Imaging Engine – FlexRip 14

Proof

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1 Preface

1.1 Who is this guide aimed at?

This manual introduces you to the FlexRip application. You will find all the necessary information you need to make you feel at ease working with FlexRip. It is meant to be equally helpful to first time users and skilled operators who might need a little extra assistance from time to time.

1.2 What does this Manual contain?

This FlexRip manual basically consists of the following parts:

- Introduction to a FlexRip / FlexProof workflow
- Startup and shutdown of a FlexRip
- General overview of programs on the FlexRip
- Dispatcher
- Queue Settings
- Status Monitor
- History View
- Workflow: flavors and hints
- Data backup and customization
- Classic errors and their explanation
- General troubleshooting
- Frequently Asked Questions
- Appendix

1.3 Conventions

1.3.1 Layout

For easy reference, we use the following conventions:

Each topic of a list will be preceded by a bullet.

Instructions of only one step, or instructions independent of the order of the steps, are also preceded by a bullet.

1. For instructions that consist of several steps to be performed in a strict order, we use numbered steps.

Note
A note gives you important information.

Tip

A tip gives you useful information.

Warning
A warning gives you information on how to avoid problems.

Task
indicates a reference to a task.

If a task is referred to in the See also-sections it is preceded by the words "How to..."

2 General introduction

This document is the user and training manual of a FlexRip / FlexProof and is intended for all operators. It explains a FlexRip workflow, the setup of possible configurations, describes its daily use and contains some basic troubleshooting. This document is currently available as PDF file or on-line help.
A FlexRip comes with the Suite 12 DVD that contains the following:

1. Software
2. User documentation on:
    * FlexRip / FlexProof (this document) (PDF file: Acrobat)
    * Esko Curve Pilot
    * Esko Screening
    * SambaFlex Screens

Warning
This document (and a FlexRip training in general) assumes that the operators of a FlexRip are at least comfortable with the basics of the Windows operating system. A daily user of FlexRip does not need detailed knowledge, but the system manager who controls the in-house networking, installation and configuration of Windows does. This implies that he should have no problems reading our installation and update documentation, written in English. If this is not the case, Esko strongly advises the customer to have his system manager follow a Windows training program.

3 Introduction to a FlexRip workflow

3.1 What is a FlexRip?

1. A FlexRip is designed as a file RIP. There is no direct interfacing with non-Esko machines to ensure maximum connectivity, flexibility and performance.
2. FlexRip is a true Dual Channel RIP. It is equipped with an Esko native channel and an Adobe Certified PS/PDF channel to guarantee a fully open platform.
3. The FlexRip engine is Esko technology and a continuation of the FastRip technology. FlexRip has the same engine for all flavors.
4. FlexRip contains various output modules for different output device types (proofers, ImageSetters, PlateSetters), but only 1 kernel to guarantee a 100% consistency.
5. FlexRip comes standard with Esko Curve Pilot, the advanced calibration tool for film output, plate calibration and press compensation.
6. FlexRip is based on a very modular design, so different output flavors can be added at any time.

3.2 What kind of FlexRip flavors exist?

FlexRip is a modular product with different input channels and a variety of output flavors.

1. Input channels:

    - PostScript 3 / PDF 1.4 / PDF 1.5 / PDF 1.6
    - Normalized PDF (Esko's native file format)

Note
FlexRip 12 is compatible with Automation Engine 12, Esko PackEdge 12 and Esko Plato 12 for PS/PDF interpretation.

2. Output flavors:

    - FlexRip/Approval provides an interface with Kodak's Approval proofer machines.
    - FlexRip/B either rips on the fly (Esko native only) or rips to (screened bitmap) files before sending the information to the Barco ImageSetter (PS and Esko native).
    - FlexRip/C outputs screened LEN files for CDI's.
    - FlexRip/DCS screened output is a generic module to generate DCS 2.0 files.
    - FlexRip/DCS unscreened output provides generic unscreened DCS 2.0 files.
    - FlexRip/P outputs (un)screened PDF or PostScript files.
    - FlexRip / FlexProof outputs to proofing devices. Various output formats are available: TIFF, PS, RTL, PDF, Windows Printer, and E Printer. It can also be used for output on digital presses (HP Indigo).
    - FlexRip/Tg (TIFF/Gray) outputs grayscale (8-bit) TIFFs (unscreened).
    - FlexRip/T4 outputs screened bitmap TIFF files (1-bit).

3.3 What is a FlexRip / FlexProof?

FlexRip Proofing Output is a module that outputs to various proofing devices.
This flavor is called FlexProof if installed on a dedicated PC.
There are different FlexRip / FlexProof output formats depending on the type of device you want to proof on:

Windows Printer
FlexProof will generate a .PRN file which is formatted in GDI (Windows printing language). The .PRN file is sent to a driver which converts the GDI information into the printer's native language. GDI (Graphics Device Interface) is a collection of standard graphical functions provided by Microsoft Windows. Windows-based applications do not access the graphics hardware directly, but instead, GDI interacts with device drivers on behalf of applications.

The GDI functions allow Windows to control the way graphics are displayed and to generate graphical output for displays, printers, and other devices. The printer driver converts GDI objects into the printer language.

With FlexProof now generating GDI output, FlexProof can drive any proofer that

can be driven from Windows. All you need is a Windows printer driver to drive the proofer from FlexProof.

Only a limited list of proofers will be supported:

1. HP:
    - HP5000 DesignJet (Simplex)
    - HP5500 DesignJet (Simplex)
    - HP20PS (Simplex)
    - HP9000DN (Duplex)
    - HP5SI LaserJet (Duplex)
    - HP8550DN (Duplex)

2. Epson 7600, 9600 and 10600
3. Xerox 7300

E Printer
FlexProof/E is a new flavor in FlexProof, