically inserts the relevant high-resolution image data into the job during the output run.

Utilization of Layout Files for Proof Output

Output to Low Resolution Printers

If image data are to be output to laser printers or other output devices which work with a comparatively low resolution, layout files which contain so-called "layout proofs" can be generated for this type of output by the layout generator if the original images are in TIFF, JPEG or Scitex-CT format or if they are EPS or DCS files which contain directly readable pixel images ("Photoshop EPS"). As with previews, layout proofs are low-resolution versions of the original high-resolution images. Layout proofs are generated in the resolution required by the respective output device. As an example then, a resolution of 100 - 200 dpi is appropriate for a laser printer.

If the "OPI Including" option under "Virtual Printer" is not activated, the layout files in the print job are printed instead of the high-resolution image files.

Previews or Layout Proofs contained in PostScript Files

If the high-resolution images are in DCS or ICS format (but not EPS), they may already contain previews or layout proofs. The Image Manager can be configured so that these PostScript previews or layout proofs are included when the layout file is generated. This is valid in the same way for Macintosh previews or file icons in the Macintosh resource fork.

Creating Layout Files by Interpolation

The layout file generator generates the layout files. The layout generator examines the TIFF, JPEG or Scitex-CT high-resolution images and creates the layout files by means of interpolation. In this way, you obtain previews which show a much more detailed reproduction of the original image than previews created in the normal procedure.

The layout files are filed in layout folders (high-resolution images are stored in the image folders). The settings for the layout file generator are carried out in the image directory in the "Layout file generator" section.

Automatic Layout File Generation

The procedure for creating layout files is automated. This requires that the function is activated.

The process causes image directory jobs to be sent to the layout generator. This means that a layout file is automatically created by the layout generator from every image file stored in the image folder. The layout file is saved in the layout folder.



Note: Image folders stored on file systems which do not report changes to the Image Manager (NFS, Netware) are checked for new or updated image data at a regular interval which can be stipulated (the "Max. time between updates" option).

Image Manager – file formats

When layout files are generated, various layout file formats can be created, depending upon the original fine image's file format. The possibilities when generating screen previews or layout proofs also vary, depending upon the fine image's file type. Some high-resolution image formats contain screen previews that can be used, whilst others contain layout proofs, which serve as screen previews.

Supported Fine Image File Formats

In the following, more detailed information on the high-resolution image formats supported will be given. In particular, it will be explained, under which conditions the file formats are processed by the Image Manager.

DCS and ICS

Separated PostScript files are supported, if they consist of one main file and 4 color separation files (CMYK). The main file format must correspond to DCS-1, and may contain a PostScript proof. An EPS file may contain a TIFF or a Windows metafile preview as well as an EPSI preview (PostScript comment). DCS-2 images in Single and Multi-file formats are also supported.

EPS

An EPS high-resolution image file can not contain any PostScript proof because the PostScript part represents the fine image. An EPS file may contain a TIFF or a Windows metafile preview as well as an EPSI preview (PostScript comment).

JPEG

Baseline JPEG is supported in both the ADOBE and JFIF variants. Supported color depths: gray, RGB, and CMYK, each with 8 bits/sample.

Scitex-CT

Supported color depths: gray, RGB and CMYK. A TIFF file may contain a maximum of two additional color separations. These separations will not be processed and therefore not exposed.

Image Manager

TIFF

Supported color depths: B/W with 1 bit/sample, gray (8 bits and 4 bits), RGB palette (8 bit and 4 bit), CMYK, and single separation with 8 bits/sample. A TIFF file may contain a maximum of two additional color separations. These separations will not be processed and therefore not exposed. The image data may be arranged in a single area, in strips or in tiles, and they can either be LZW or Pack-Bits compressed. DotRange is taken into consideration.

Not supported are: L*a*b*, YCC or other color spaces, color sequences other than C-M-Y-K, JPEG-compression, rotated orientation.

Comments

Macintosh Fine Images

Fine image files may contain a PICT preview in the Mac resource fork. If available, the "creator" will be copied into the layout file, otherwise "LHPS" ("Layout file Heidelberg Print Server") will be used as the creator.

Depending on the layout file format, the "type" will be set to "EPSF", "JPEG", "TIFF", or "..CT". If available, Mac icons will be taken over, otherwise a standard Mac icon will be used (depending on "type" and "creator").

Color Formats in Layout Files

For previews in layout files, CMYK is substituted by RGB, in order to obtain a substantially better preview quality. If layout files are generated in the original (high resolution) file format (TIFF, JPEG, Sci-TeX-CT), CMYK is preserved, in order not to impair the proof ability.

Photoshop Clippaths

If clippaths are included in TIFF, JPEG or EPS images with Photoshop, they are recognized by the Image Manager and integrated into the layout files as a white silhouette mask. The clippaths, or at least the white silhouette masks, are displayed and interpreted in the DTP application (Quark XPress, PageMaker) during layout generation with the use of the layout files. The Printmanager processes the clippaths when the layout files are replaced by the fine images.

Generation of Previews and/or Layout Proofs from PostScript Image Files

The Image Manager is able to generate layout files from PostScript files in EPS, DCS, or DCS-2 format, if these files contain image components. These layout files may contain screen previews or layout proofs, even if the image file contains no preview. Prerequisite for this is that the image components are allocated by appropriate comments (%ImageData) in the PostScript code.



Note: EPS vector formats are not supported; therefore no proof or preview components are generated.

Summary

The following table gives a brief overview of the various options for creating and re-using previews and layout proofs when layout files are used. Depending upon the high-resolution image file format, varying layout files may be created. The previews or layout proofs, which are contained in the layout files, may come from different sources: from a Macintosh resource, from a PostScript file or they are created by the layout generator.

Where do the preview images or proof images come from, when utilizing the layout files?

Fine image file format	Layout file format	..when positioning	..for layout proofs without OPI
DCS/ICS	EPS	Preview from PICT resource or TIFF preview (option "Preserve Preview"; preview must be contained in the fine image file)	PS proof from main file (option "Preserve Proof"; proof must be contained in the main file of the high-resolution images)
EPS	EPS	Preview from PICT resource or TIFF preview (option "Preserve Preview"; preview must be contained in the fine image file)	No preview (if necessary, the fine image must be positioned)
JPEG, Scitex-CT, TIFF and Photoshop-EPS, Photoshop-DCS (pixel formats)	EPS (option "Generate EPS Layout File for")	TIFF preview (option "Generate Preview")	PS proof (option "Generate Proof")
JPEG, Scitex-CT, TIFF and Photoshop-EPS, Photoshop-DCS (pixel formats)	same as fine image, EPS is always generated from DCS	Original format (proof resolution if "Generate Proof" is set, otherwise in preview resolution; Warning! do not use transparency or coloring!)	Original format (proof resolution if "Generate Proof" is set, otherwise preview resolution)

Image Manager Configuration

Several image folders can be created with a corresponding layout generator in the Image Manager. This means that the Image Manager can be adapted to suit the job in question.



Note: Only one layout folder can be created for each image folder. Separate image folders can, for example, be set up for various employees in the company (or customers). If the Imagemanager is used extensively, it may be necessary to create image folders on different hard disks (depending upon their capacity) within the Prinect MetaDimension PC.

Image Manager

Image Folder as Layout Folder

You can select the image folder with the high-resolution images as your layout folder. This means that the low-resolution layout files are written back to the relevant image folder.

File name extension for layout files

In order to differentiate between layout files and original images, the layout files are given a special file name extension, e. g. ".lay" or ".eps". The layout file extension is appended to the fine image file name. If a high-resolution original image is named "image1.eps", then its layout file is called "image1.eps.lay" or "image1.eps.eps".

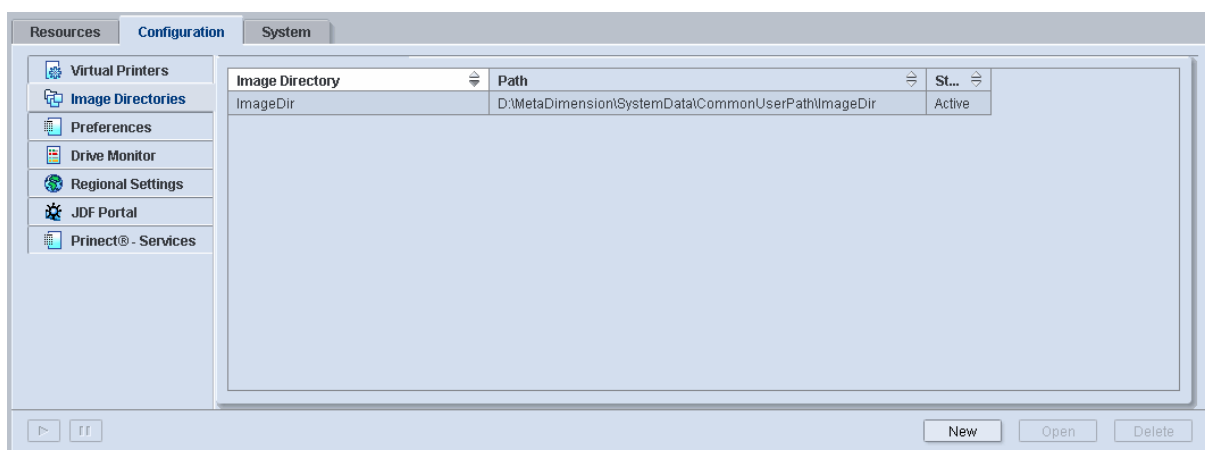


Note: The file name extension you select depends on the DTP program the layout files are to be incorporated into. There are programs which only permit files with the extension ".eps". In other cases, it may be better to select ".lay" so that you can differentiate between the layout files and the high-resolution images which are in EPS format. The file name extension can also be empty. In this case the layout files have the same name as the high-resolution images.

Creating Image Directories

Image directories are created as follows in Prinect MetaDimension:

Switch to the "Administration > Configuration > Image Directories" section. A list of installed image directories is displayed:



For more information about configuring image directories, refer to [section "Image Directories", page 179](#)).

Deleting image directories

Image directories can, provided they have been selected, be deleted with the "Delete" button.



Note: When image folders are deleted, no files or folders are deleted physically from the data storage media.

Working with the Image Manager

The Prinect MetaDimension Image Manager has been designed, so that once it has been configured, it can perform its functions automatically. In particular, the automatic image directories time control generally makes constant, manual intervention in the workflow of the MetaDimension Image Manager superfluous.

Operating MetaDimension Image Manager

Operation of the MetaDimension Imagemanager is normally limited to copying the high-resolution image files from the scanner workstation to a corresponding image folder. The layout files are then transferred to the DTP workstation (via the network or by means of data media) and included in the DTP document. When the job is output, Prinect MetaDimension ensures that the correct control of the output device is used (output of the layout proofs or inclusion of the fine images).

Printing out with OPI

The "Image Manager" option gives you the possibility to use the OPI (Open Prepress Interface) capabilities of Prinect MetaDimension. The Image Manager converts high-resolution, digitized image data (fine image data) into low-resolution layout files (coarse image data). The layout files are integrated into the layouts of the DTP application (e.g. Quark XPress) instead of the high-resolution images, while the high-resolution images are saved on the Prinect MetaDimension server. During exposure, Prinect MetaDimension replaces the layout files with the high-resolution images.

This means that large volumes of high-resolution data do not have to pass through the network several times between the Prinect MetaDimension server and the DTP workstation. The main memory, CPU and graphics of the DTP workstation are also not taxed by the high-resolution data but only by the layout file data, which is generally much more compact.

Creating Layout Files:



Prerequisites: An image folder is installed on your Prinect MetaDimension server, e.g. the "Image" folder. Two folders are then automatically enabled for the Macintosh and Windows file systems, "Image_IM" and "Image_LO". The "Image_IM" folder contains the high resolution fine image data; the "Image_LO" folder contains the low resolution layout files.

Image Manager

You have scanned high-resolution image data onto your scanner workstation and you want to transfer these to the Image Manager so that layout files can be created:

Procedure on the Macintosh OS X:

The following settings must be made on a Windows PC:

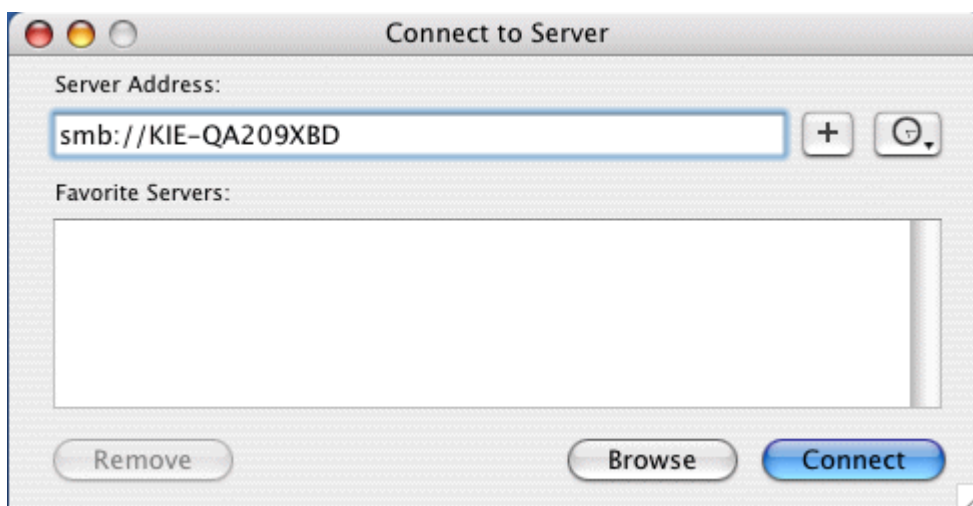
- If necessary, activate the "Guest" user account (Windows® Server 2003)
- Set up a user with administrator rights

These steps are described in Chapter 1 of the Prinect MetaDimension installation manual and should be carried out in conjunction with the MetaDimension server installation.

You require the Windows release in order to be able to access the image folder via SMB from the Mac OS X.

Connect with the image folders on the Macintosh OS X:

1. Call up the "Go to > Connect To Server" menu option in the Macintosh Finder :



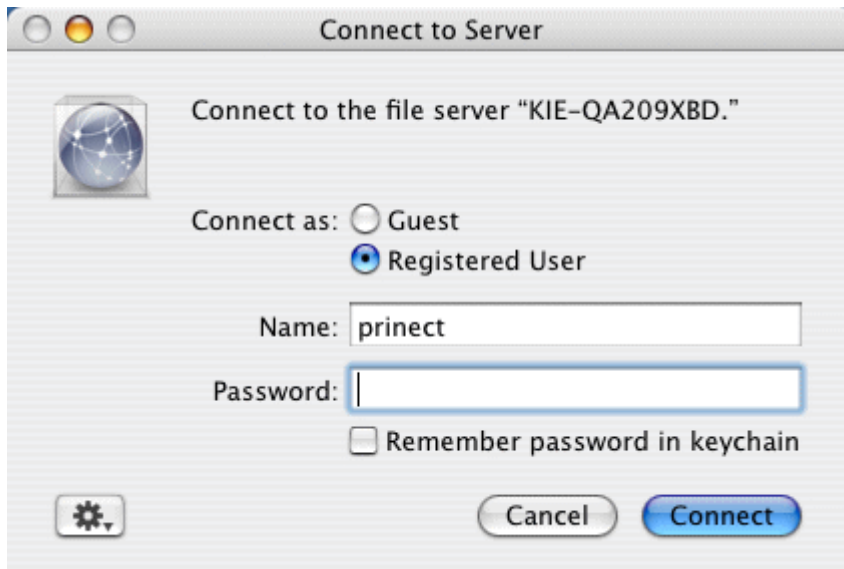
Enter the IP number or network name of the MetaDimension server under "Server Address". Enter "smb://" before the Windows network name.



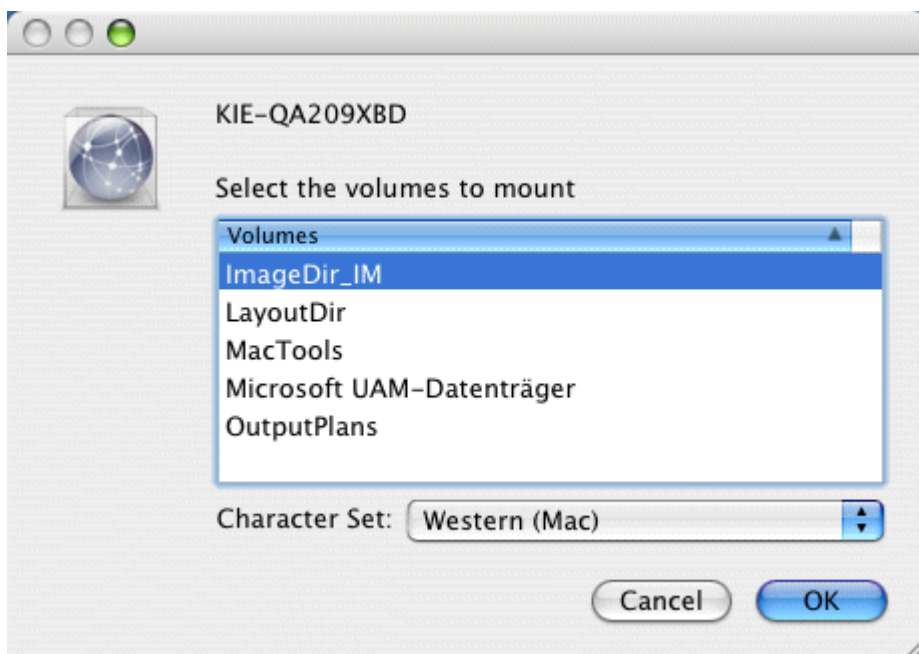
Note: You can see the IP number in the MetaDimension Printmanager under "Administration > System > Server". On a running MetaDimension system the server name and the IP number will be shown above the list of accessible servers.

Or you can also select the server in the finder window on the network.

2. Click "Connect". The "Connect To Server" dialog opens:



3. Enter the user name of a user who is logged in to the MetaDimension server with administrator permissions (e.g. "prinect", as recommended in the installation manual) and the password of this user. Then click "Connect".
4. In the selection list of the released folders, select the folder "ImageDir_IM" and confirm with "OK".



An "ImageDir_IM" symbol appears on the desktop if the connection is successful.

Repeat steps 1 – 4 to connect the "ImageDir_Lo" folder.

The connections are displayed as symbols on the desktop.

Image Manager



Copy the high-resolution image data, which you want to use to create layout files, to the "Image_IM" folder.

Procedure on the Windows PC:

1. Open the Windows Explorer and search for the Prinect MetaDimension server, whose Image Manager functionality is to be used in "Network Neighborhood". Click the plus sign next to the Prinect MetaDimension server symbol. The directory tree of the Prinect MetaDimension server is displayed.
2. Select the "Image_IM" folder with the left-hand mouse button and call up the context-sensitive menu with the right-hand mouse button. Select the "Map Network Drive" command. In the "Map Network Drive" dialog box, select a drive letter, for example "F" (you can generally use the letter suggested by the system).
3. If you are registered as a user on the Prinect MetaDimension server, you can leave the "Connect As" box empty. If you cannot access the required folders of the Prinect MetaDimension server, ask your system administrator. If you wish to access the "Image_IM" folder during later sessions as well, check the "Reconnect at Logon" box. Close the dialog box by clicking "OK".
4. Repeat step 2 and 3 for the "Image_LO" folder on the Prinect MetaDimension server and assign a drive letter to this folder, for example "G".
5. If you do not wish to use the Windows Explorer to create the layout files, you can create symbols of these folders on your Windows desktop:

In the left-hand half of the Explorer window, search for the "Image_IM" and "Image_LO" folders as network drives, e.g. "F" and "G" (not in Network Neighborhood!). Select the drive symbols and drag them, holding down the left-hand mouse button, to the background of your Windows desktop. Symbols referring to these mapped folders are now created on the desktop. Double-click these symbols to open the folders and work with them.

6. Copy the high-resolution image data, which you want to use to create layout files, to the "Image_IM" folder.

Further Procedures (Macintosh and PC)

The high-resolution image data is saved in the "Image_IM" directory on the Prinect MetaDimension server. At the same time, layout files are automatically created from these files and are saved in the "Image_LO" directory.

7. When the high-resolution image data has been copied to the image folder of the Prinect MetaDimension server, you can delete the originals on the scanner workstation as you only need the high-resolution images on the Prinect MetaDimension server to continue your work.
8. To work with image data inclusion, link the "Image_IM" and "Image_LO" folders to your DTP workstation as described above. Insert the layout files from the "Image_LO" folder as images in your DTP layout. In general, the layout files are marked accordingly in the file extension (normally a ".lay" suffix). If you are working on a layout, which already contains high-resolution image data, you can replace these with the corresponding layout files. How you replace the images differs from application to application. Usually, you must update the layout file paths to the high-resolution images.

Virtual Printer Setup at the DTP Computer



Note: The procedure for printing via Prinect MetaDimension is the same for Macintosh and Windows operating systems. However, there are differences in the configuration of the output devices (printers). For that reason, configuration is described separately for the Macintosh and Windows operating systems.

Procedure on the Macintosh (OS X)

Printing on Prinect MetaDimension with the Macintosh OS X can be done using the TCP/IP-based "Remote LPR" protocol (Line Printer Protocol). Printing using the Remote LPR only functions if Prinect MetaDimension is installed on a Windows Server OS (Windows® 2000 Server/Windows® Server 2003), because the UNIX print services are required there and they are only available for server systems.



Note: You can verify whether the "Print services for UNIX" are installed and ready on a Windows® Server 2003 by doing the following: start the computer administration ("Start > Administrative Tools > Computer Management") and open the "Services and Applications > Services" area. Check in the list whether the "TCP/IP Print Server" is available and ready. Start the service, if necessary. If the service is not available, install the "Print Services for UNIX". Installation is described in the installation manual.

Preparation on the Windows Server PC:

The following settings must be made on a Windows PC:

- Install the "Print Services for Unix"
- If necessary, activate the "Guest" user account (Windows® Server 2003)
- Set up a user with administrator rights

These steps are described in the Prinect MetaDimension installation manual and should be carried out in conjunction with the MetaDimension server installation.

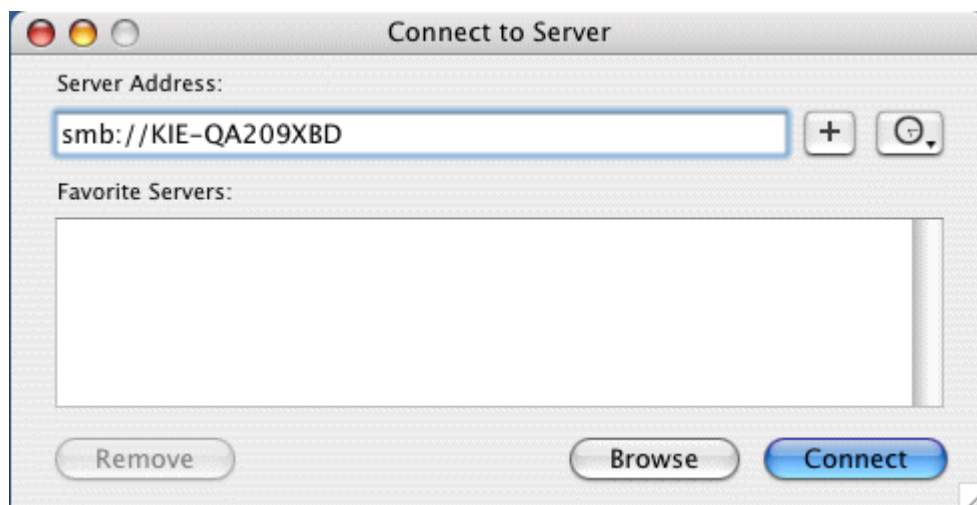
Setting up a Virtual Printer for Windows Network Access

To access a virtual printer from a Macintosh OS X via Remote LPR, you must set up a virtual printer for Windows network access. You will find details about the setup of a virtual printer in [section "Setting up the Virtual Printer as a Windows Printer \(Windows Queue\)", page 178](#).

Map the MacTools Folder on a Macintosh

1. Call up the "Go to > Connect To Server" menu option in the Macintosh Finder :

Virtual Printer Setup at the DTP Computer



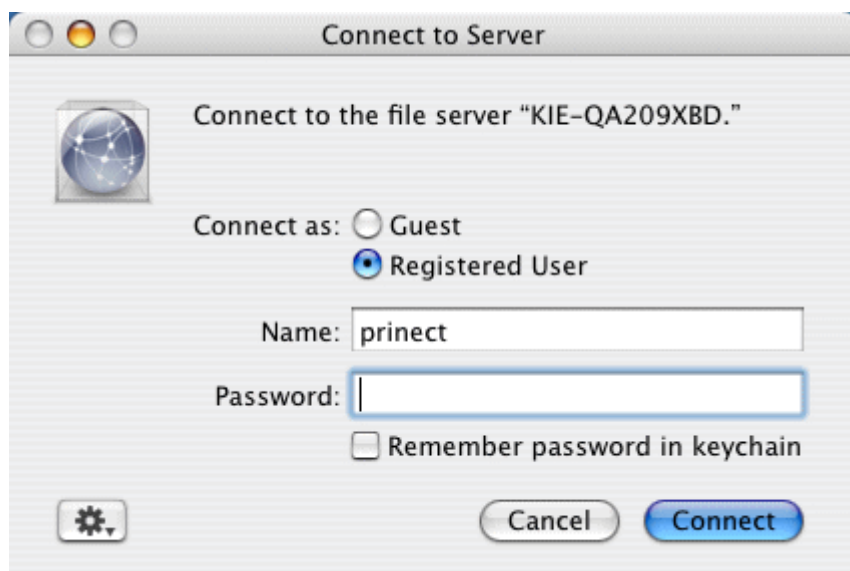
Enter the IP number or network name of the MetaDimension server under "Server Address". Enter "smb://" before the Windows network name.



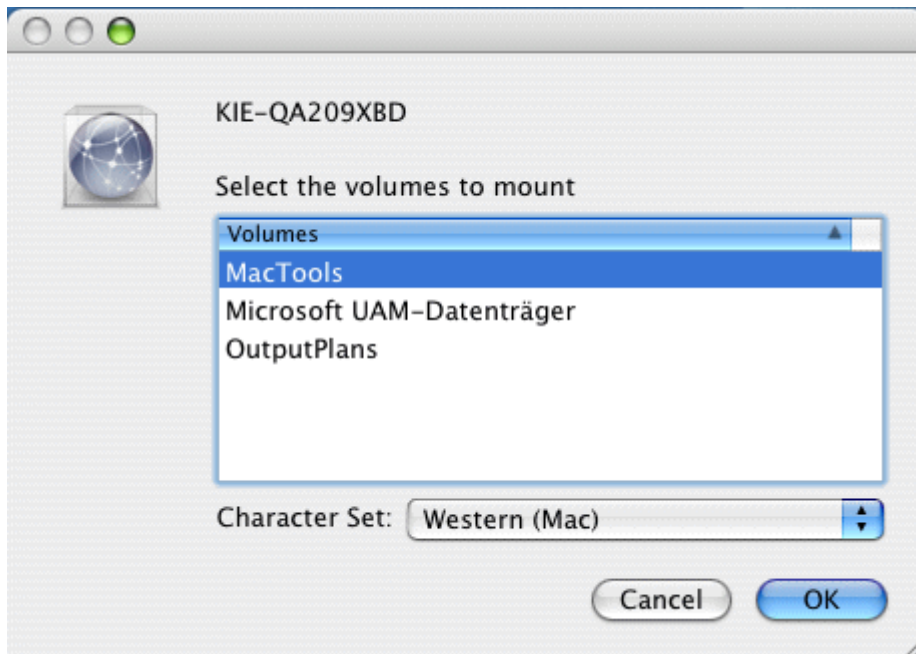
Note: You can see the IP number in the MetaDimension Printmanager under "Administration > System > Server". On a running MetaDimension system the server name and the IP number will be shown above the list of accessible servers.

Or you can also select the server in the finder window on the network.

2. Click "Connect". The "SMB/CIFS File System Identification" opens:



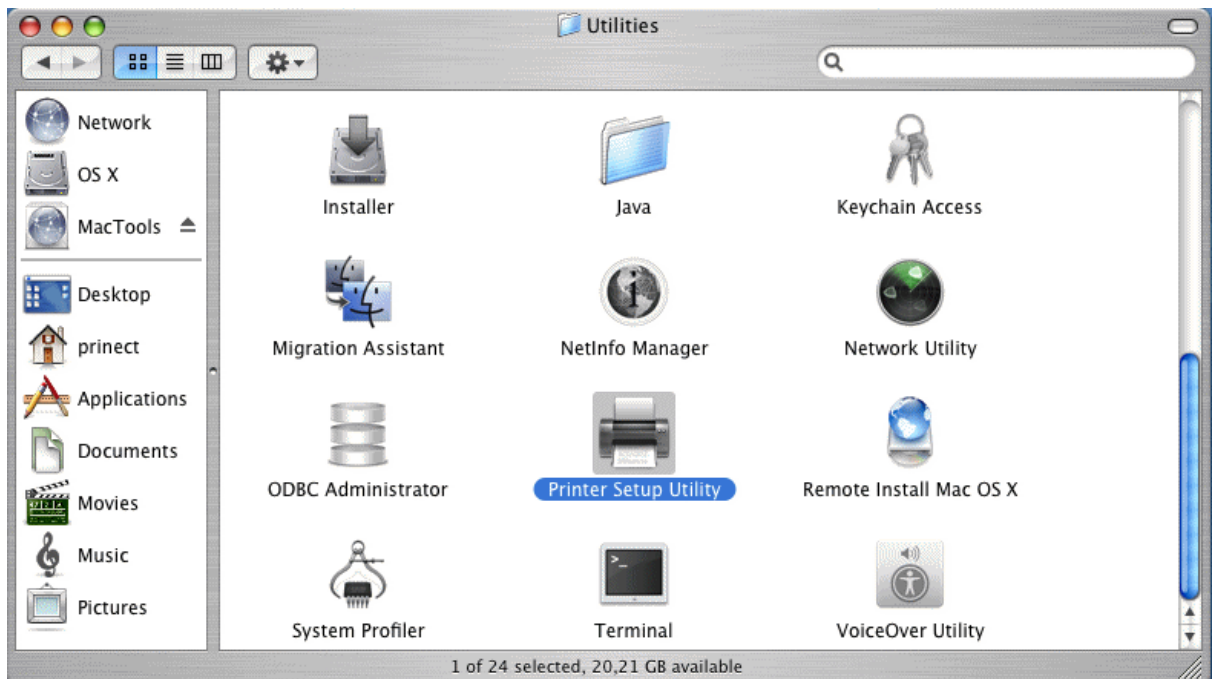
3. Enter the user name and password of a user who is logged in to the MetaDimension server with administrator permissions (e.g. "princt", as recommended in the installation manual). Confirm the dialog with "Connect". The "Select the volumes to mount" dialog opens:



4. Select the "MacTools" folder in the list of shared folders and confirm with "OK".
If the connection is successful, a "MacTools" icon will be created on the desktop.

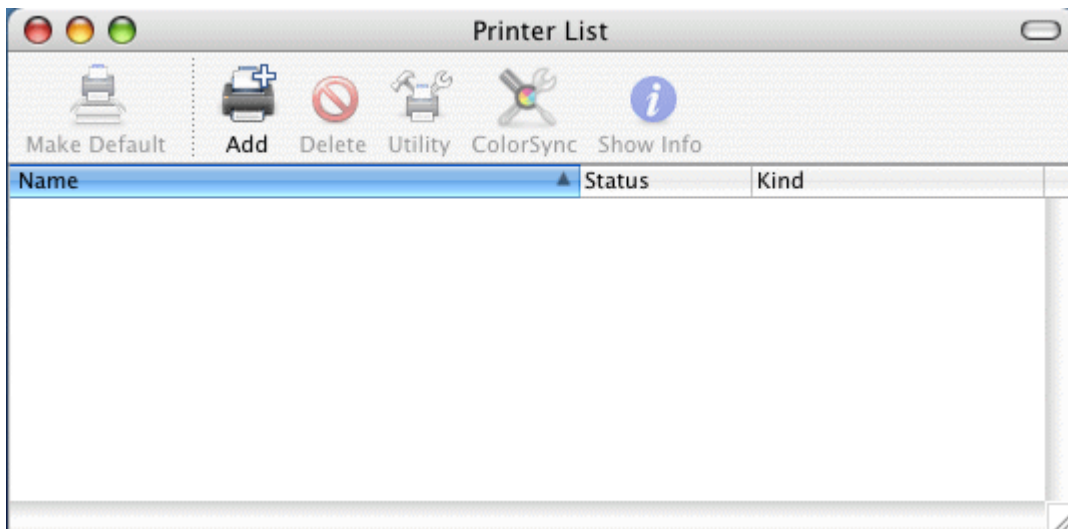
Creating a Printer

1. In the Finder on the system hard drive, open the "Applications > Utilities" folder.

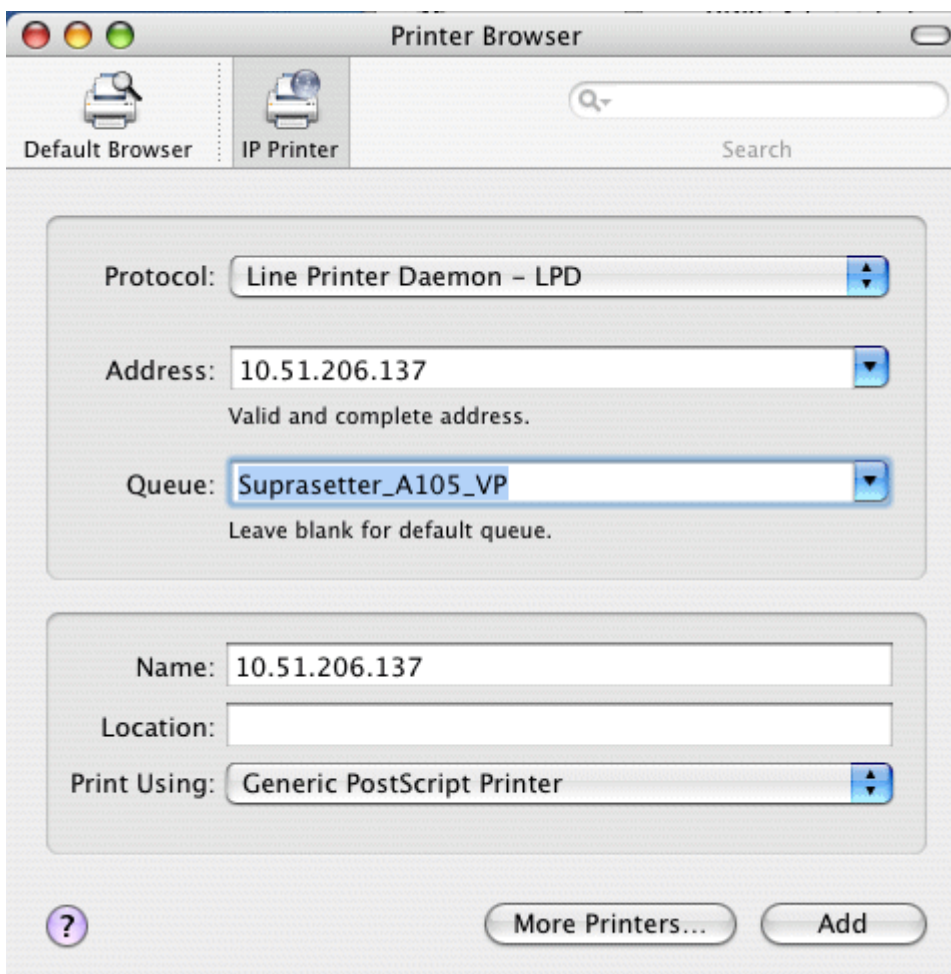


2. Start the "Printer Setup Utility".

Virtual Printer Setup at the DTP Computer

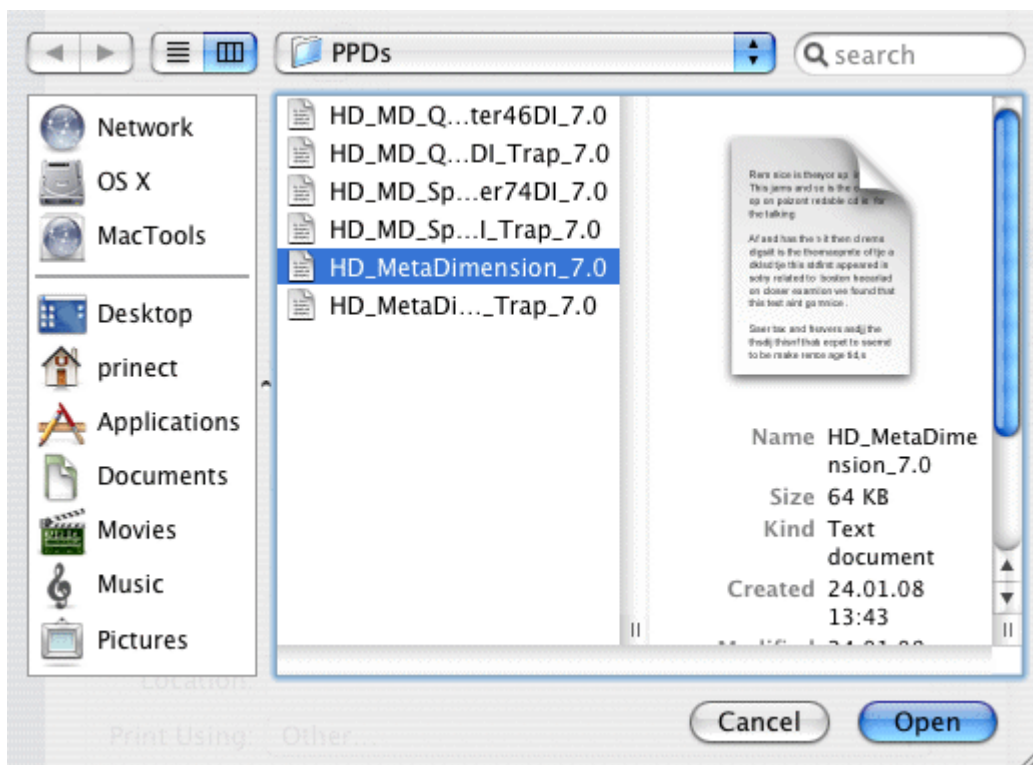


3. Click the "Add" icon. The "Printer Browser" dialog opens:



4. Select "Line Printer Daemon - LPD" in the "Protocol" list box.

5. Enter the IP number or the computer name of the MetaDimension server as the "Printer Address". To find out the IP address see the note in step 1 in [section "Map the MacTools Folder on a Macintosh", page 351](#). If you wish, you can select an IP address from a list box if you click on the list box button next to the entry field.
6. In "Queue Name" enter the name of the virtual printer that you have set up for Windows network access and would like to set up as the printer.
7. Select "Other" as the printer you want. A Finder dialog opens:



8. Open the "MacTools > PPDs" folder and select the PPD file that matches the selected output device (default imagesetter, Quickmaster DI or Speedmaster DI), whereby only one PPD with trapping option and one without trapping option are available for each.



Note: To decide which PPDs (with or without the trapping option) will be selected, take note of the following item: If the "InRIP Trapping" dongle option is not licensed for Prinect MetaDimension, the job may be aborted in the following cases:

- If InRIP Trapping is enabled in the printer driver of your DTP application (e.g. InDesign) and
- if a PPD is used with the trapping option and
- if the trapping functionality is enabled in the Output Plan.

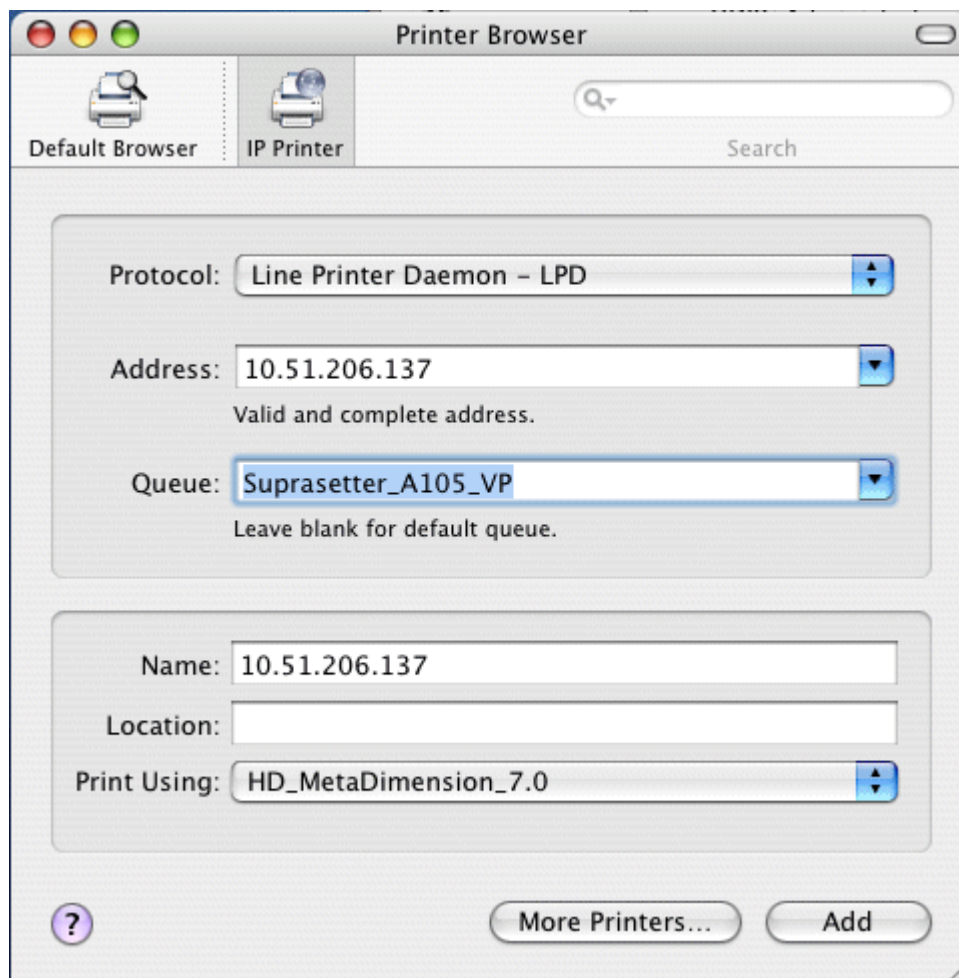
If a PPD without the trapping option is used in this case, a message displays at the start of job processing in Prinect MetaDimension pointing out that the "InRIP Trapping" option is not licensed. In this way, you are warned in time before any jobs are aborted.

Virtual Printer Setup at the DTP Computer



Note: If you would like to set up more virtual printers at a later date and need PPDs to do it, you can copy the "PPDs" folder on a local Macintosh hard drive. This way you will not have to map the MacTools folder of the MetaDimension server every time you want to set up a new virtual printer.

9. Confirm the dialog with "Select". The printer is now configured.



Procedure on the Windows PC



Prerequisites: In order to install a virtual printer in Windows, a virtual printer with an active "Windows Network" option must be installed on the Prinect MetaDimension server (see [section "Setting up the Virtual Printer as a Windows Printer \(Windows Queue\)", page 178](#)).

Installing PPD Files

1. Check whether a PostScript printer is already installed on your system. To do this, open the "Printers and Faxes" window with the "Start > Printers and Faxes" command in the Windows Start menu.
2. If a PostScript printer is not installed, double-click "Add Printer" in the "Printers and Faxes" window.
 - a. Select "My Computer" and click "Next".
 - b. Select "LPT1" and click "Next".
 - c. In the "Manufacturers" list, select "Apple" and in the "Printers" list "Apple Color LaserWriter 12/600" (Windows NT/2000/Server 2003) or "Apple Laser Writer" (Windows 95/98/ME) and click "Next".
 - d. Do not change the suggested printer name and answer the question, as to whether the printer is to be used as the default printer, with "No". Click "Next".
 - e. Select the "Do Not Release" option and click "Next".
 - f. Do not print a test page and click "Finish".
 - g. You are now prompted to insert the Windows operating system CD. If the installation is successful, you will see the "Apple Color LaserWriter 12/600" symbol in the "Printers" window. Leave the "Printers" window open.
3. Download the general printer driver installer from the Adobe home page at <http://www.adobe.com>. It will install the correct Adobe PostScript printer driver for the following Windows operating systems: Windows 95/98/ME, Windows NT and Windows 2000/XP.
4. Start the installer. Follow the installation setup, paying attention to the following items:
5. Click "Next" in the Welcome window
6. Accept the licensing agreement.
7. Select "Network Printer".
8. Look for the MetaDimension Windows printer you want on the MetaDimension computer and click "Next".
9. Do **not** select the printer as the default printer and do not print a test page. Click "Next".
10. Now check the 'restart my computer' option.
11. Your computer will be rebooted. This concludes installation.

When the output device has been configured, open the layout program with the document you wish to print out. Start printing after you have checked that all images or layout files and all required fonts are there, e.g. in Quark XPress, with the "File> Print" menu item. The print dialog box contains a number of options which you can use to control the output.



Note: If you use image data inclusion in Quark XPress, you must set the "OPI" option to "Exclude TIFF & EPS" in the "Quark XPress" section in the print dialog box. If you do not do this, image data inclusion will not work properly.

Virtual Printer Setup at the DTP Computer

When you click on the "Print" button, the printer driver generates the PostScript code for the print job. The data is transferred to the virtual printer on the MetaDimension computer and processed there.

On the Prinect MetaDimension computer, you can now monitor the processing of the job in the jobs view mode.

Workflows

You can use Prinect MetaDimension in various workflows. A few typical examples of workflow constellations will be presented in this chapter:

- Proofer Workflow
- Prinect MetaDimension with a Prinect Signa Station for the Imposition of Sheets
- PDF workflow
- Importing Delta Lists (Delta Flow)

Proofer Workflow

With Prinect MetaDimension, you can output print jobs both on a high-resolution output device and on a proofer (color and/or imposition proofer). In addition, it also has a so-called "Job Preview" function based on contone and halftone data. This function is used to view and measure the job data on the screen (CMYK/RGB color data, geometry). A proofer workflow can be configured in different ways:

- High-resolution output and proof output on the same Prinect MetaDimension system
- High-resolution output on one Prinect MetaDimension system and proof output on another Prinect MetaDimension system

Additional Interpreter for Proofing (optional)

If needed, you can enable a second proof interpreter for a proofer workflow (not available in a Prinect MetaDimension version where an imagesetter is connected directly). This option is advisable only for a combined proof and high-resolution output using Tiff-B export. With such jobs, the interpreter may be so busy with proofing that it is not able to deal with a high-resolution output for a while. The proof job may have to be canceled and repeated at a later period if a high-resolution output is now urgently required. Vice versa, a running high-resolution output can block the system for an urgent proof job.

In these cases, a second interpreter makes sure that processing a proof and a high-resolution output do not block each other.



Note: The use of a second interpreter for proofing does not automatically increase the overall throughput of your Prinect MetaDimension PC. The throughput capacity depends primarily on the hardware equipment of your Prinect MetaDimension PC. The question of whether a second interpreter enables a higher overall throughput is defined mainly by the nature of the processed jobs.

Color / Form Proof

In the case of a proofer workflow, a proof is generated before output on the plate or film imagesetter in order, for example, to check the correct color reproduction of the pages of a print job (color proof). Special color printers, which can print individual pages, are used for the color proof.

Workflows

You need a form (imposition) proof to check the correct positioning of the elements on a sheet. Some form proofers are able to produce color proofs with a high color accuracy. These devices let you use the proofs both as imposition proofs and color proofs at the same time.

You can install a high-resolution output device and one or several proofers on a Prinect MetaDimension server. To do this, select the relevant proofing options (Color Proof Pro, Proofing Engine Manager) during installation of the Prinect MetaDimension software.

Automatic Proof Workflow

You can configure an automatic proof workflow for an imagesetter and a proofer. You must set up a special Output Plan template for this workflow and then activate it in a virtual printer. In this Output Plan template you then parameterize the imagesetter with all the necessary options. When you activate the "Proof" option (refer to [section "Proof", page 264](#)), you can select one of the installed proofers in the "Proofer" list box.

Select a proofer. You can now set various proofer parameters. If you select a color proofer, it is essential that you enable the Proof Color Management function.

You can determine the job processing behavior in the automatic proofer workflow in "Action after proof" in the "General Settings" section. The following options are available:

- "Stop after proofing":

Only one proof is printed. After that, the print job stops. For output on the imagesetter, you have to print the job again via another virtual printer. The automatic proof workflow is not active when this option is selected. If you select this option, some parameters of the output device (e.g. the "Exposing Window" if APP is used) are taken into account in proofing. A single proof lets you determine in advance whether or not potentially critical jobs would be output correctly to an output device at all.

- "Wait after the proof":

Job processing is stopped after the proof output. You can then check the proof and, if necessary, prevent the exposure by aborting the job. If the proof is ok, you can start the output on the imagesetter by clicking on the Start button.

- "continue":

Exposure is started directly after proof output. You can select this option if you need the proof for archiving purposes only or something similar and if you are sure that imaging matches the requirements.

You can only set up the automatic proofer workflow for one proofer. If you need both a color proof and a form proof, you can either use a color-compatible form proofer as a proofer or you can set up one of the proofers in the automatic proofer workflow and create a separate virtual printer for the second proofer. To output to this device, you have to output the job again at the DTP workstation via this virtual printer.

Job Preview ("Softproof")

You can also install a software proofer in the automatic proof workflow. To do this, set up the "Preview" section in the Output Plan for a contone proof (see [section "Preview", page 263](#)) or the "Halftone Soft Proof" section (see [section "Halftone Soft Proof", page 263](#)). This proofer creates a preview image for every page of the processed job. You can view these preview images in the Prinect MetaDimension Printmanager by opening the respective job in the "Jobs" section and going to the "Preview / Color" or "Halftone Soft Proof" tab.



Note: When using softproof options, it is presently not possible technically to have a true-color screen preview that meets the quality demands of a prepress workflow.

You can generate the contone preview images in three resolutions:

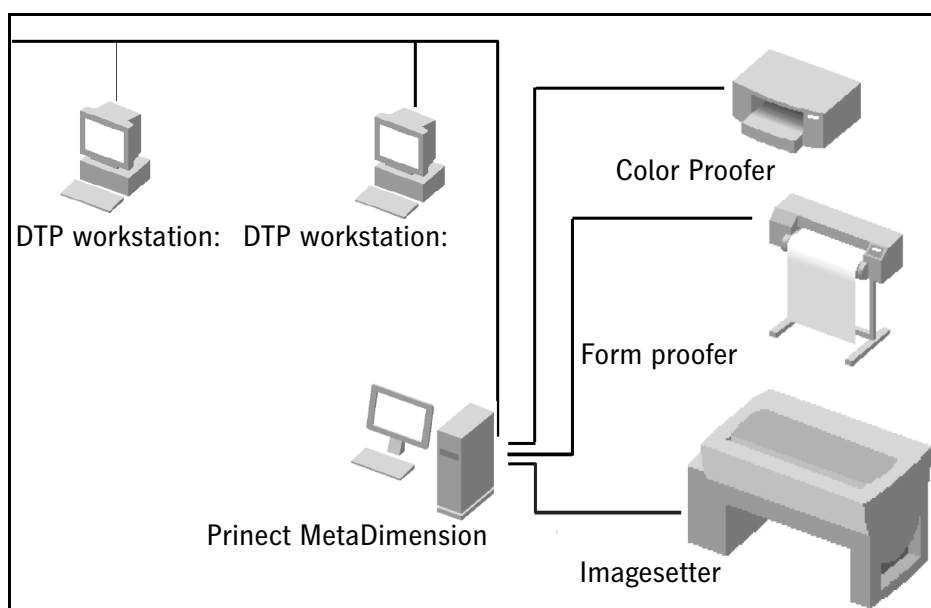
- a screen preview with a resolution of 72 dpi
- a screen preview with a resolution of 150 dpi
- a preview with a resolution of 300 dpi. With this resolution, you can view, for example, each of the trap lines if your jobs were processed with the "Trapping" option.



Note: You can find detailed information about the job preview or the halftone softproof in [section "Preview / Color Tab", page 69](#) or in [section "Halftone Soft Proof tab", page 89](#).

High-Resolution Output and Proof Output on the same Prinect MetaDimension System

One or several Output Plans and virtual printers are set up, as required, for each output device. Install the virtual printers for both the proof and imaging at the DTP workstation (see [section "Virtual Printer Setup at the DTP Computer", page 351](#)).



Workflows

First of all, run a color proof, for example. Check the result and, if necessary, repeat the proof output using different output parameters. To do so, you can either configure the automatic proof workflow (see [section "Automatic Proof Workflow", page 360](#)) or control the color proofer via its own virtual printer.



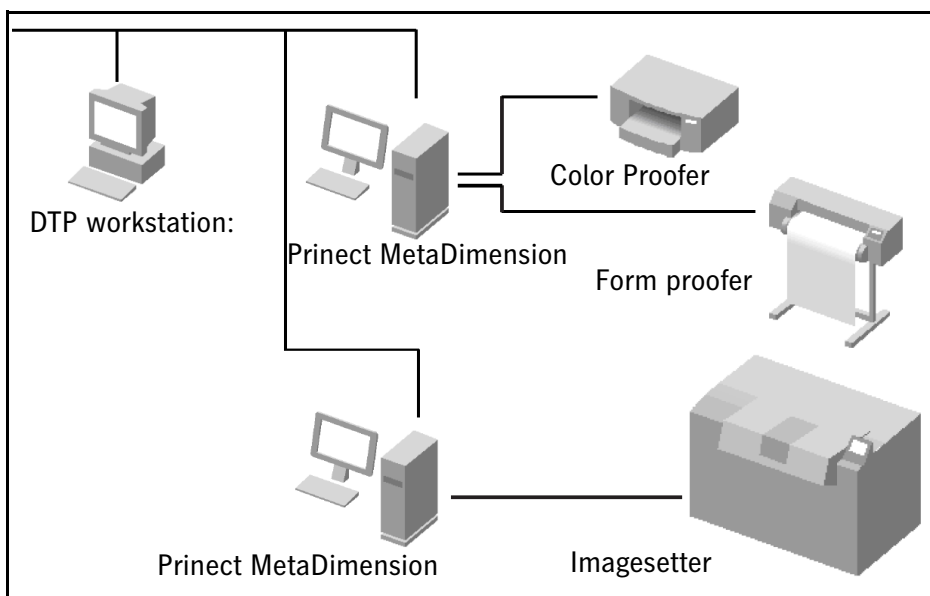
Note: When you set up a color proofer, you must make sure that the Prinect MetaDimension Color Management functionality is enabled in the Output Plan. You should use a custom ICC profile for the color proofer that you can create using the "Prinect Profile Toolbox" software, for example.

You can then perform a form proof, if required, and check the sheet layout and proof again, if necessary. If the proof result is ok, you can start imaging by printing on the virtual printer for the imagesetter or continue the paused job in the automatic proof workflow.

You can also split the output time-wise by, for example, carrying out proof outputs during the day and making any necessary corrections during the day shift. You can run imaging in the evening and during the night only by setting the job handling in the Prinect MetaDimension Printmanager ("Administration > Configuration > Virtual printer > Start job between"). All jobs which are output during the day on a virtual printer which is set up for imaging are then collected on the Prinect MetaDimension server and are only exposed at the set time. You should not use the automatic proof workflow for this mode of operation.

High-Resolution Output and Proof Output on a separate Prinect MetaDimension System

If you use your platesetter or film imagesetter to capacity and at the same time output proofs frequently, it is advisable to proof on a second Prinect MetaDimension (proof) workstation. This separates the proof output from the imagesetting process. Set up output plans and virtual printers as required on the respective MetaDimension system and install the virtual printers on the DTP workstations (see [section "Virtual Printer Setup at the DTP Computer", page 351](#)).



You can now fully utilize both the proofer and the imagesetter without having to interrupt the image-setting process for a proof, for example. If, in such a constellation, you do not install one of the proofers on the same Prinect MetaDimension server on which the imagesetter is also installed, then you cannot use the automatic proof workflow.

ROOM Proof Workflow

If you use the TIFF-B Export functionality to control an imagesetter using, for example, a Prinect Shooter, you have the option of using a special proof workflow.

This calculates the proof data from the screened TIFF-B data without having to repeat the RIP stage for proofing. In this process, the TIFF-B data are descreened, converted to contone images and output to the proofer. This process is known as "ROOM" Proof (**RIP Once Output Many**). This workflow is set up in the Output Plan (see [section "Proof", page 264](#)). Because the ROOM Proof workflow is based on TIFF-B data, it only works in cases where TIFF-B files were generated, namely in TIFF-B export. The ROOM Proof workflow is not designed for DI presses although such presses also need TIFF-B data as the input format.

This workflow is extremely reliable in providing a correct preview of the imaged result. This is because the ROOM Proof data are calculated from the high-resolution TIFF-B data. This reliability primarily concerns the properties of the ROOM Proof as an imposition proof. True-color proofing is not guaranteed with ROOM Proof. One of the reasons is that the TIFF-B data can already have information from process calibration and/or linearization.

ROOM Proof with an Additional Prinect MetaDimension Proofing Station

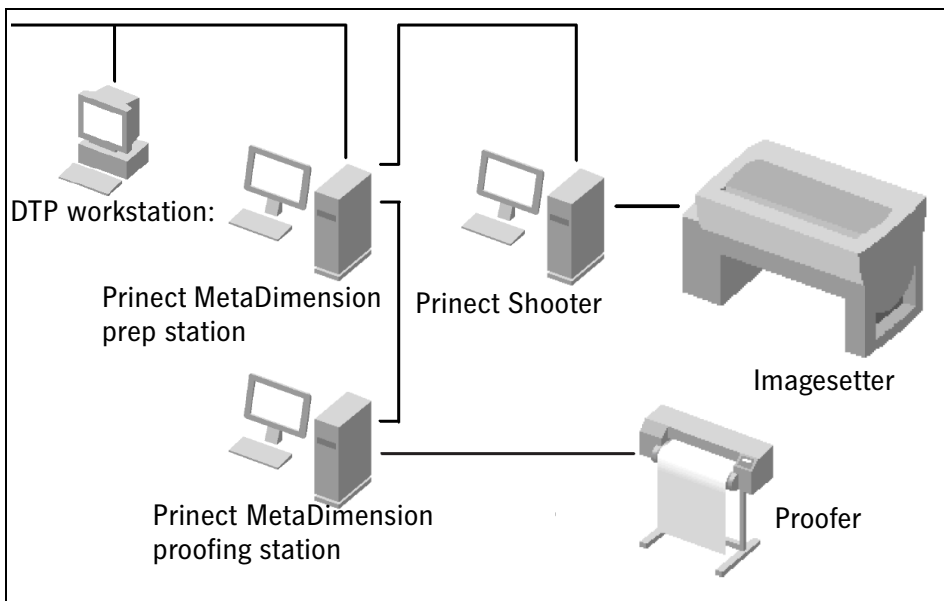
You can also run a ROOM Proof workflow with an additional Prinect MetaDimension proofing station. In this workflow, the TIFF-B data for the ROOM Proof and for imaging using, for example, a Prinect Shooter, are generated at the Prinect MetaDimension "prep station". The TIFF-B data are sent to the input hot folder of a Prinect MetaDimension proofing station, descreened there and output to the connected proofer. The TIFF-B data can be output to the imagesetter if you are satisfied with the proof results.



Prerequisites: The following licenses must be enabled for this workflow:

- At the Prinect MetaDimension prep station: a TIFF-B Export license matching the format.
- At the Prinect MetaDimension proofing station: a ROOM Proof license (a TIFF-B Import license has been enabled automatically).

Workflows



Configuration

1. First set up an Output Plan at the Prinect MetaDimension proofing station and a virtual printer for the connected proofer. It is important that you create a hot folder for this virtual printer (see [section "Setting Options for Virtual Printers", page 171](#)).



Note: When the TIFF-B Import license and the ROOM Proof license are enabled at the proofing station, Prinect MetaDimension recognizes whenever TIFF-B data are filed in the input hot folder. The TIFF-B data are descreened automatically and converted to contone data.

2. You must set up an Output Plan for a TIFF-B export device at the Prinect MetaDimension prep station. Enable the "Proof" option and set "Proof high resolution bitmap on ProofWorkstation" in the "Proofer" list box.

The screenshot shows the 'Proof' dialog box. The 'Proofer' dropdown is set to 'Proof high resolution bitmap on ProofWorkstation'. The 'Proof based on high resolution bitmap' checkbox is checked. The 'Proofer Parameter' section includes fields for 'Size', 'Material Size', 'Paper Name', 'Resolution', 'Ink', 'Tray', and 'Profile'. The 'Print borderless' checkbox is unchecked. The 'Print area' is set to '0.0 x 0.0 pts'. The 'Proofworkstation-Hotfolder' is set to '1e-qa207v5s\Epson Stylus Pro 7600_VP_HF'. The 'Use Visual Correction' checkbox is unchecked. The 'Overwrite existing files' checkbox is unchecked. A 'Browser...' button is next to the hotfolder field.

3. In "Proofworkstation Hotfolder", type in the (UNC) path to the hot folder of the virtual printer of the proofing station set up in step 1 or set the path with "Browser". The other proofer parameters are disabled. They are set automatically for the ROOM Proof workflow.

The screenshot shows a configuration window for the ROOM Proof workflow, divided into two main sections: General Settings and Page Size Settings.

General Settings:

- Action after proof:** A dropdown menu set to "wait after proofing".
- Supervised Output:** A checked checkbox.
- Proof Directly Without Scattering:** An unchecked checkbox.
- Copies:** A text input field set to "1".
- Page Proof:** An unchecked checkbox.
- Rotation:** A dropdown menu set to "None".
- Mirror Print:** An unchecked checkbox.
- Two Side Printing:** A dropdown menu set to "Off".
- Cut after page:** A checked checkbox.
- Antialiasing:** A dropdown menu set to "1x1".
- Print Color Bar:** An unchecked checkbox.
- HD Proof / User Defined:** Radio buttons, with "HD Proof" selected.
- File:** A text input field with a "Browser..." button next to it.
- Use Colormatching for the Color Bar:** A checked checkbox.

Page Size Settings:

- Page size matching:** Radio buttons for "Final Output" (selected) and "Document".
- Page Size Policies:** A dropdown menu set to "About the Job".
- Crop Marks:** An unchecked checkbox.
- Center Output:** An unchecked checkbox.
- Allow Automatic Rotation:** An unchecked checkbox.
- Tiling Overlap:** A text input field set to "2.54" with a unit dropdown set to "cm".
- Center Sheet:** An unchecked checkbox.
- Back:** Text input fields for "0.0" x "0.0".
- Shift Front:** Text input fields for "0.0" x "0.0" with a unit dropdown set to "cm".

4. In "General Settings", you can set in the "Action after proof" list box whether the imaging job will be paused, continued or stopped after proofing. Generally, the imaging job is paused ("wait after proofing") so that the proof can be examined. You can continue with the job if you are satisfied with the proof. Set "stop after proof" if you only want to proof your job and not output it to the imagesetter. The job is then canceled at the prep station after proofing.

Configuration of your ROOM Proof output is now finished.

You can find more information about the ROOM Proof workflow in [ROOM Proof, page 273](#).

ROOM Proof Workflow in a Prinect Integration Manager Neighborhood

The ROOM Proof workflow is set up fully by the Prinect Integration Manager (in a workflow sequence) if Prinect MetaDimension is integrated as an engine in a Prinect Integration Manager neighborhood.

More details can be found in the "Prinect Integration Manager - User's Guide/Workflow".

Prinect MetaDimension with a Prinect Signa Station for the Imposition of Sheets

Prinect MetaDimension can be used in conjunction with the Heidelberg Prinect Signa Station. You can choose between two workflow variants:

- Parameterizing the output options in the Prinect Signa Station user interface
- Setup of the output options in the MetaDimension Output Plan Editor and loading the Output Plan setting in the Prinect Signa Station user interface

When you work with the Prinect Signa Station, we recommend you to set the output options in the Prinect Signa Station user interface. When you work with the SignaStation 9, you must use the Output Plan Editor.

Setting the Output Parameters in the Prinect Signa Station Software

In this workflow the imposition or assembly jobs are generated on the Prinect Signa Station.

In the Prinect Signa Station you have the option in the output parameter set editor of defining corresponding parameters and selecting the MetaDimension workflow.

Exporting / importing device-specific settings

If you want to output on a virtual printer from the Prinect Signa Station, the Prinect Signa Station needs information about the output device. You can call up this information in the MetaDimension browser user interface in the form of an "IPR file" from the connected output device and save it on the Prinect Signa Station PC.

To create an IPR file, go to "Configuration > Preferences" in the browser user interface. In this section, click "Save" next to "Create IPR". A dialog displays where you can select the device in "Devices" for which an IPR file will be created. In the lower part of the window, you define where the IPR file will be filed and the name of the file. Save the IPR file on your Prinect Signa Station computer. You can generally retain the file name that is suggested.

If you want to use the IPR file with the Prinect Signa Station software, store it in folder "C:\Documents and Settings\All Users\Application Data\Heidelberg\PrinectSignaStation_1\Ipr_Qry" (with C: being the system drive of the Prinect Signa Station PC).

Hierarchy of Output Plans for the Prinect Signa Station Workflow

In the Prinect Signa Station workflow with Prinect MetaDimension, up to three Output Plans or output parameter sets per output device can influence the job processing function:

- The parameter set created with the Prinect Signa Station Output Parameter Set Editor.
- The Output Plan defined in Prinect MetaDimension, which is assigned to the controlled virtual printer.
- The default Output Plan, which is assigned to every output device in Prinect MetaDimension.

The settings for these output parameter sets can contradict each other in some cases and have different parameters. In order to achieve a clear definition of the output parameters, the output parameter sets have a fixed hierarchy.

- The Prinect Signa Station output parameter set has priority over all other Output Plans that influence job processing.
- The Output Plan which is assigned to the virtual printer has priority over the default Output Plan.

In general, the first output parameter set in the workflow to have an influence on the jobs has priority over all other subsequent output parameter sets. Parameters that were set in the Prinect MetaDimension Output Plan and are not available in the Prinect Signa Station Output Parameter Set Editor also affect job processing.

Example:

If, for example, the "Wrong Reading" parameter in the Prinect Signa Station Output Plan is set to "Off" in the "Printing Mode" section, it cannot be switched to "On" again by the corresponding parameter in the Output Plan of the virtual printer, as the output parameter set has priority over the Output Plan of the virtual printer.

You can find more information about the hierarchy of output parameter sets in the section [Priorities for the Setup of Output Settings, page 219](#).

Output using a Prinect Signa Station Output Parameter Set

If you defined an output parameter set on the Prinect Signa Station and output the sheet via the output inspector on Prinect MetaDimension, the Prinect Signa Station parameter set is sent together with the PostScript or PDF code for the job to the virtual printer. The output parameter set is evaluated by Prinect MetaDimension and is applied to the job.

PDF workflow

In addition to jobs in PostScript format, Prinect MetaDimension can also process PDF data. The PDF format has established itself as a universal data exchange format for print jobs in the prepress sector. You can use either the "Configurable PostScript Interpreter (CPSI)" or, optionally, the "Adobe PDF PrintEngine" for the PDF workflow. For more information about the PDF PrintEngine (see [section "Adobe PDF PrintEngine \(APPE\)", page 28](#) or [section "Rendering", page 225](#)).

PDF Workflow Procedure

The basic procedure for the PDF workflow using Prinect MetaDimension is as follows:



Prerequisites: Adobe Acrobat has been installed on the DTP workstation.

1. Setup of the Acrobat Distiller:

You must configure the Acrobat Distiller as a preliminary for using the Acrobat Distiller to create PDF data (see [section "Configuring the Acrobat Distiller", page 371](#)). You can save the settings under their own name in the Distiller.

2. Printing from the DTP application into a PostScript file using the Adobe PDF printer driver or the corresponding PPD (Macintosh).
3. Starting the Acrobat Distiller and converting the created PostScript file into PDF format.
4. If necessary, further processing of the PDF file using Adobe Acrobat and appropriate plug-ins.
 - If necessary, perform trapping offline.
 - If necessary, check using a Preflight program.
5. Set-up of a virtual printer with a hot folder on Prinect MetaDimension.
6. Output to Prinect MetaDimension via a hot folder.

What is the PDF Workflow needed for?

The PDF format in the meantime has become a new standard document format in the prepress workflow. The PDF format is very reliable for processing and output because of its embedded fonts and images and the means of compression it offers. In contrast to PostScript, PDF is not a "programming language", and consequently there is much less risk of faulty processing by commands in the PostScript code that do not match the workflow. In particular, the PDF/X format is extremely reliable for output (see [section "PDF/X", page 286](#)). The workflow has even more benefits, e.g. when processing transparent elements (see also [section "Adobe PDF PrintEngine \(APPE\)", page 28](#)) if you use the "Adobe PDF PrintEngine" for rendering that you can install as an option.

Not only that, the PDF format has benefits when exchanging print data between differing systems and locations and for archiving print jobs.

If you create the print job data offline at the DTP workstation, e.g. as a customer without your own output facility, or if you do not yet know on which devices (imagesetter, proofer) and with which settings the final output is to be performed, PDF format is a good exchange format for print data. You can generate a PDF document at your DTP workstation and, for example, send it to a shop with imaging facilities for printing (via data carrier, e-mail, FTP server, etc.).

If you make the right settings on creating the PDF document, you do not have to worry about whether or not all necessary fonts, all integrated images, etc. are available during imaging. PDF format works with compressed data, which means you can include all necessary data in the PDF document and still have files which, thanks to their size, are easy to send or archive.

If you have PDF-based offline trapping software (e.g. Prinect Trap Editor) at your disposal, you can use it for trapping. In this case, the PDF file is then device-dependent.

What Must I Remember?

In order to use Prinect MetaDimension for processing PDF print jobs with a high output reliability, you should observe a few points:

- If possible, create PDF documents using the Acrobat Distiller, as the PDF writer and some Free-ware tools are not suitable for the Prinect MetaDimension PDF workflow.
- If possible, use the Adobe PDF printer driver (or the PPD) to create the PostScript files
- Do not use the Jobstream software (no longer ships with Prinect MetaDimension).
- Only create composite jobs
- Fully embed all fonts
- Embed all images (if possible, avoid using OPI)
- If necessary, embed all necessary color profiles for Color Management
- Do not make any settings relating to a special output device (e.g. screen settings)
- Edit PDF jobs with MetaDimension in the hot folder mode
- Use Preflight software or Acrobat Preflight functions to check your output

Using the Acrobat Distiller

PDF files can be created using different basic methods:

- Creating PostScript files ("Print to file") and subsequent processing using the Acrobat Distiller
- Printing from an application using the Adobe PDF Writer printer driver or similar applications of other manufacturers.
- Saving in PDF format using the Export function of some applications (Adobe Illustrator, Adobe InDesign, Macromedia Freehand, etc.)

Out of these options, you should only use the first one, as far as possible, namely creating a PostScript file and then converting it into PDF format using the Acrobat Distiller. It is possible that Prinect MetaDimension cannot correctly process the PDF files created using the other methods or that they are not suitable for prepress. You can use the PDF Maker which is available for Microsoft Office products as this software uses the Acrobat Distiller to create PDF files.

Creating the "right" PostScript Code

In order to create a safe and portable PDF format, you should only use the Adobe PDF printer driver (Windows) or the Acrobat Distiller PPD (Macintosh) to create PostScript files. Using this printer driver or PPDs rules out the use of the Jobstream software.

Only create Print Jobs in Composite Format

When you use the PDF workflow, you should only create composite print jobs, i.e. you should disable all separation options in your DTP application when printing. If you have already got separated job data, which you cannot create anew, you can use special Acrobat plug-ins, with which you can convert separated print data into composite data. If you output through a Prinect Integration Manager, you can use the "Recombiner" engine to convert separated data into composite jobs.

In the PDF workflow the color separation is only performed as an InRIP separation by Prinect MetaDimension. The virtual printer or hot folder must be configured accordingly (Output Plan settings: automatic color detection also of spot colors and suppression/substitution of spot color separations).

Embed all fonts

You should enable the "Embed all fonts" option in the Acrobat Distiller settings. This ensures that all the required fonts are available on the printer.

Embed all images

In Prinect MetaDimension you can use the OPI image data inclusion (see [section "OPI - Image Data Inclusion \(not with PDF Print Engine\)", page 331](#)). In principle, this option also functions in the PDF workflow, however the OPI image data inclusion function always requires that the RIP has access to the high-resolution image data and that the references to the high-resolution image data are integrated into the PDF data when a print job is created. For this purpose you should activate the option "Process DSC comments" in the distiller settings in the "Advanced" tab under "DSC" and here activate the options "Preserve EPS information from DSC", "Preserve document information from DSC", and "Preserve OPI comments".

Workflows

As the PDF workflow is intended to be an exchange format between different work environments, the requirements of OPI image data substitution contradict the demand for universal interchangeability. You should therefore only use OPI image data substitution within a work environment in which the network constellation between DTP workstations and the OPI server (Prinect MetaDimension) is fixed.

In the PDF workflow, you should therefore integrate all necessary images in a high-resolution format into the PDF jobs. As the Acrobat Distiller has the option of compressing images and graphics, the resulting PDF file sizes are kept within reasonable limits. For example, JPEG 2000 images can be highly compressed and embedded without any loss of data.

Color Management in the PDF Workflow

If your print jobs contain color objects, which are prepared for true-color output, you should embed all necessary color profiles (ICC profiles), which describe the source color space, in the PDF files (Acrobat Distiller settings, see [section ""Color" section", page 378](#)). The color profiles are used in Prinect MetaDimension, configured accordingly in the Output Plan either for printing or proofing.

Avoid device-specific Output Settings

In order to retain the universal interchangeability of PDF files, you should avoid device-specific output settings, for example, specifying certain screen systems or resolutions, when you generate PDFs. For output on Prinect MetaDimension, you can make these settings in the configuration for the virtual printer / Output Plan which is used.

PDF Output via Prinect MetaDimension in the Hot Folder Mode

In Prinect MetaDimension, you can use the Hot Folder mode to output PDF jobs. In this mode, you print to a PostScript file from your DTP application. Then you generate a PDF file from it with Acrobat Distiller. You then transfer this PDF file to a Prinect MetaDimension hot folder for output.

Acrobat Distiller Versions

You are advised to use Acrobat Distiller Version 4.0 or higher. The following description is based on version 7.0.

Use Preflight Software to Check Your Output

In order to ensure a high output reliability in the PDF workflow, you should use Preflight software to make a preliminary check of the print job data. To do so, you should use preflight software, Enfocus PitStop, for example. For more information on working with PitStop, refer to the PitStop documentation. Enfocus PitStop requires Acrobat Standard or Professional. This software cannot run with Adobe Reader.

You should also not use Adobe Reader for a visual output check because it may not give a correct preview to check. Adobe Reader 6.0 does not support an overprint preview. Consequently, overprint in the documents may not be recognized correctly. This can result in documents in Adobe Reader appearing to be correct whereas they are actually faulty when output. For this reason, we strongly recommend that you use Acrobat Standard or Professional to check your output.

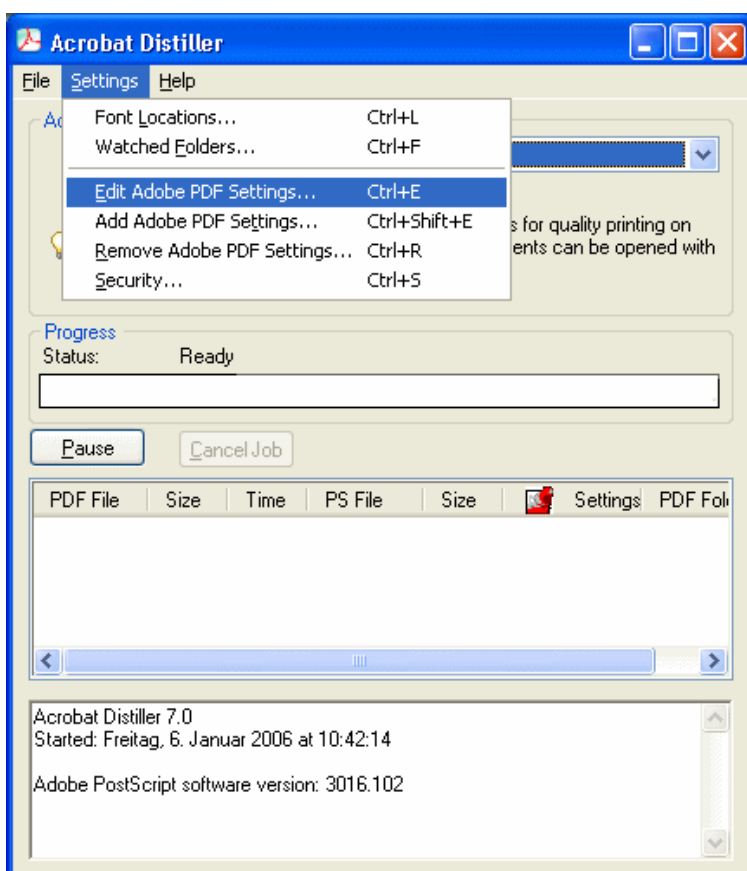


Note: A true-to-print preview of the printed result is guaranteed only with a proof set up in Prinect MetaDimension or with a softproof preview (see [section "Preview / Color Tab", page 69](#) or [section "Halftone Soft Proof tab", page 89](#))!

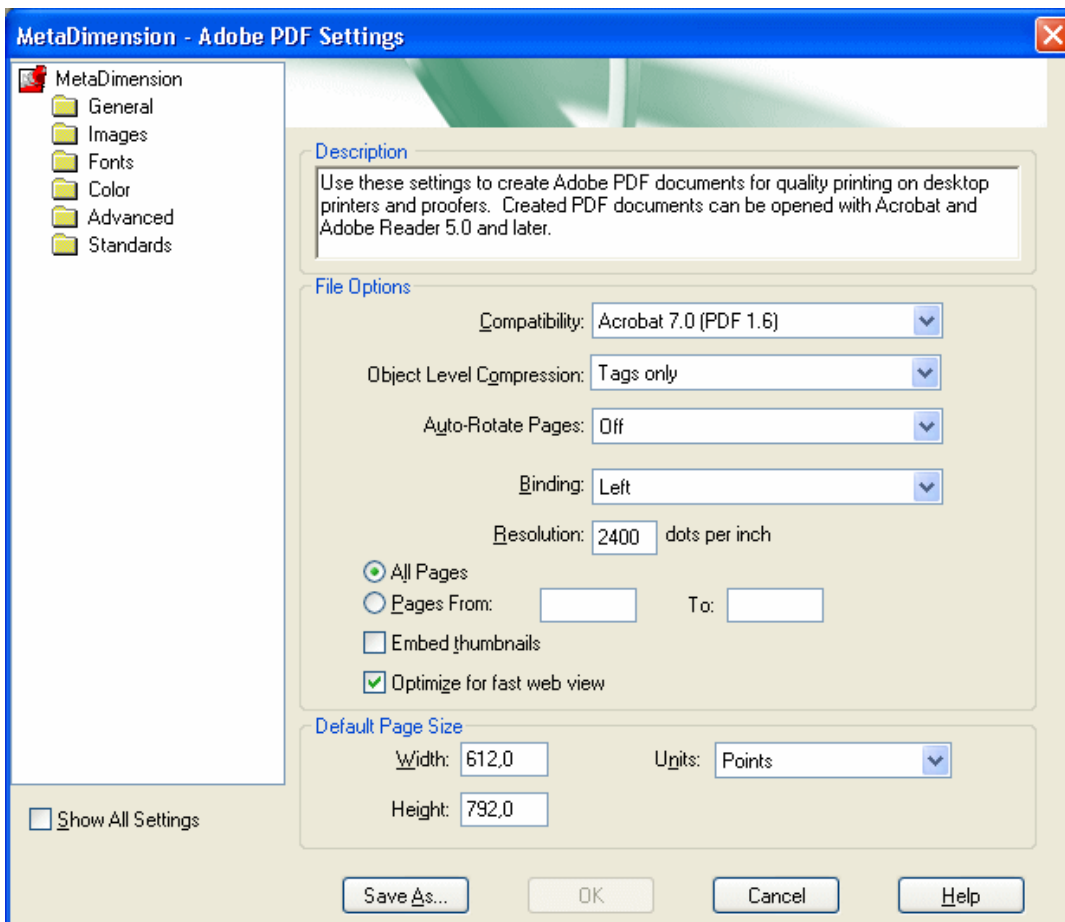
Configuring the Acrobat Distiller

Recommendations will be made below for the configuration of the Acrobat Distiller in order to ensure reliable output in the PDF workflow when using Prinect MetaDimension. The settings for the Windows version of Acrobat 7.0 are shown as an example. If you use the Macintosh versions, the recommended settings apply accordingly.

To configure your Acrobat Distiller, you can first select a setting in the "Default Settings" list that matches your output target as far as possible, e.g. the shipped setting "High Quality Print". To customize these Acrobat settings, select the "Settings > Edit Adobe PDF Settings" menu item.



The "Adobe PDF Settings" dialog opens that displays as follows in Acrobat 7.0:



You can switch between the different setups at the left of the "Adobe PDF Settings" dialog:

- General
- Images
- Fonts
- Color
- Advanced
- Standards



Note: All other existing Acrobat PDF settings will be shown in this dialog if you check the "Show All Settings" option.

"General" section

Make the following settings:

- You should deactivate the "ASCII Format" (only in older Acrobat versions) option as otherwise unnecessarily large PDF files are created. The PDF data are generated in binary format if this option is disabled.

- Set the Acrobat format you want in the "Compatibility" list box. The settings for Acrobat 7.0 are described in the following. If you set the compatibility to older Acrobat versions, some options will not be displayed or used differently.
- Objects in a PDF file that cannot be compressed singly are grouped to streams and compressed if you enable "Object Level Compression". Structural data such as bookmarks are compressed in the PDF document when you select the "Tags only" option. In this case, you cannot use structural data in older Acrobat versions (version 5.0 and older). You can set this option to "Tags only" for a prepress workflow.
- You should switch off the "Auto-Rotate Pages" option (from Distiller 5). As the PDF data should be created as device-independent, the rotation of pages is configured, if necessary, only for output in the Prinect MetaDimension Output Plan.
- With the "Binding" setting (from Distiller 5), you specify whether the document is to be bound left or right during further processing. This option is intended for automatic workflows, in which information about further processing after printing is already determined on creating the document ("CIP3"). If you are not using such a workflow, this setting does not have an effect.
- The "Resolution" parameter defines the standard resolution of the Distiller. If the PostScript code which is to be processed does not contain any information about the resolution, the standard resolution is used. As a result, PostScript files, for example, which are created with Prinect MetaDimension do not contain any details about the resolution. The resolution specification has a big influence on the quality of the output.

As a high value only slightly increases the size of the PDF files, you should select a value which corresponds to the highest output quality. For an output using Prinect MetaDimension, this is generally the resolution of the connected imagesetter, i.e. 2400 / 2540 dpi, for example.

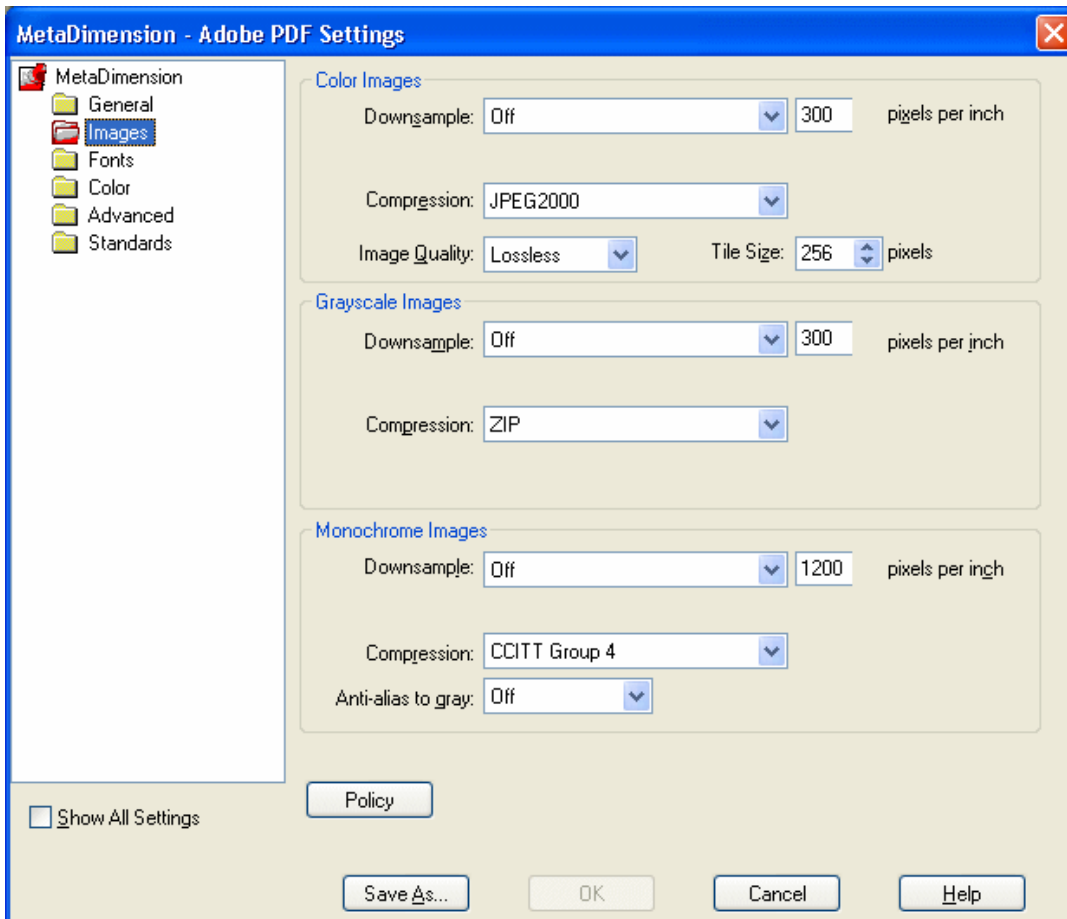
- You can leave the settings for the page range ("All" - from Distiller 5) as they are unless you need special settings.
- Small thumbnails of the pages are created when you check the "Embed Thumbnails" option. These icons make it easier to navigate in Acrobat or in the Adobe Reader. They do not affect the printing process.
- Check the "Optimize PDF" or "Optimize for fast web view" option. This removes redundant elements from the PDF file. In general, this optimization leads to smaller PDF files. In the case of complex documents, the processing time of the Distiller can increase quite substantially when the optimization function is active.
- "Default Page Size" section: You can define a default paper size in the input boxes "Width" and "Height". This default page size is used for the generated PDF file if no page size is defined in the original file. Normally, PostScript files contain information about the page size, unlike EPS files that have a bounding box size but not a page size.

"Images" section

A big advantage of the PDF format is the compactness of the code. You can greatly influence the size of the ensuing PDF files through the settings in the "Images" or "Compression" tab. As a high compression could mean a loss of quality, you should select these settings with great care. For a high-

Workflows

resolution output using Prinect MetaDimension, you are advised to deactivate Resampling and JPEG compression for color and gray scale images. If the PDF files get too big for certain purposes and require compression, you should decide on a low compression rate in favor of higher quality (preference should be given to using the lossless JPEG2000 or ZIP compression function).



Color Images/Gray Scale Images:

The criteria for image compression are more or less the same for color images and gray scale images.

- Resampling:

The "Bicubic Downsampling at" option provides optimum quality when compressing image data. The desired target resolution (in this example: 300 dpi) specifies which resolution the compressed images should have after compression. To reduce losses in quality, policies are specified in the Distiller according to which the resolution is only reduced when the resolution of the images in the PostScript code of the job is at least 1.5 times that of the target resolution. In this example (300 dpi are set), an image must have a resolution of at least 450 dpi for the compression function to be applied. This option should only be used with caution as it can lead to a loss of quality. However, images which have been scanned at too high a resolution can be optimized at a set value of 600 dpi.

- **Compression:**

In this box, you can choose between "ZIP", "JPEG", "Automatic (JPEG)", "JPEG 2000" (as of Acrobat 6) or "Automatic (JPEG 2000)" (as of Acrobat 6).

- **ZIP** The "ZIP" option offers the lowest compression, but is loss-free. We recommend this option if you do not need a particularly high compression.

Quality: For ZIP compression you should select "8-bit" quality to ensure highest quality (only Acrobat versions < 6.0).

- **JPEG** In JPEG compression, image data are modified by the compression algorithm. The greater the compression, the more they are modified and, consequently, the quality of the compressed images drops. You can set the quality in "Image Quality" if you select JPEG compression. If you need JPEG compression for output via Prinect MetaDimension, you can get satisfactory results in most cases with the "Maximum" or "High" image quality settings (this depends on the structure of the images). You should not use JPEG compression on images that have a lot of contrast.
- **JPEG 2000** JPEG 2000 compression is available as of PDF version 1.5 (as of Acrobat 6.0). This mode also allows lossless compression, like ZIP. Compared to ZIP, JPEG 2000 works with noticeably higher compression rates and, consequently, generates smaller PDF files. You must set "Lossless" as the image quality to get lossless compression.

Image size: You can set the tile size for image data if you use JPEG 2000 compression. This lets you divide large images with very high resolution into smaller image parts. Later, decompression can be speeded up considerably because you only have to unpack the tiles you need and not the entire image.



Note: At present, Prinect MetaDimension supports JPEG 2000 compression only for color images. Problems can occur in some DTP applications in the case of grayscale images.

- **Automatic (JPEG or JPEG 2000)** You should not select "Automatic" as you cannot be sure with this setting that the Distiller makes the right decision.

Monochrome Images:

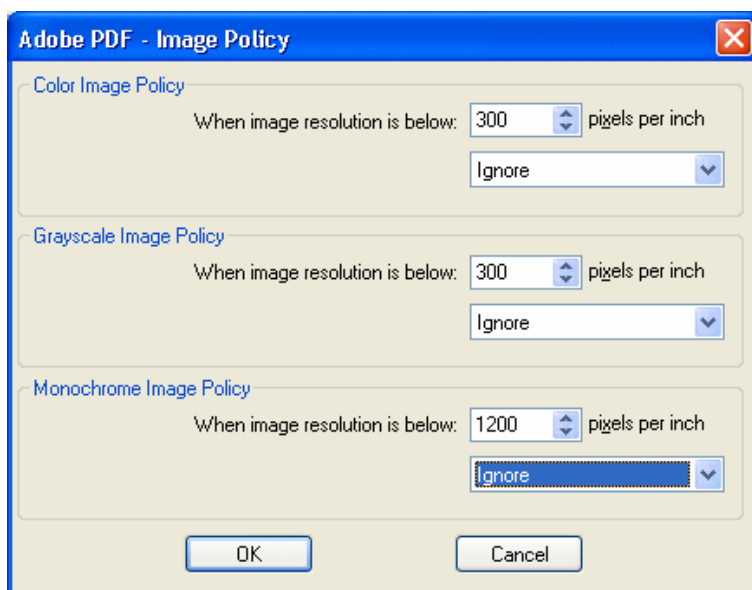
All available processes for compressing monochrome bitmap images are completely loss-free. The "CCITT Group 4" procedure is usually the fastest.

Text and Vector Graphics can be compressed (only Acrobat before Version 6.0)

Texts and vector graphics can be compressed without losses. You should therefore always activate this option.

Policies

Click the "Policy" button to display the "Image Policy" dialog.



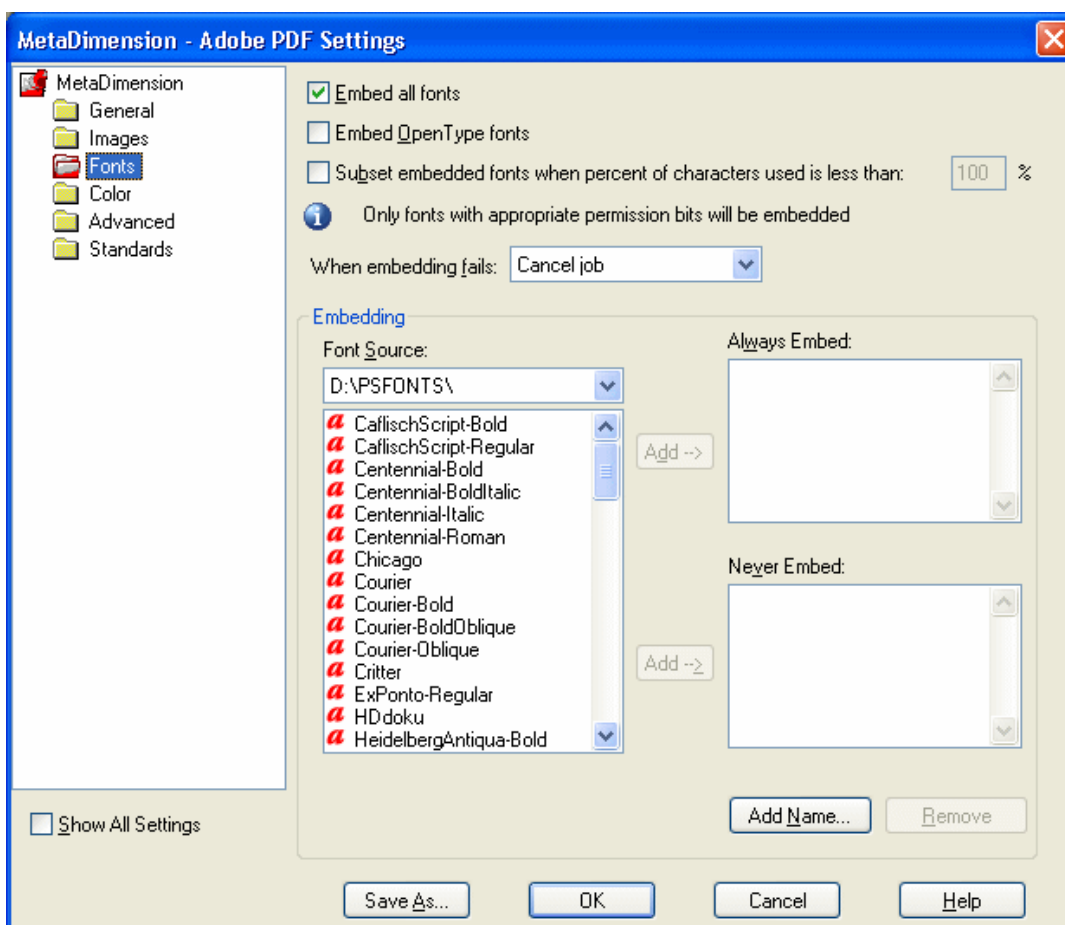
In this dialog, you can define whether the Distiller will issue warnings or cancel processing in the case of color, grayscale or monochrome images that fall below a set resolution. When you enable this policy, you can determine at a very early stage during production whether the documents to be processed have images with too low a resolution for quality printing and that must be replaced by higher resolution images.

"Fonts" section

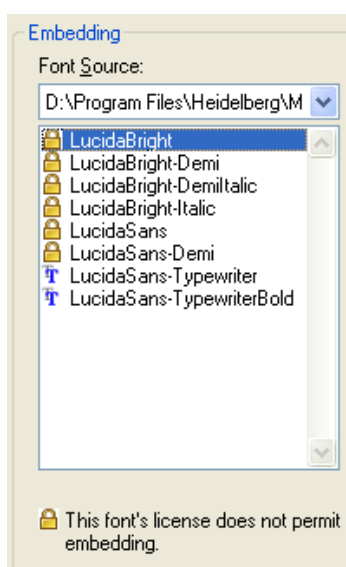
In order to ensure a reliable output of all necessary fonts, we urgently recommend that you enable the "Embed all fonts" option (see [section "Embed all fonts", page 369](#)). This option is a must for PDF/X compatibility. You can embed OpenType (as of Acrobat 7), TrueType and Type 1 fonts. You can enable the "Embed OpenType fonts" only if you set "Acrobat 7.0 (PDF 1.6)" in "Compatibility" in "General".



Note: For TrueType fonts, the font manufacturer can decide that a font may not be embedded in PDF files.



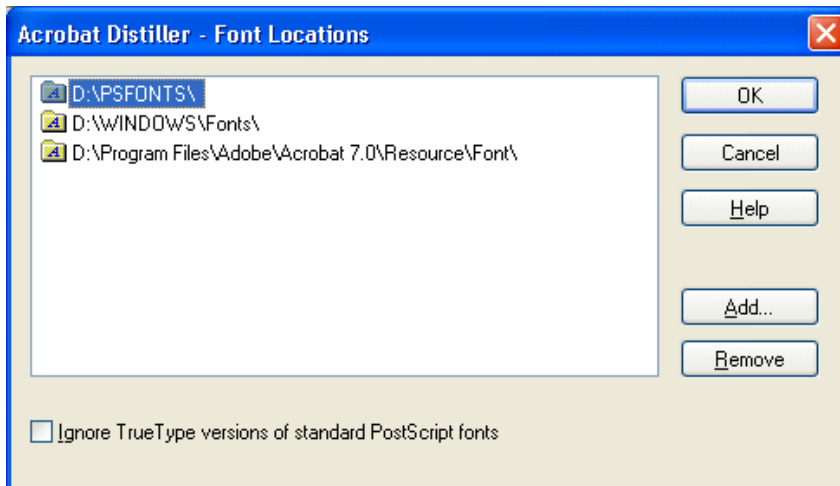
Note: Fonts with licensing restrictions are marked by a lock. The type of restriction appears below the font list when you select such a font.



You should not use embedding of subgroups for Prinect MetaDimension.

Workflows

To embed fonts, select the appropriate options of the printer driver when printing from the DTP application. If this is not possible, the Distiller tries to find the necessary fonts in the computer's file system. Please enter the references to all font folders in your system in the "Font Locations" dialog. This dialog is accessed in the Acrobat Distiller under the menu item "Settings >Font locations".

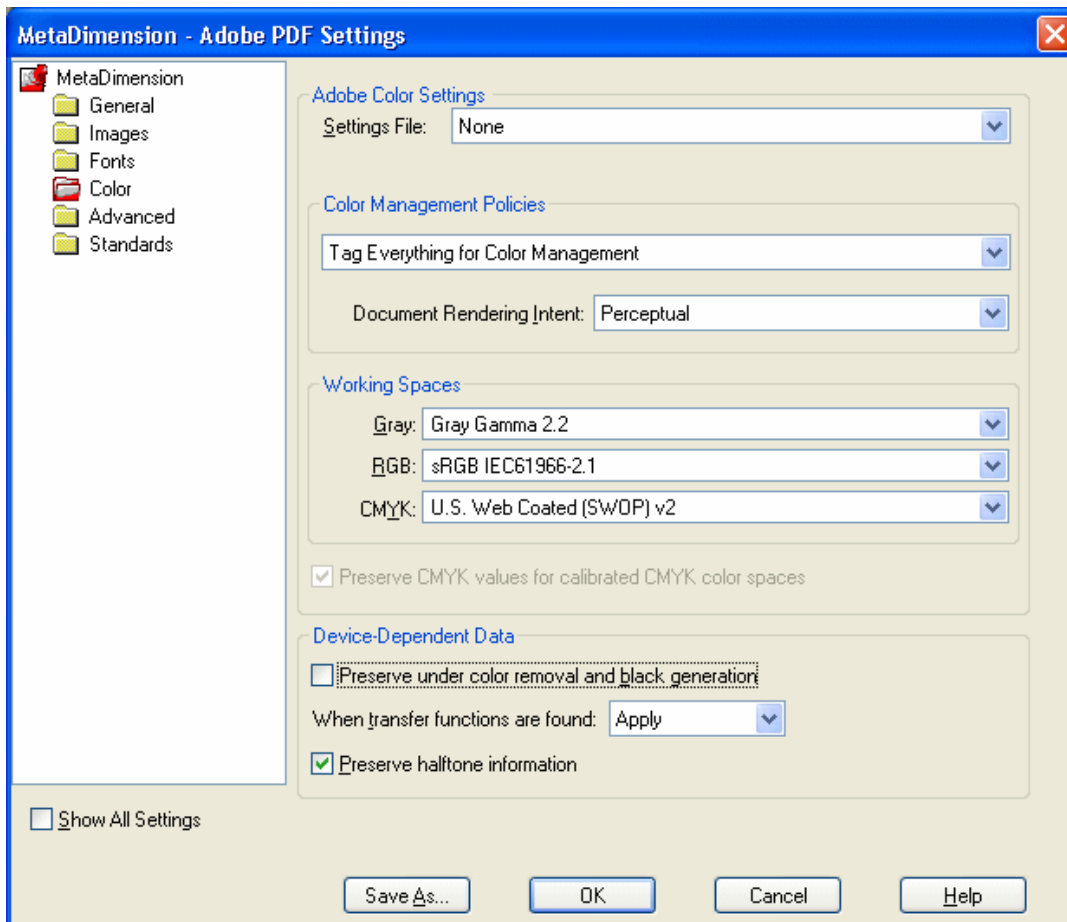


The "Always Embed" and "Never Embed" lists are designed for cases where certain fonts only will be embedded or excluded from embedding. These options contradict the "Embed all fonts" option. For that reason, do not select fonts for these lists for the MetaDimension workflow.

"Color" section

The settings made here have an effect on the color reproduction in the proof and the exposure.

If the print job contains color elements, which are to have true-color output, you should embed the corresponding color profiles in the PDF code. To do so, the required profile files must be available. Copy available profile files into the DTP workstation's color profile folder. On a Windows PC, the folder is located in the "C:\WINNT\system32\spool\drivers\color" directory (Windows 2000) or "C:\WINDOWS\system32\spool\drivers\color" (Windows Server 2003/Windows XP) (with C: being the system drive). On a Macintosh OS X computer, the color profiles are located in "<MacOS X> Library/ ColorSync/Profiles". Alternatively, the color profiles can also be filed user-specific in "<MacOS X> User/<User>/Library/ ColorSync/Profiles". On a Macintosh Classic (OS 9) the folder is located in the system folder under "ColorSync Profile".



In Acrobat 7.0, first set the option "Settings File" to "None" to be able to set further options of this tab.

For an output on Prinect MetaDimension you should preferably activate the "Tag Everything for Color Mgmt" option under "Color Management". When you enable this option and select "Acrobat 4.0 (PDF 1.3)" or higher in "Compatibility" in "General", color objects with an ICC profile are embedded during PDF generation and colors in images are calibrated. This produces device-independent images in the PDF files. No ICC profiles are embedded to the PDF files if you select "Acrobat 3.0 (PDF 1.2)" in "Compatibility". However, device-dependent color spaces that are defined in the PostScript files (RGB, grayscale and CMYK) are converted to device-independent color spaces (CalRGB, CalGray, L*a*b*) in the PDF files.

With these options the Acrobat Distiller makes it possible to assign color profiles not only to image data, but also to texts, graphics and screen areas.

Color profiles are applied only to image data if you select the "Tag Only Images for Color Management" option.

Under "Intent" select the reproduction intent that you require for the color management (see [section "Rendering Intent", page 276](#)). If you would like to handle priority images with color management, select "Perceptual".

If you do not need true-color output, or only wish to apply the color profiles to the print data on the Prinect MetaDimension system, activate the "Leave Color Unchanged" option.

Workflows

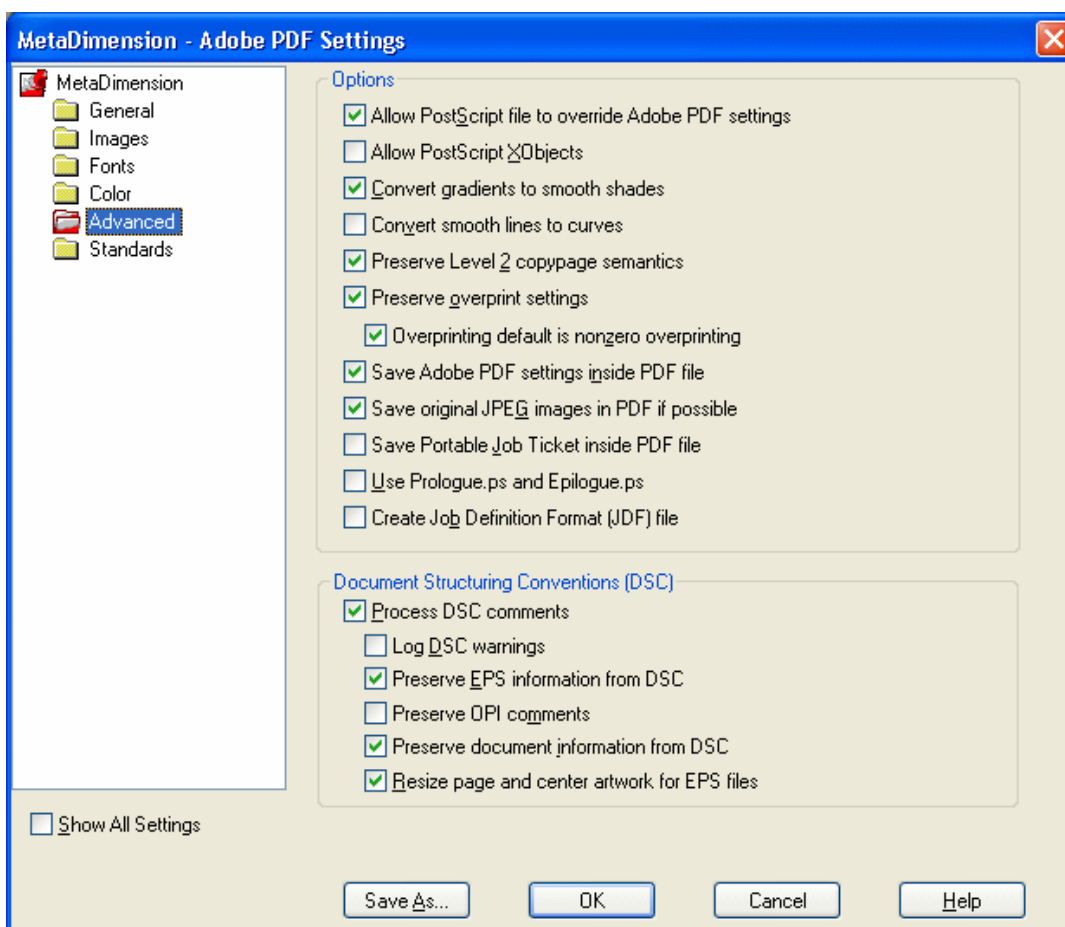
The "Convert All Colors to sRGB " option is mainly intended for using PDF files on the Internet and not for the Prepress sector. You should not activate this option for imagesetter output using Prinect MetaDimension.

In the "Working Spaces" section, select the color spaces used.

In the "Device-Dependent Data" section you should uncheck the "Preserve under color removal and black generation" option. You should check the "Preserve halftone information" option for separated data. You should uncheck it for composite data.

"Advanced" section

The settings in this section determine how the Postscript code is processed.



- Allow PostScript file to override Adobe PDF settings:

If this option is activated, Distiller options embedded in the PostScript code override the current Distiller settings. If you want to ensure that any Distiller settings made by the customer override the current settings; deactivate this setting. If you are sure that the PostScript data contains the correct settings, activate this setting.

- Allow PostScript XObjects:

With this option you can allow the PostScript code to be embedded in the PDF code. As this option can lead to faulty output results, we recommend that this option be switched off.

- Convert gradients to smooth shades:

"Smooth Shades" were introduced with the PostScript 3 format. If you check this option, the color processes that have not already been generated by the DTP application as Smooth Shades will be converted to Smooth Shades as appropriate. As Prinect MetaDimension supports PostScript 3, we recommend this option be checked. Especially since Acrobat Distiller 6.0, the quality of the replacement with smooth shades has been improved compared to previous versions.

- Convert smooth lines to curves:

This option is designed solely for CAD drawings. It reduces the number of reference points used for the formation of curves. You should leave this option unchecked if you are not going to edit CAD drawings.

- Preserve Level 2 copypage semantics:

This option is of no significance to the Prepress workflow. The "copypage" PostScript command effects the ejection of the printed material out of the output device. However, the page buffer of the output device is not deleted. The last page to be ripped is retained in the device and the following page is printed over it. The mode of operation of this command has changed during the transition from PostScript Level 2 to Level 3. In Level 3 the page content is only copied on calling up the command for the first time, whilst all subsequent pages are empty. In Level 2 the page content is copied every time. If you need the Level 2 functionality, activate this option.

- Preserve overprint settings:

If objects are declared as overprint in the PostScript code that is to be processed by the Distiller, this object attribute is accepted into the PDF file. You can basically have this option activated.

- Overprinting default is nonzero overprinting:

This parameter prevents overprint objects without CMYK data covering objects lying lower down. You should also leave this option enabled.

- Save Adobe PDF settings inside PDF file:

If you check this option, the Distiller job settings are also stored in the generated PDF file. You can open the distiller settings, e.g. in Acrobat 6.0 with the menu item "Document > File Attachments". The workflow in Prinect MetaDimension is not disturbed by these file attachments.

- Save original JPEG images in the PDF if possible:

If you check this option, an already compressed JPEG halftone image is accepted unchanged into the PDF file. In older distiller versions JPEG images were decompressed and recompressed in accordance with the compression settings in the "Images" tab, which lead to losses in quality. You should check this option.

Workflows

- Save Portable Job Ticket inside PDF file:

If certain output device-specific options have been set in the PostScript file, (e.g. Trapping), they can be embedded in the PDF file if you enable this option. In principle, portable job tickets correspond to the Output Plans in Prinect MetaDimension (see [section "Output Plan Templates", page 123](#)). Prinect MetaDimension is able to evaluate some of this information (e.g. Trapping).

- Use Prologue.ps and Epilogue.ps:

This option is only required for special cases. Normally this option can remain deactivated. In Acrobat Distiller 3.0 it was necessary to activate the Prologue option to retain spot colors embedded in the PostScript code. The Prologue is no longer required for this from Version 4.0 onwards, as this function is integrated in the Distiller.

- Create JDF file (Job Definition Format):

If you check this option, the distiller job options will be generated as JDF files parallel to the PDF files. The Prinect Integration Manager workflow system works on the basis of JDF files, however the JDF files are generated within the Prinect Integration Manager and not by the Acrobat Distiller. If you do not explicitly require JDF files for other workflow systems, you should switch this option off.

DSC (Document Structuring Conventions)

Due to the DSC conventions, it is possible to obtain information about the document structure when importing PostScript files without having to interpret the entire file. A graphics program, for example, can thus determine the size of an EPS object without requiring an internal software RIP, which interprets the entire Postscript code and then calculates the size from this.

DSC information is still used for the OPI functionality and for processing color separations.

To be able to parameterize this section, check the "Process DSC comments" option.

Certain DSC information can be filtered out / ignored by the following options.

- Log DSC warnings:

If there are contraventions of the Adobe DSC conventions, they are recorded in the PDF job log file. Such a contravention is not to be confused with a Postscript error and does not lead to the PDF generation being aborted. In general, all DTP applications understand this rule.

- Preserve EPS information from DSC:

Every EPS file contains information about the creating program, the file name, the creator, the date of creation, etc. If this information is to be transferred to the PDF file, activate this option.

- Preserve OPI Comments:

OPI comments are contained in the PostScript code in the form of special DSC comments. Only if you wish or have to use OPI in the PDF workflow do you have to enable this option. Please observe the relevant information in [section "What Must I Remember?", page 368](#).

- Preserve document information from DSC:

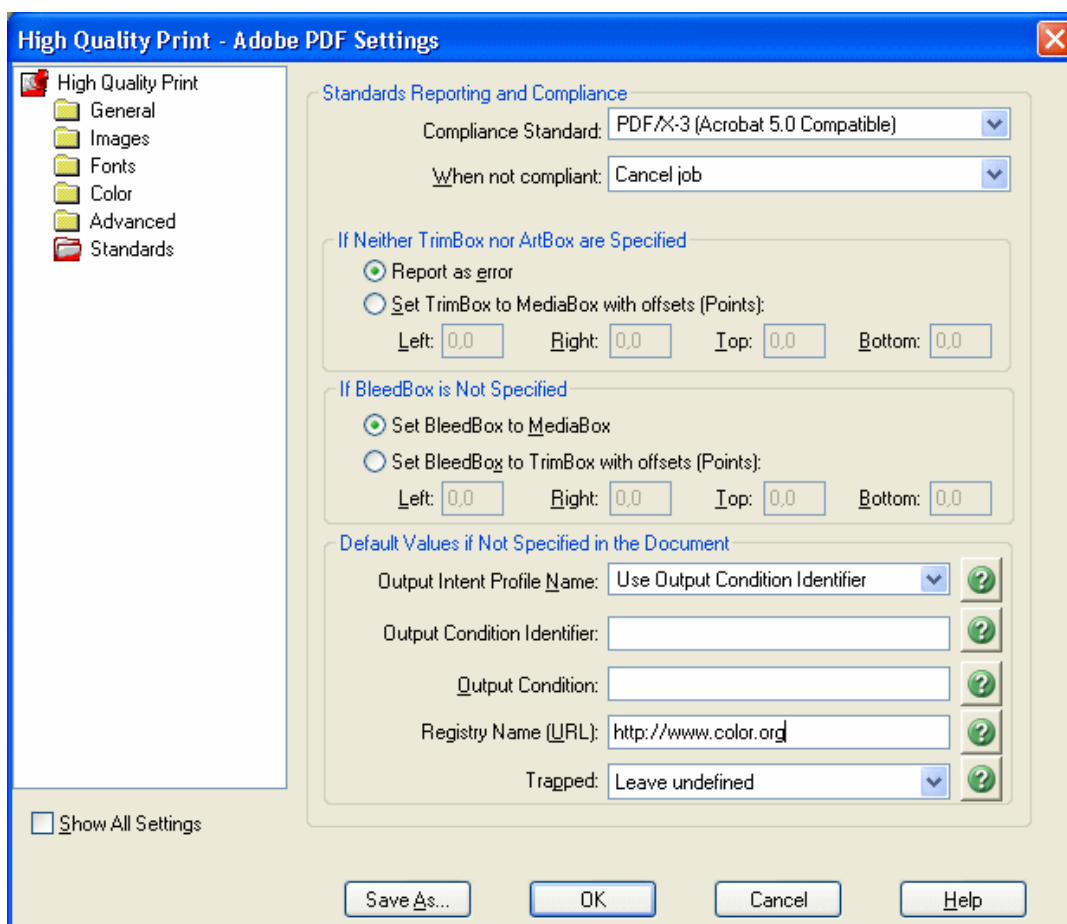
Similar to the EPS header, many PostScript files contain information about the creating program, the creator, the document name, the date of creation, etc. If this information is to be transferred to the PDF file, activate this option.

- Resize page and center artwork for EPS files:

EPS code is a device-independent PostScript code. EPS code therefore does not contain a Postscript command which determines the page size. The corresponding DSC comment is used instead to read out the EPS page size. If this option is activated, the PDF page is given the size which is entered in the DSC comment and is positioned centrally. If the option is deactivated, the default page size is used and the content of the EPS file sits in the bottom left-hand corner of the PDF page. If the content of the EPS file is bigger than the default page size, the objects on the right and at the top are cut off.

Standards section

This section is only available in Acrobat 7.0 Professional. The options available here enable PDF/X-1a and PDF/X-3 compatible PDF files to be generated (see also [section "PDF/X", page 286](#)).



- Compliance Standard:

Select the PDF/X default here. The defaults are essentially different with regard to color definitions. PDF/X-1a only allows device-independent CMYK and spot colors. PDF/X-3 additionally supports device-independent colors (see also [section "Color space conversion", page 316](#)).

Select the default that you require for the further processing of the PDF/X data. PDF/A files are designed mainly for archiving purposes. PDF/A documents only contain elements that are absolutely necessary for opening and viewing the files. PDF/A is not meant for prepress.

- If not compatible:

If you want to or must ensure that the PDF/X default is maintained, select "Cancel Job".

- "If Neither Trimbox nor ArtBox are Specified" section

The PDF/X default requires that the end format of the document pages and the net format of the relevant page extract is defined in the PDF/X files as either "Trim Box" or "Art Box" (never both at the same time). As these elements do not arise in PostScript, this information must be generated by the DTP application in the form of pdfmark instructions or the distiller attempts to recognize the end format from the document information.

- Report as error:

If the end format cannot be recognized, the PDF generation is cancelled.

- Determine the end format frame on the media frame with spacings:

The end format of the document pages can be derived using PostScript page sizes. An indent of the respective page margins of the media box is defined in the text boxes. As according to the PDF specifications, none of the PDF page frames may be bigger than the media box, only positive values that cause a reduction of the page size can be entered. The values should generally be left at "0".

- "If BleedBox is not Specified" section:

In addition to the end format, the bleed zone that surrounds the end format must also be defined in a PDF/X-compatible file. The page frame for this is called "bleed box".

- Set BleedBox to MediaBox:

The bleed box will have the same page size as the media box. Consequently, the whole area between the trim box and the media box is defined as the bleed zone.

- Set BleedBox to TrimBox with offsets (Points):

Here you can set the bleed box smaller than the trim box (only positive values are possible). This requires that the end format is correctly defined, otherwise the trim box and bleed box are not defined correctly.

Enable the "Set BleedBox to MediaBox" option if you do not need a manually defined bleed box.

- "Define Values if not Specified in the Document" section:

- Output Intent Profile Name:

According to PDF/X convention, information must be embedded in the PDF documents for the "Output Intent" in order to optimize the exchange of color documents. The output intent is represented by an ICC profile that describes the target color space during the PDF generation. The ICC profile is embedded in the PDF/X file in such a way that it cannot unintentionally influence the color reproduction. In MetaDimension such an ICC profile can be used for print output (see [section "Use Embedded PDF/X Output Intent, if Available, as Press Profile \(If PDF/X-Conform Workflow is activated, the Output Intent must be used\)", page 285](#)).

In order that new ICC profiles can be embedded in the Acrobat Distiller, they must be stored at the following locations.

Windows: "C:\WINNT\system32\spool\drivers\color" (C: being the system drive) or depending on your Windows version

"C:\Windows\system32\spool\drivers\color".

Macintosh OS X: <System Volume>:Library:Application Support:Adobe:Color:Profiles:Recommended.

- Output Condition:

In addition to the Output Intent, a description of the envisaged print process must also be contained in a PDF/X file. What printing procedure, what print material and what screen frequency is to be used must be described as precisely as possible in this text field.

- Registry Name (URL):

Instead of embedding an ICC profile in the Output Intent, reference to a web server can also be provided, the URL of which can be entered here. This server should provide the characterization information of the named print conditions. A server of this kind would, for example, be one of the International Color Consortium, which provides different characterizations in accordance with CGATS, bvdn/FOGRA and IFRA in the "Registries" section. If an ICC profile of the entry "Without" is selected under "Profile name for Output Intent", this entry is optional.

- Trapped:

The information of an unambiguously defined trapping code is required in the PDF/X files for the automatic further processing of PDF/X files. This code must be entered, whether or not the file is already trapped or not.

- Leave undefined:

This value is not permitted in accordance with PDF/X default. If this option is selected, an error report is made.

Workflows

- "Insert False":

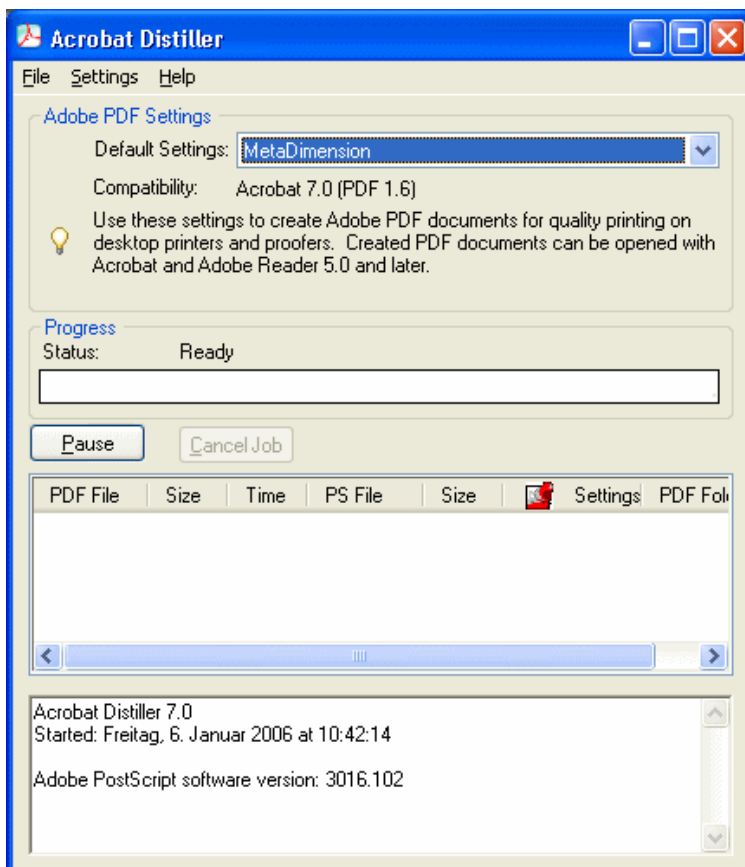
It is announced that no spreading information is embedded. If required, a later trapping is required.

- "Insert True":

It is announced that the PDF/X file is already trapped and that no later trapping is required.

Saving your Settings

You can save the settings under their own name by clicking the "Save As" button and assigning a name. If you need different sets of settings, you can save several sets and select them in the "Job Options" selection list in the Acrobat Distiller's main window.



Importing Delta Lists (Delta Flow)

In Prinect MetaDimension, you can import and output Delta Lists that were created using Delta Technology Version 7.0 or higher. To do this, you must define certain settings in Delta Technology to make sure that the Delta Lists are in a format that can be imported. For further information, please refer to the Delta Technology documentation.

Delta Lists are imported in the hot folder mode. You must set up a virtual printer with the "Hot Folder" option for this (refer to [section "Setting Options for Virtual Printers", page 171](#)).

You can only use the Delta Lists import functionality if the "Delta Flow" dongle option has been enabled.



Note: To import Delta Lists to Prinect MetaDimension, you must heed the following general requirements:

- In Prinect MetaDimension, you can only import Delta Lists that were exported with the Prepare "Delta Lists for DeltaFlow" option. Delta Lists that were generated with older versions of Delta Technology cannot be directly imported to Prinect MetaDimension. If you want to import older Delta Lists, you can import them to Delta Technology 7.x or higher and then export them to Prinect MetaDimension.
- The set job parameters "Resolution", "Orientation", etc. must match the settings in Prinect MetaDimension or the output device available there. If necessary, you can match the Delta Lists accordingly with the "DeltaList Transformation" application.

The information about orientation in the Delta Lists is no longer applicable if the output format is changed because you switched, for example, from a Herkules to a Prosetter 102. In this case, the Delta Lists must be generated again.

- To ensure correct output of the process control bar and slugline, we strongly recommend that you use the screen settings defined in the queue OPC settings during the generation of the Delta Lists also for the screen settings in the Prinect MetaDimension Output Plan.
- The output profile that is activated in the export directory must be the IPR profile that was generated by the device used for output in Prinect MetaDimension.
- The Prinect MetaDimension parameters are used to set the parameters of the output. Remember especially that almost all Delta Lists screen settings are overwritten by Prinect MetaDimension.
- Process calibration/linearization:

All settings related to process calibration or linearization in the Delta Lists are disabled during an output via Prinect MetaDimension and overwritten with the settings accepted in MetaDimension.

Importing Delta Lists

If you wish to import Delta Lists to Prinect MetaDimension, you only have to copy the export files to a hot folder at the Prinect MetaDimension output workstation. The format of the Delta Lists (directory, TAR or ZIP) is irrelevant here.

A workflow where the exported Delta Lists are to be automatically exposed should be configured as follows:

1. Setup of a virtual printer with the hot folder option as the import directory on the Prinect MetaDimension system.

Workflows

2. Mapping of the import hot folder at the export station. (Mounting a drive and assigning it a letter are performed in Windows Explorer). As the automatic monitoring does not function with Windows Server 2003, from Delta Technology Version 8.1 on you can make the allocation per UNC path.
3. The mapped import hot folder is set up as the export directory at the Delta Technology export station.

The following parameters of the imported Delta Lists are always overwritten:

- Dot shape
- Screening system (IS / HQS screening)
- Screen frequency, if advantageous for the given resolution

Introduction

Meaning and Development of the CIP3-PPF and CIP4-JDF Formats

Prepress data can help automate press and postpress workflows. This includes, for example, an automatic set-up of the cutting machines (postpress) based on cutting information from the prepress phase.

In addition to the reusable data, there are also control data that must be generated, maintained and analyzed during the workflow. There must be a uniform, machine-independent data format for the control data as machines and software products used in the prepress, press and postpress phases can come from different manufacturers.

In 1994, a consortium of companies was founded with the aim of specifying this data format. Until drupa 2000, this consortium was called the "Cooperation for Integration of Prepress, Press and Postpress", or "CIP3". The CIP3 consortium specified the "Print Production Format" (PPF).

During the Drupa 2000, the consortium was renamed to the "Cooperation for the Integration of Processes in Prepress, Press and Postpress", or "CIP4". The CIP4 consortium specified the "Job Definition Format" (JDF).

Further details as well as contact addresses can be found at the following Internet address: <http://www.cip4.org>.

Specifications of the CIP3-PPF and CIP4-JDF formats

The following specifications exist for CIP3 PPF and CIP4 JDF data formats:

- CIP3:

The data format specified by the CIP3 consortium is known as the "Print Production Format" (PPF). The file extension is ".ppf". In addition to the image data for the ink zone calculations, etc. the CIP3-PPF files are available in the "PostScript – ASCII format" and can be read that way with an editor such as Notepad.exe (Windows Editor).

- CIP4:

The "Job Definition Format" (JDF) was introduced as a further development of well-known technologies such as PPF and PJTF (Adobe Portable Job Ticket Format). The JDF is based on the XML data format. JDF combines the job ticket specifications with a message description standard and a message interchange protocol. The file extension is ".jdf". The PPF data are a subset in a JDF file.

CIP3-PPF and CIP4-JDF Contents

Heidelberg prepress systems can supply the following PPF/JDF data:

- Job identification
- Ink zone control
- Tab
- Color references
- Cutting data
- Folding, collating, binding
- Digital good sheet for subsequent control with Image Control
- Control elements such as measuring bars ("MB_...") and print control strips ("PCS_...") for checking colors automatically on the press sheet

Image data of the color separations for ink zone control are saved in the CIP3-PPF file. Only references to the image data of the color separations are saved in .png format in the CIP4-JDF file.

Workflow

Overview of the CIP3-PPF and CIP4-JDF Data Workflow



Note: At present, not all possible workflow components are JDF-compatible. That's the reason why we sometimes talk about CIP3-PPF data and sometimes about CIP4-JDF data.

Prinect MetaDimension can interpret CIP4-JDF data and output CIP3-PPF data. That means this is the interface between both data formats in a workflow with Prinect MetaDimension.

Possible CIP workflow components are:

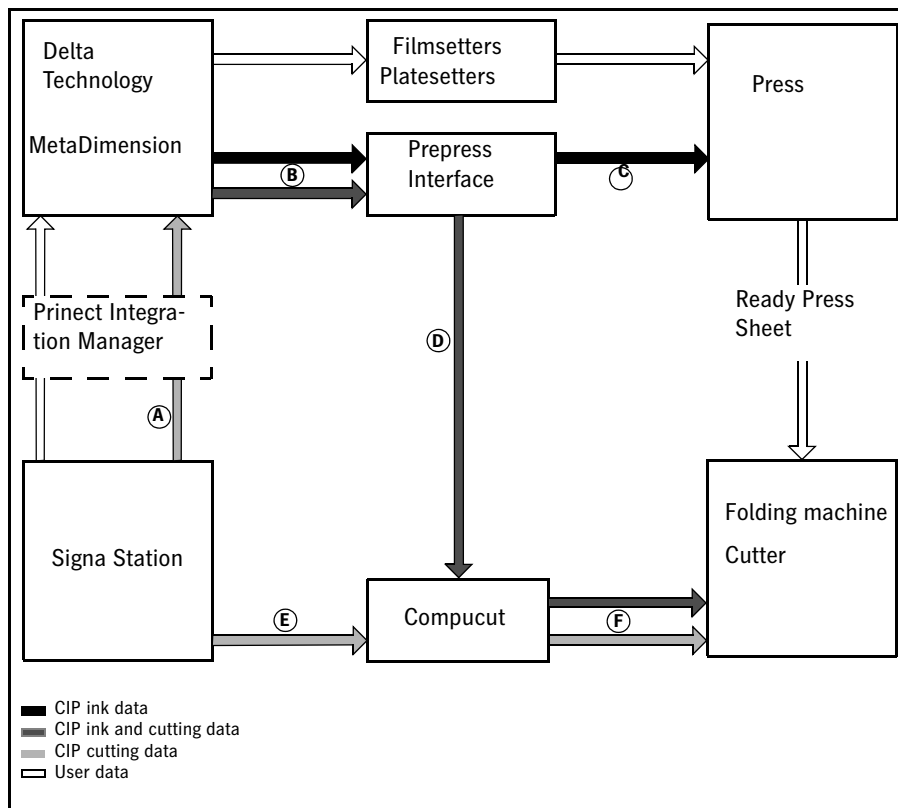
- Prinect Signa Station (CIP4-JDF)
- Delta Technology (CIP3-PPF)
- Prinect MetaDimension (CIP3-PPF; can interpret CIP4-JDF)
- Prinect Integration Manager (CIP4-JDF)
- Prinect Prepress Interface (CIP3-PPF) or another processing software that calculates the machine-specific data for ink zone control from the CIP3-PPF or CIP4-JDF data.

- CompuCut or another finishing software that calculates the machine-specific data for other clients (cutters, folders, etc.) from the CIP3-PPF or CIP4-JDF data.
- Data transfer systems (e.g. Data Control or PECOM) that send the machine data calculated from the CIP3-PPF or CIP4-JDF files to the press or other clients (cutters, folders, etc.).
- Presses and other clients

Prinect MetaDimension is used only as an RIP if there is a Prinect Integration Manager in the workflow.

The following diagram gives you an overview of the data flow involving the CIP4-JDF, CIP3-PPF data and the user data.

CIP3-PPF / CIP4-JDF Data Flow



Workflow with Prinect MetaDimension and Prinect Signa Station

The text below illustrates the workflow for processing using a cutter and the "CompuCut" processing software.

- Prinect MetaDimension: CIP3-PPF data is generated for ink zone control.
- Prinect Signa Station: here CIP4-JDF data is generated for cutting and folding, for example.

There are two options for the finishing data:

- The CIP4-JDF data for finishing are generated at the Prinect Signa Station automatically and the process is not interactive. In a normal workflow, these data go to the Prinect Integration Manager or to Prinect MetaDimension/Delta Technology, depending on what you configured (route A).

From Prinect MetaDimension/Delta Technology, the CIP3-PPF data are transferred to a software capable of interpreting such data, such as Prinect Prepress Interface (route B) . Prinect Prepress Interface converts the CIP3-PPF data for a job into ink coverage values for the respective ink zones. The data are transferred to the printing press, either online or via flashcards (route C).

Prinect Prepress Interface also makes the CIP3-PPF data available to systems further on in the workflow, for example, CompuCut (route D).

- It's also possible for you to generate an additional CIP3-PPF file manually at the Prinect Signa Station . These data can be sent directly to a cutter via CompuCut, for example (route E, F). The advantage here is that this file doesn't have any ink zone control data and, as a result, is small.

CIP3 Information in JDF (Job Definition Format)

Prinect MetaDimension cannot generate JDF files itself. In a Prinect Integration Manager system environment JDF files are created in the Prinect Integration Manager and transferred to MetaDimension. MetaDimension can interpret the JDF files contained in the instructions received, enter the planned actions in the JDF files and thus report to the Prinect Integration Manager.

If there are instructions for creating CIP3-PPF files in the JDF files, these can be entered in the JDF as follows:

- As a reference in the JDF to a CIP3-PPF file created by MetaDimension (Reference) or
- there is already CIP3-PPF information, for example, from Prinect Signa Station or from the Prinect Integration Manager, in with other Meta components in the JDF file generated by the Prinect Integration Manager.

The CIP3-PPF files created by Prinect MetaDimension contain the following components:

- Image data for ink zone calculation,
- Orientation for the image data,
- Or the referenced image data,

- Additional internal Heidelberg data like inks, printing materials, etc.

A .PNG file with the set PPF resolution is created for every color separation by Prinect MetaDimension for ink zone control. The target folder for the .PNG files is defined by the Prinect Integration Manager system. References to these .PNG files are entered in the JDF. The information regarding orientation of the image data and the additional Heidelberg information are entered in the JDF.

CIP3 Settings in Prinect MetaDimension

Compressing PPF Images

RLE compression of the PPD images in binary mode can be switched off in MetaDimension. There is no ASCII Hex code in compression.

Other Options:

- Orientation and mirroring of PPF images can be set in Prinect MetaDimension irrespective of the output device.
- Printing material information is transferred to the PPF.
- Color management options have been expanded (inks, information, etc.)
- "Force Front" and "Create back as front".

If documents that have been predetermined as two-sided printing for front and back are required as PPF file one-side, by selecting this option you can enable generation of the back pages in the PPF document as front pages. You can use this option, for example, if you wish to print on both sides (in succession) on presses that have no perfector.

More details about these functions are available in the Output Plan Editor in the [section "CIP 3", page 289](#).

Processing the CIP3-PPF Data with Prinect Prepress Interface

The Heidelberg "Prinect Prepress Interface" software allows you to evaluate the CIP3-PPF files and their color data that were generated by Prinect MetaDimension. Prinect Prepress Interface converts the CIP3-PPF data for a job into ink coverage values for the respective ink zones. The calculated data can then be imported by the ink zone control and converted to setting data for the CP ink fountains (fountain rotation and ink zone opening).

Interface between Prinect MetaDimension and Prinect Prepress Interface

Processing of the CIP3-PPF data can be automated with the Prinect MetaDimension and Prinect Prepress interfaces. This requires that the hot folders at Prinect Prepress Interface are set up or selected as CIP3-PPF output directories at Prinect MetaDimension .

CIP3-PPF/CIP4-JDF Data Generation

Prinect Prepress Interface has a directory structure with "PPFIn" as the main directory for the incoming CIP3-PPF files. The "PPFIn" directory is created automatically during the installation of Prinect Prepress Interface.

In Prinect Prepress Interface 3.x, you can define for what press the data will be computed. The specific operational data (plate size, number of ink zones, printing characteristic, orientation, etc.) are saved as processes. When you create a process, a hot folder is automatically generated for the CIP3-PPF data in the "PPFIn" directory.

Prinect Prepress Interface regularly scans the hot folder for new data and, if any are found, automatically starts data processing.

This hot folder must be the output directory of the RIP if you want processing to be automatic. You must place the CIP3-PPF file manually in this hot folder of Prinect Prepress Interface if you select a different folder as the output directory.

CIP3-PPF files are deleted from the "PPFIn" hot folder when they are processed. To make the CIP3-PPF files available to processing systems (CompuCut), they must be duplicated when they enter the directory and the duplicates must be saved. The Prinect Prepress Interface user configures whether the CIP3-PPF files will be copied or not and to what directory.

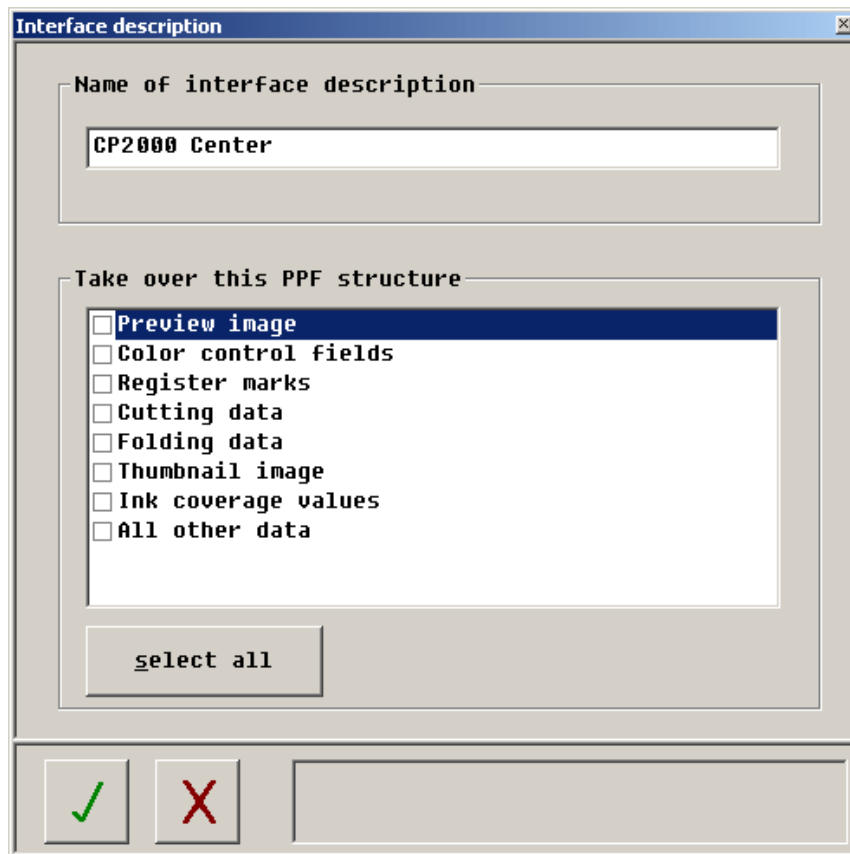
Interface between Prinect Prepress Interface and Clients

A new interface can be used for clients as of Prinect Prepress Interface version 3.x.

In version 2.1, only the calculated ink zone control data and the preview images are sent to the clients. A new client interface was defined for version 3.0 to make all the prepress defaults that were generated available to the clients downstream.

This client interface requires an extended data format, the "PPF+- format". A specific PPF+- file must be written for every client to optimize the data exchange between Prinect Prepress Interface and the connected clients. A specific, configurable profile (interface description) that is defined in Prinect Prepress Interface must be used there for each client. This profile defines which data will be taken from the CIP3-PPF file or from Prinect Prepress Interface. The following data can be configured for the client interface:

- Scope of the PPF+- file (e.g. "Register marks", "Ink coverage values", "All other data", etc.).



- Number of different transfer directories where the data for the clients will be saved.
- Allocation of the PPF+- files to the transfer directories.

Only the following interfaces are supported as of Prinect Prepress Interface version 3.0:

- Flashcard as in version 2.1
- CDK format as in version 2.1
- Configurable interface (PPF+- format, see above)

Data Export to the Press

The data can be exported to the press as follows:

- Online with "CP2000": This is the control stand for the SM102 and SM74 sheet-fed presses. This stand can be networked. The "PresetLink" module must be enabled for evaluation of the CIP3-PPF data.
- Via flashcard: This is a memory card that can hold 50 jobs. The flashcard controls the ink and register control software "CPC1".
- Online with the "DataControl" software and the "Prepress Interface Connection" module.

Data Export to Other Processing Systems (CompuCut, CompuFold)

Automatic data processing can be configured at the interface between Prinect Prepress Interface and finishing systems (e.g. CompuCut, CompuFold). To do this, the Prinect Prepress Interface output directories must match the input directories of the finishing system.

Since version 2 of Prinect Prepress Interface, automatic processing of CIP3-PPF data is possible in conjunction with CompuCut.

- PPF Image Code
- Suppress Final Output
- Original Reference Image
- CIP3-Output Directory
- Extension of the CIP3-PPF file
- Resolution
- Orientation: Images 5-8

Settings that can be made both in Prinect MetaDimension and at the Prinect Signa Station:

- Front and Back
- Orientation: Images 1-4

"PPF Image Code" section

This is where you can specify if you want the CIP3 PPF images to be generated in binary code or in ASCII hex decode data format. We recommend using the binary code as it is faster.

"Parameter" section

- Suppress Final Output

The job is stopped after the CIP3 data are generated. No films or plates are imaged and no proof output. This setting is useful, for example, when a job is output and it is started a second time only to generate the CIP3 data.

- Original Reference Image

Check this option if you wish to create additional Heidelberg-formatted image data that are used by an electronic measuring station, e.g. ImageControl, for more accurate measuring (50.8 dpi resolution). In such a case, image data without process calibration are used. The CIP3-PPF file becomes noticeably bigger if this option is selected.

- Output directory

Click the "Browse..." button to select an output directory where you want the CIP3 PPF data to be written to. You can select a directory on the Prinect MetaDimension PC or in the network, e.g. on the Prinect PrepressInterface PC. A local directory should be shared for network access.

You must create a process with the CIP3-PPI Process Editor if PPF data are to be processed automatically by Prinect Prepress Interface (PPI). When you create a process, a hot folder is automatically generated for the CIP3-PPF data in the "PPFIn" directory. The "PPFIn" directory is automatically created during the installation of Prinect Prepress Interface.

Prinect Prepress Interface regularly scans the hot folder for new data and, if any are found, automatically starts data processing.

This hot folder must be the output directory of Prinect MetaDimension if you want processing to be automatic. You must place the CIP3-PPF file manually in this hot folder of the Prinect Prepress Interface if you select a different folder as the output directory.

- PPF-Extension

".ppf" is the file type designated in the CIP3-PPF specification. You can change the extension if processing software manufacturers use a different file type. If not, leave the default as it is.

- Resolution

The default setting of 50.8 dpi complies with the CIP3-PPF standard and should not be changed.

- Front and Back

Normally, there is a CIP3-PPF file for each output (signature). In the case of double-sided printing (front and back) with automatic turnover, a CIP3-PPF file containing the data for the front and the back of the page is required. A joint CIP3-PPF file for the front and back page is created when this option is checked. The Prinect Signa Station settings have priority.

Orientation Section

Normally, orientation of the PPF image data must not be changed in a correctly set Heidelberg PPF workflow. However, if you have to set orientation at this point, you should check all stages in the workflow once again (Prinect Signa Station to PPI). You then have to set the "Signa Workflow (only 1-4)" option. In this case, only the upper four images (1-4) appear for selection. If needed, a 90° rotation is defined in this case by the Prinect Signa Station.

The upper four images show mirroring, the lower four rotation.

The various orientations are as follows:

- 1: Initial position
- 2: Position 1 with horizontal mirroring
- 3: Position 1 with vertical and horizontal mirroring
- 4: Position 1 with vertical mirroring
- 5: Position 1 rotated by 90 degrees
- 6: Position 2 rotated by 90 degrees
- 7: Position 3 rotated by 90 degrees

CIP3-PPF/CIP4-JDF Data Generation

- 8: Position 4 rotated by 90 degrees

Configuration of Prinect MetaDimension as a Integration Manager Engine

Prinect Integration Manager is a very powerful workflow system that provides automated control of the data flow of jobs. So-called engines are responsible for implementing single steps in the process in the Prinect Integration Manager. For example, there are tools for trapping, color management, page positioning, etc. In conjunction with the Prinect Integration Manager, MetaDimension is also part of a modular system that assumes tasks like a RIP does for proofing and imaging.

Logon of Prinect MetaDimension at the Prinect Integration Manager



Prerequisites: Before you connect Prinect MetaDimension to the Prinect Prepress Manager, you must first make sure that the MetaDimension service is active. To do this, call up the "MetaDimension Service Control" application from the MetaDimension start menu, if necessary, click the "Start" button and wait until the MetaDimension service has started.

Make sure that all instances of the Prinect Integration Manager "Cockpit" are exited because MetaDimension can only be used after a complete Integration Manager cockpit user interface restart.

To mount MetaDimension at the Prinect Integration Manager, MetaDimension must be configured as the "engine" for the Integration Manager. A special configuration application is available for this: "Join Prinect" that is easy to start from the Prinect MetaDimension user interface.

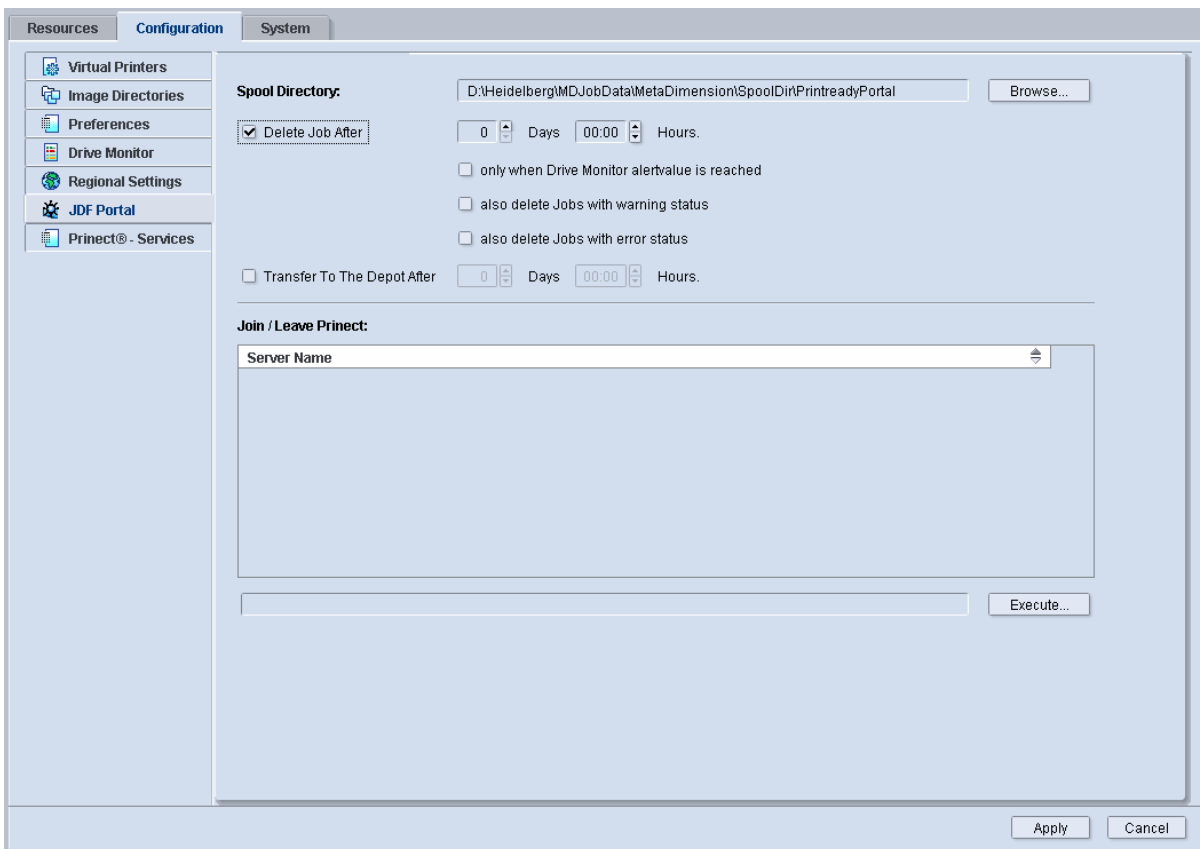


Note: To connect Prinect MetaDimension to the Prinect Integration Manager, the MetaDimension service must be set up with a user account that has the necessary permissions on the Prinect Integration Manager PC. This requirement is met if you installed Prinect MetaDimension and the Prinect Integration Manager with the same user account (e.g. "prinect") as recommended in the installation manuals. You can find details about the MetaDimension Service in the "Prinect MetaDimension – Installation" manual in the "Windows System Settings" chapter.

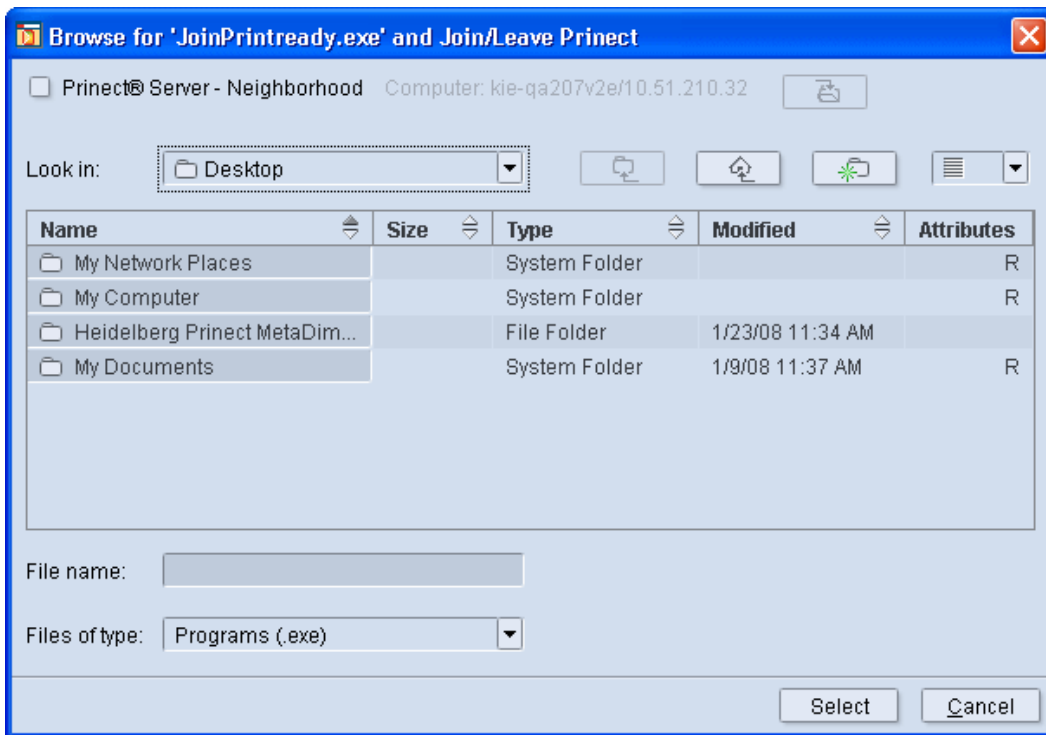
Proceed as follows for connection at the Prinect Integration Manager:

1. Start the Printmanager user interface on the Prinect MetaDimension server and check whether the local Prinect MetaDimension server is selected and connected in "Administration > System > Server". If necessary, connect to the server manually (see [section "Server", page 205](#)).
2. Go to the "Administration > Configuration > JDF Portal" tab.

Connection to the Prinect Integration Manager



3. All the Prinect Integration Manager servers available in the network are listed in "Join / Leave Prinect". Select the server you require and click "Execute". The "Select" dialog is opened. If your server is selected, you can skip item 4. that describes another way to select the server.



- You must select the Prinect Integration Manager manually if the Prinect Integration Manager server you want is not listed. Click "Execute" without selecting a server in the list. The "Browse for 'Join Printready.exe' and Join/Leave Prinect" dialog displays.

If the Prinect Integration Manager is installed on the same computer that MetaDimension is installed, go to the "C:\PTConfig\JoinPrinect" folder (C: is the drive on which the Prinect Integration Manager configuration directory is set up). Select "JoinPrintready.exe" and click "Select".

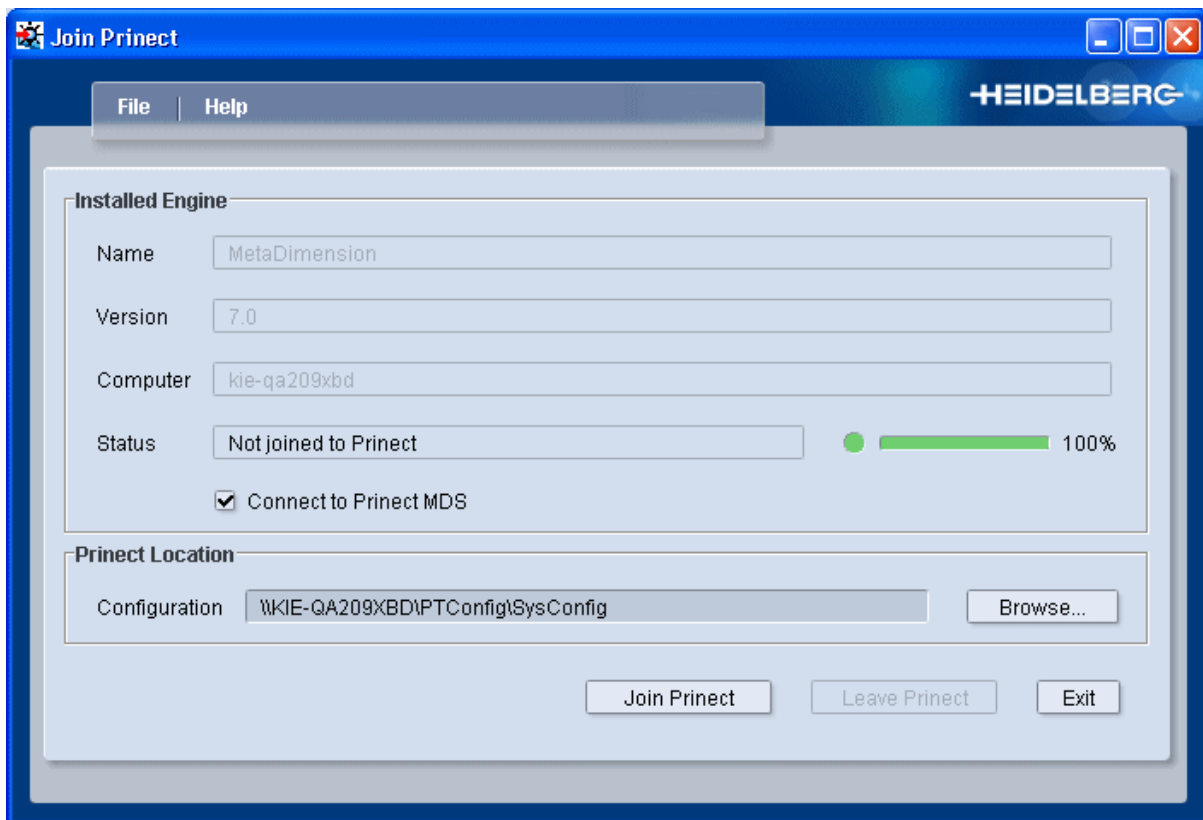
If the Prinect Integration Manager is installed on another computer, in the network environment, go to the Prinect Integration Manager server and open the shared "PTConfig" folder. Go to the "JoinPrinect" folder and select "JoinPrintready.exe". Confirm the dialog with "Select".



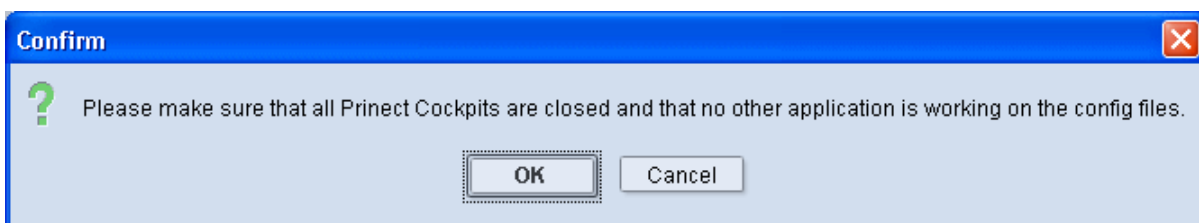
Note: To reach the "PTConfig" folder you need access rights on the Prinect Integration Manager server. The user name (e.g. "prinect") that you are logged on with at the Prinect MetaDimension computer must also be a user name on the Prinect Integration Manager server. You can find information about creating a user account in the MetaDimension installation manual in chapter 1. If necessary, ask your network administrator for information about access permissions on the various computers.

The "JoinPrinect" dialog opens.

Connection to the Prinect Integration Manager

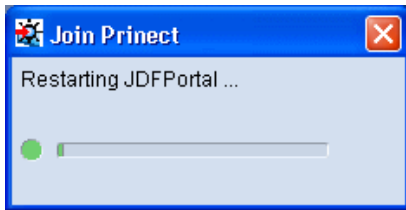


5. We recommend that you enable the "Connect to Prinect MDS" option if there is a "Master Data Store" (MDS) on the Prinect Integration Manager server. In this case, the MDS of the Prinect Integration Manager server is responsible for management of the master data. For more information about Master Data Store (MDS), see [section "Prinect Integration Layer \(PIL\) as a Communication Level in the Prinect System", page 36](#).
6. Click the "Join Prinect" button. An alert message appears:

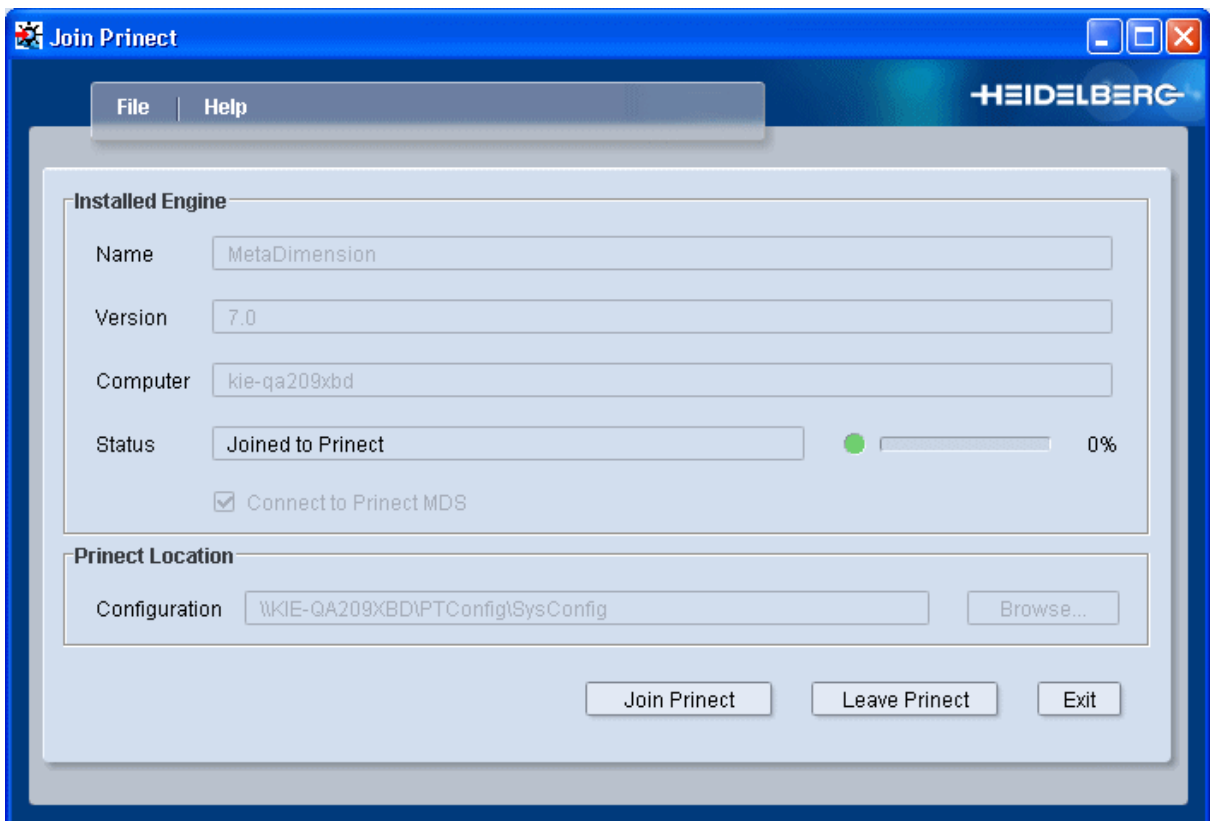


7. Make sure that all Integration Manager Cockpits are closed and that no other applications are working with the Integration Manager configuration files. Confirm the dialog with "OK".

A progress bar shows the connection status. At the same time additional status information is shown in a small window:



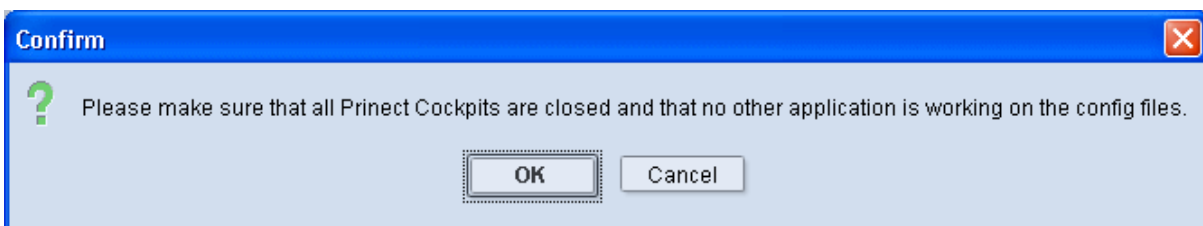
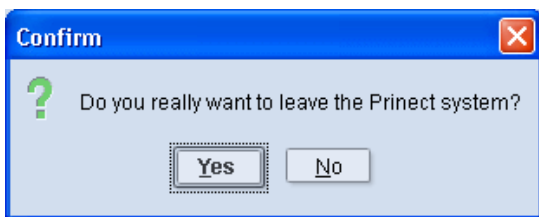
8. When the connection is established, the status display shows "100%" and the "Joined to Prinect" message appears.



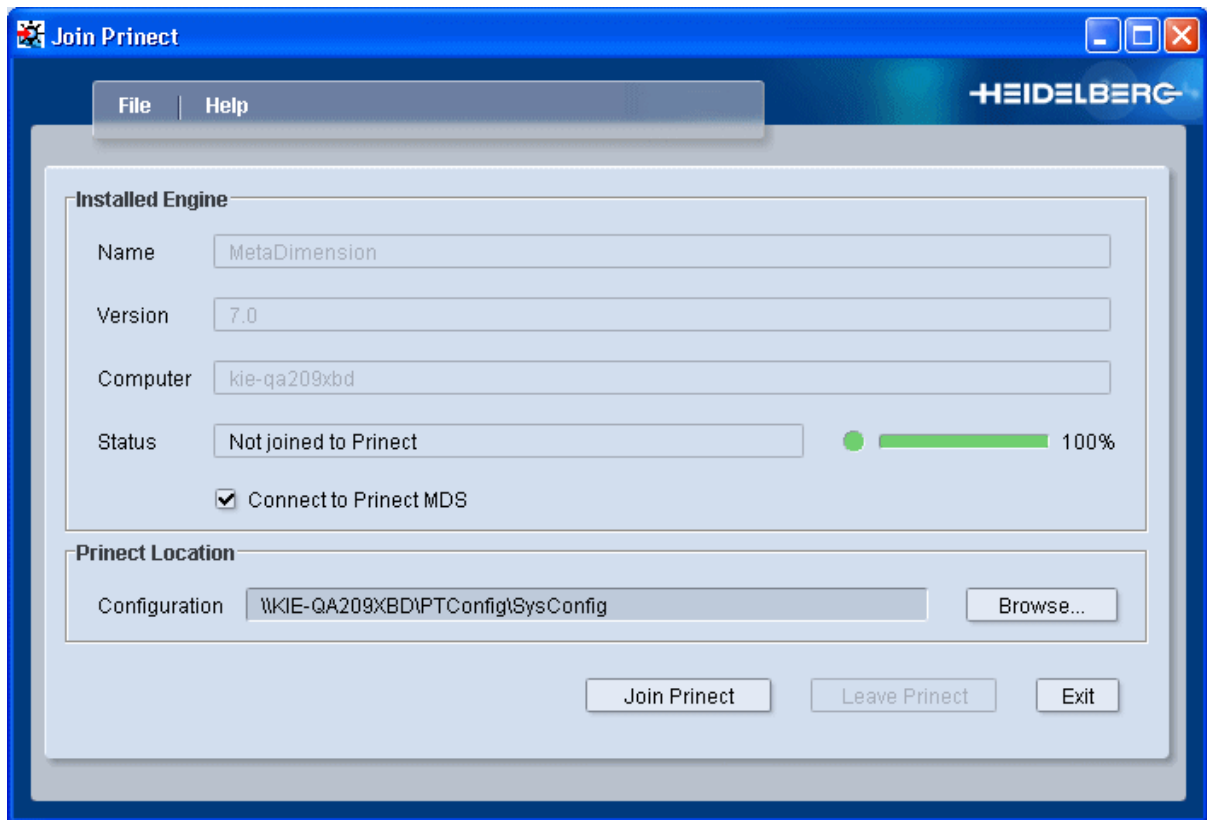
This means that MetaDimension is mounted to the Prinect Integration Manager server as an "engine" and the MetaDimension RIP functions can be used by the Prinect Integration Manager. Close the "Join Prinect" dialog by clicking "Exit". Now you can start the Prinect Integration Manager Cockpit.

Logoff of Prinect MetaDimension from the Prinect Integration Manager

If you would like a new installation or an update installation of the Prinect Integration Manager-software, you must log MetaDimension out of the Prinect Integration Manager again before the new installation or update. To do this, open the "Join Prinect" program again in "Administration > Configuration > JDF Portal" as described above and click the "Leave" button. Confirm the following alert messages with "Yes" or "OK":



Wait until the "Not joined to Prinect" status message appears:



Close the "Join Prinect" dialog by clicking "Exit". The Prinect MetaDimension is now logged off from the Prinect Integration Manager. Now you can, for example, run a new installation and register MetaDimension again on the Prinect Integration Manager.

Configuration

The "Platesetter remote control" (MetaDimension device) is released when the "CP2000 Plate On Demand" dongle option is licensed.

Settings in MetaDimension



Prerequisites: To control plate output from the CP2000 user interface, you must define the following settings in the Prinect MetaDimension Printmanager:

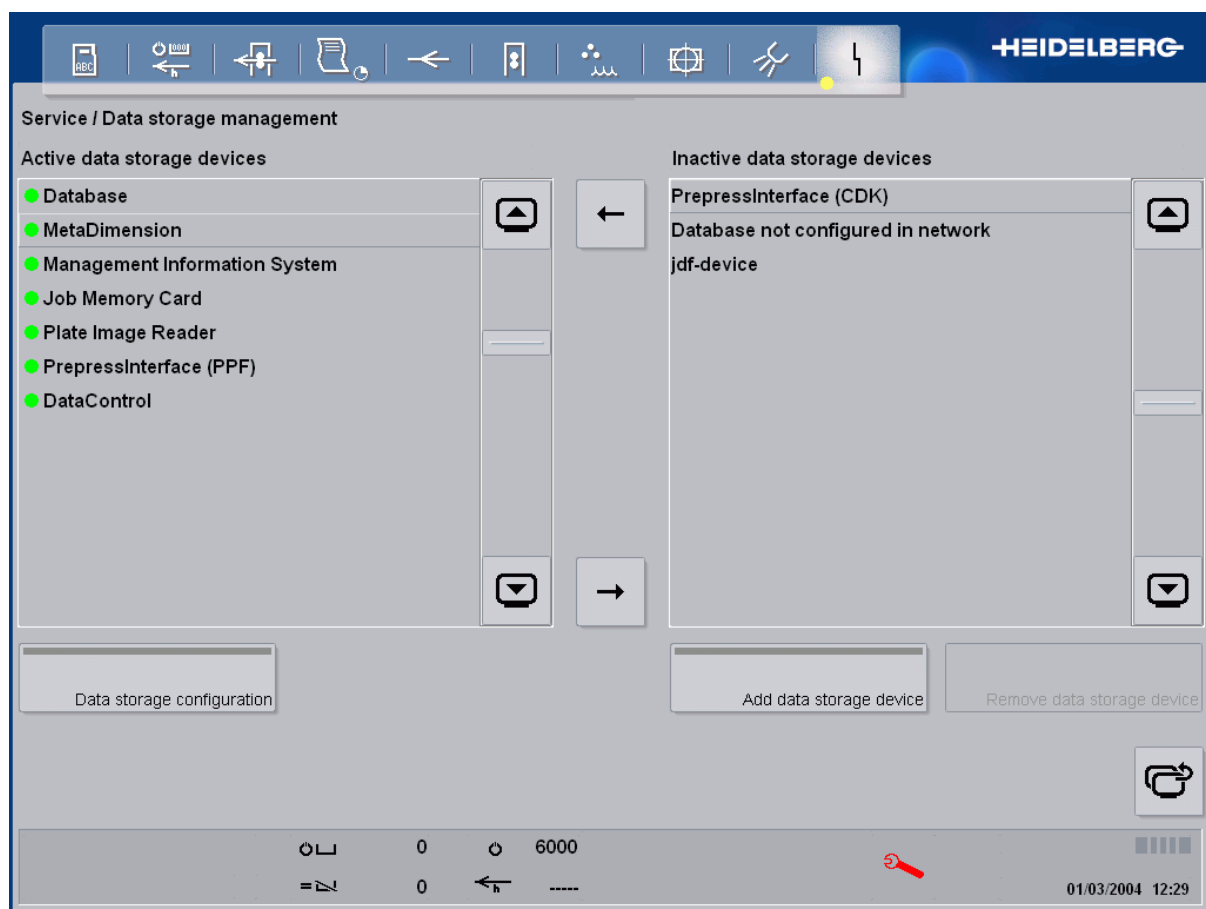
Go to "Administration > Resources" and open the Output Plan templates of the imagesetter whose output you want to control from the CP2000 user interface. Enable the "Preview" option in the Output Plan and select a resolution. Set "wait after preview" in "Action after preview".

Remember that these settings only affect jobs that were edited by Prinect MetaDimension with these parameters. If you use a Prinect Integration Manager to generate jobs at Prinect MetaDimension, you should make sure that preview or thumbnail generation is set in the MetaDimension sequences so that you can use preview images to identify jobs in the CP2000 user interface.

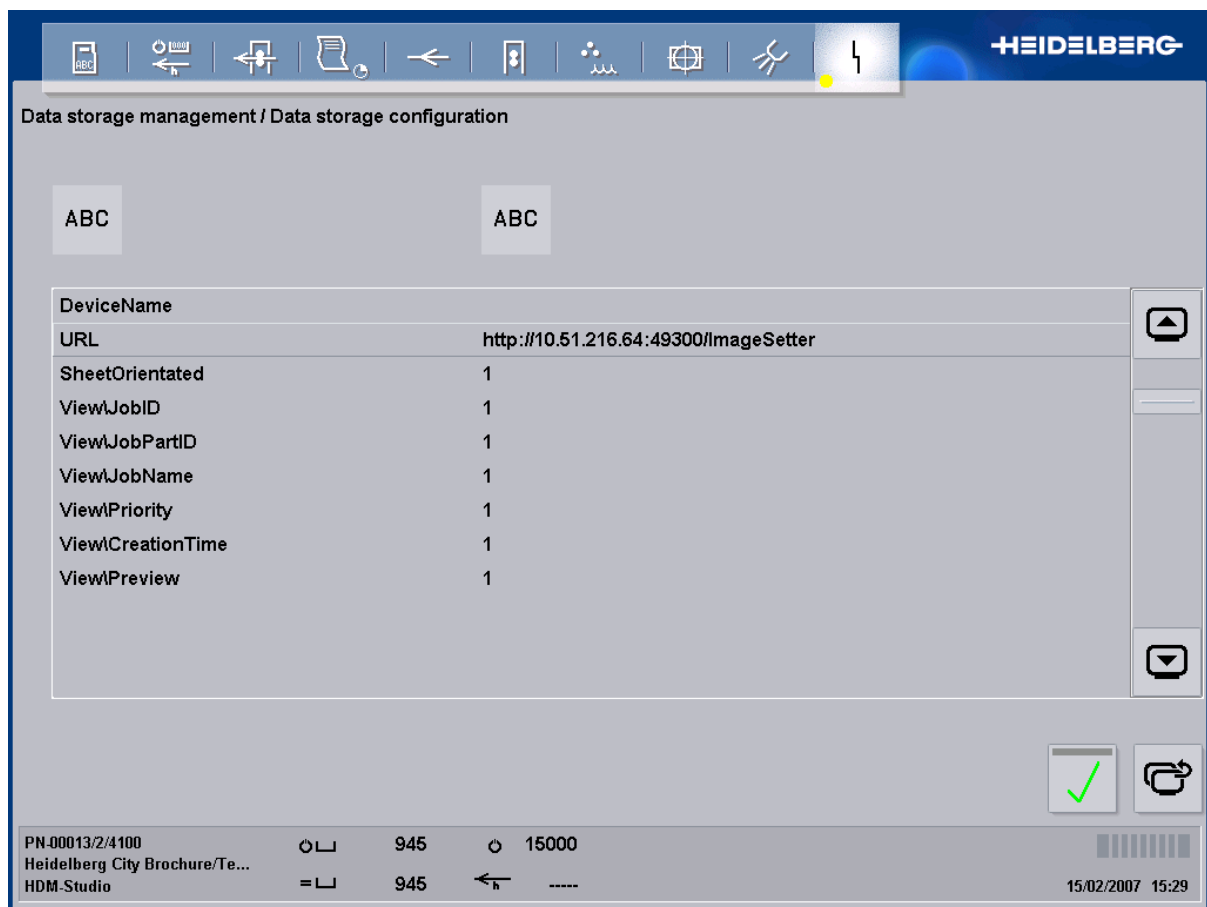
Steps in the CP2000 User Interface

First go to the "Manage Service/Data Storage" form either with "Service > Data storage management" (older CP2000 versions) or "Service > Prinect Configuration > Data storage management" (newer CP2000 versions). The "MetaDimension" device (or whatever the name of the device may be) must be in the "Active data storage devices" list.

CP2000 Platesetter Integration



After you select "MetaDimension" in "Active data storage devices", you can then configure the device by clicking the "Data storage configuration" button. A list of the configurable parameters will then be shown for this device.



The first parameter, "DeviceName", allows you to choose any name for the device. If no name is entered, "MetaDimension" is used.

For the "URL" parameter, you must enter the URL - including port number - of the HTTP server that Prinect MetaDimension provides.

After Prinect MetaDimension is installed, the URL is set as follows:

URL = http://hostname:port number/ImageSetter

The "hostname" can either be the alphanumeric computer name of the server or the IP address of the server, entered in this form: aaa.bbb.ccc.ddd. For example, the computer name "localhost" is also used as a synonym for the local computer and its IP address is: "127.0.0.1" (this is valid in general).

From experience, you should use the numeric IP address as this avoids having to first assign the host name to the IP address. This action could involve longer response times.

The port number and "ImageSetter" are set by Prinect MetaDimension and your URL is as follows:

URL = http://hostname:49300/ImageSetter,

with "hostname" standing for the Prinect MetaDimension computer.

The other parameters allow you to activate or deactivate the display of certain columns in the job list. Only when one ("1") is entered will the column in question be shown in the job list. On the other hand, a zero ("0") means that the column will not be shown.

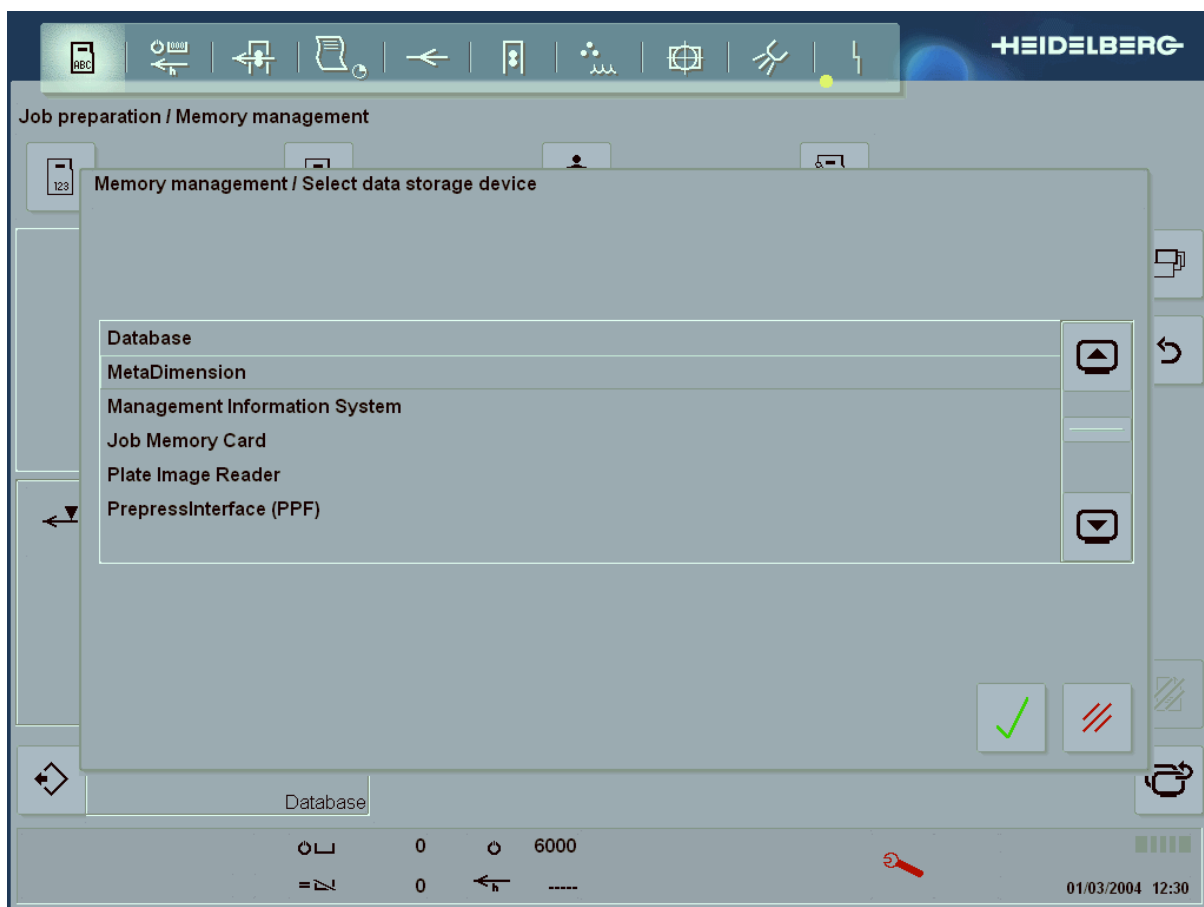
CP2000 Platesetter Integration

The parameters are assigned to the columns as follows:

View\JobID:	Job number
View\JobPartID:	Component job number
View\JobName:	Job Name
View\Priority:	Priority
View\CreationTime:	Creation date and time
View\Preview:	Show or not show preview images

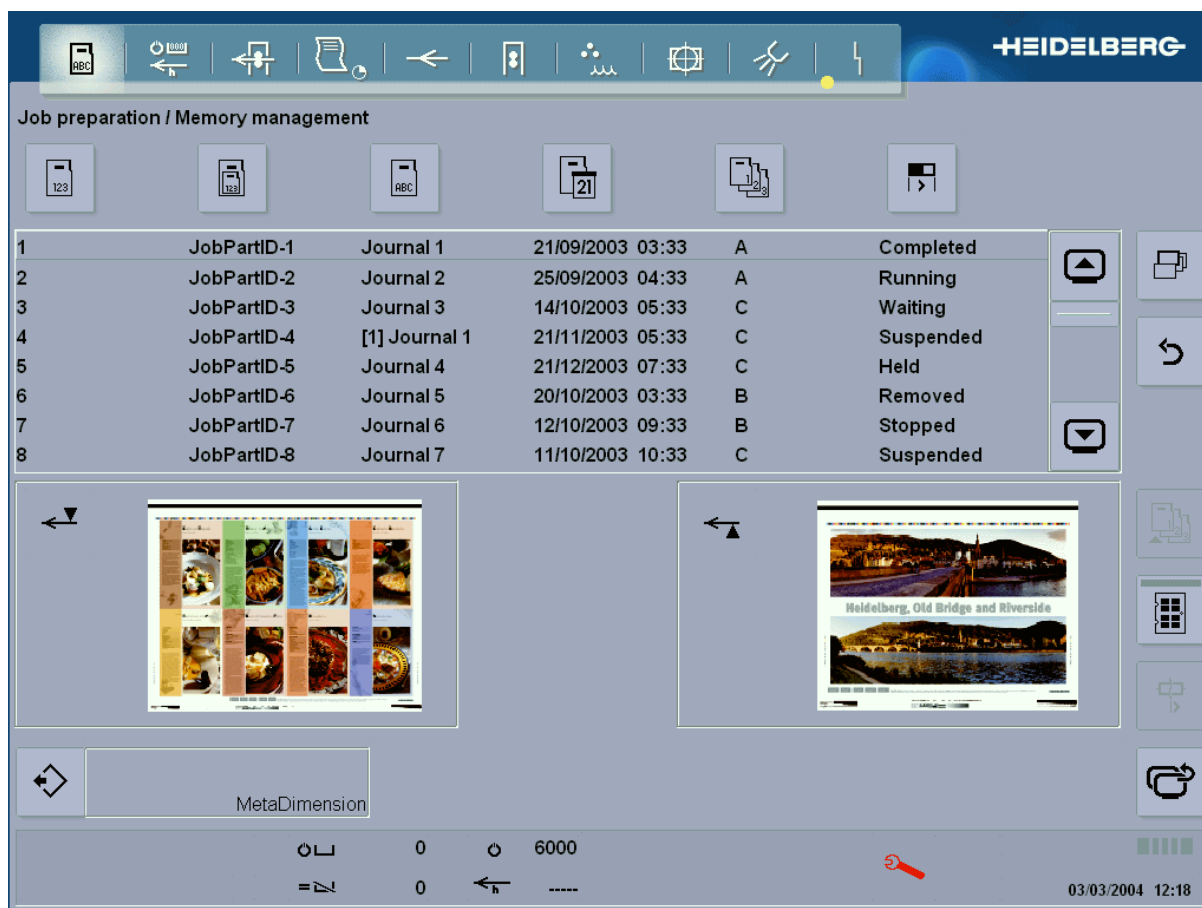
Storage management

To use the "Remote control platesetter" functionality, go to the "Job preparation/Memory management" form. First select the "MetaDimension" device (or the device name set in the configuration) in "Select data storage device".



Click "OK" to return to the form with the job list. For a certain amount of time (max. 10 sec.) the system will try to transfer data between CP2000 and Prinect MetaDimension. During this period, the status bar displays a rotating watch hand.

If the data are transferred correctly, the jobs will be seen in the job list.



The columns that can be shown are listed in the table below. Certain columns can be selected in the configuration, as previously described.

JobID	JobPartID	Name	Status	Priority	Date/time
Order ID in Meta-Dimension or JobID from the MIS	Component job number	Alphanumeric order name	Completed	A: urgent	Date/time when the job was created in Prinect Meta-Dimension
			Running	B: high	
			Waiting	C: normal	
			Held	D: low	
			Suspended		
			Stopped		
			Removed		
			Aborted		

CP2000 Platesetter Integration

Every row in the job list shows certain attributes of a job. A job is clearly identified in the first column by the JobID.

If "MemoryPlus" is licensed, you can select the buttons above the columns for sorting as well as use the common filter functionality.

For each selected order a thumbnail (preview) of the front and back side is shown from the first sheet. Thumbnails can only be shown if preview generation is enabled in Prinect MetaDimension in the relevant Output Plan.

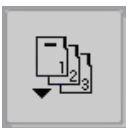
The functionality of the buttons is as follows:

Preferred (raise priority): In the CP2000 version 41, this button sets priority to "A" (urgent) for the selected job.



In the CP2000 version 42 and higher, this button raises the priority of the selected job up one level.

Reduce: This button sets the priority of the selected job back one level. This button is available only as of CP2000 version 42.



Re-image: The list of separations is shown in a new form for the selected job, where you can select a separation that needs to be re-imaged.



Continue: The selected order, which is in "suspended" status, will continue.



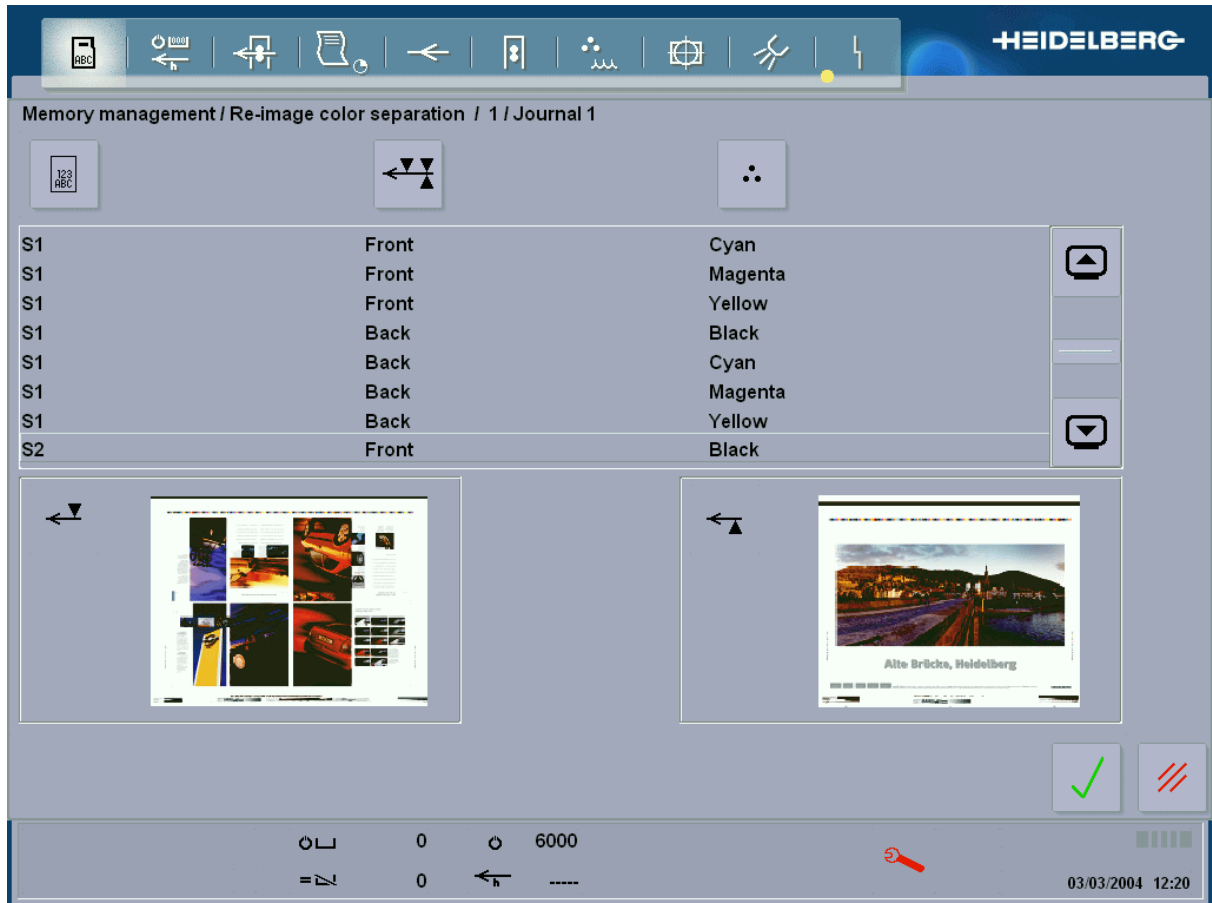
The various buttons are set to "Enabled" according to the job status. Assignment is as follows:

- Raise priority <= Status: Waiting, Running, Held, Suspended, Stopped
- Re-image <= Status: Completed
- Continue <= Status: Suspended

"Raise/change priority" and "Continue" are applied directly to the selected job. After the action is done, the job list will then show the change in priority or job status.

On the other hand, click "Re-image" to call up the color separation data for the selected job from Prinect MetaDimension. This data is shown in a new "Memory management/Re-image color separation" form.

The order number and the order name are shown in the title line of the "Memory management/Re-image color separation" form.



The various columns are listed in the following table.

Sheet name	Page	Separation
Sheet name	Front and back Front or back side	Color separation

If "MemoryPlus" is licensed, you can select the buttons above the columns for sorting as well as use the common filter functionality.

Every row defines a certain printing plate that can be re-imaged based on the three attributes, "Sheet name", "Side" and "Separation".

CP2000 Platesetter Integration

Thumbnails (preview images) of the front and back side of the associated sheet are shown for each selected line or separation.

You can select a row and click "OK" to submit the re-imaging of this separation to Prinect MetaDimension. After that the form closes - as with the "Cancel" button - and the updated version of the Prinect MetaDimension job list is requested and displayed.

The re-image job ("child job") appears in the job list with the name of the original job ("parent job") and the "parent" JobID as a prefix.

Example:

"Main order": JobID = "1", Name = "Journal 1"

"Sub order": JobID = "4", Name = "[1] Journal 1"

At the given time, Prinect MetaDimension only allows the main order or re-imaging (sub order). Simultaneous processing of the parent job and a child job is not permitted. Multiple re-imaging of a parent job is also not possible. As child jobs have the same name in the job list, this means that only one job from among the many jobs with the same name can be done at a given time.

- "No Preview (only TiffB import)" [9177](#)
- A**
- Absolute Colorimetric
 - Rendering Intent [11277](#)
 - Additive color scheme [12315](#)
 - Administration display [9193](#)
 - Adobe PDF PrintEngine [427](#)
 - Adobe Portable Job Ticket Format [9200](#)
 - Adobe Type 1 fonts [8155](#)
 - Angle Substitution [11238](#)
 - APPE [427](#)
 - Apple Talk [9174](#)
 - Area Coverage [698](#)
 - Automatic Layout File Generation [16341](#)
 - Avoiding Exposures with Bitmap Fonts [8155](#)
- B**
- Bitmap fonts [8151](#), [8155](#)
 - Bitmap Viewer
 - Toolbar [696](#)
 - Brand name [8165](#)
 - BSPP [9175](#)
 - Buttons [652](#)
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 - Scatter Proof window [7111](#)
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- Calibration
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 - Calibration curve group [13322](#)
 - Calibration Manager [8146](#)
 - Cancel preview [6103](#)
 - Change system unit of measure [9200](#)
 - Changing the color of the clipped mask [681](#)
 - Changing the language [9199](#)
 - Characterization [12314](#)
 - Characterization of a scanner [12316](#)
 - Check Fonts option [8151](#)
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 - CIE-based color space [12314](#)
 - CIELab color space [12316](#)
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 - CMYK color space [12315](#)
 - CMYK display [8161](#)
 - CMYK representation of spot colors [8159](#)
 - Color Management [11275](#)
 - Color Management in MetaDimension_ [12319](#)
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 - Color Proof Pro [7120](#)
 - Color proof workflow [12319](#)
 - Color Rendering Dictionaries [12314](#)
 - Color Space [12315](#)
 - Color space [12315](#)
 - Color Space Arrays [12314](#)
 - Color space conversion [12316](#)
 - Color spaces [12315](#)
 - Color Sync [12313](#)
 - Colors [8159](#)
 - Composite [11304](#)
 - Compucut [19391](#), [19396](#)
 - Conceptproof [11229](#), [11270](#)
 - CP2000 [19395](#)
 - CPC1 [19395](#)
 - CPSI [427](#)
 - CRD [12314](#)
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 - CSA [12314](#)
- D**
- DataControl [19395](#)
 - Delete clip mask [682](#)
 - Delete halftone softproof files after [9177](#)
 - Delete installed fonts [8154](#)
 - Delete Job After [9176](#)
 - Deleting image directories [16345](#)
 - Delta Workstation (MetaDimension) / Pre-pressInterface interface [19393](#)
 - Density value [8162](#)
 - Devices
 - Complete device list [7109](#)
 - Error message [7109](#)
 - Icon [7109](#)
 - Name [7109](#)
 - Proof Devices [7110](#)
 - Status [7109](#)
 - Document Structuring Conventions (DSC)_ [18382](#)
 - Drive Monitor [9195](#)
 - DTP Documents without Layout Files [15332](#)
 - Dynamic control panel [546](#)
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 - Password [10208](#)
 - POP3 host [10208](#)
 - SMTP host [10208](#)
 - User name [10208](#)
- E-mail
 - E-mail address [10207](#)
- Engine Managers [7119](#)
- Example
 - Spreading and screen angle measurement [6105](#)
- Exclude TIFF & EPS [17357](#)
- Exporting and Importing Device-specific Settings [18366](#)
- F** Faulty exposures [8155](#)
- File Formats [16337](#)
- File name extension for layout files [16344](#)
- Find [649](#)
- Find jobs [649](#)
- Fine images in PostScript files [9186](#)
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 - Cancel [655](#)
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 - Using the job function keys [655](#)
- G** Generate Preview [9185](#)
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- C** Color Management
- I** ICC profile
- K** Key
- R** RGB color space

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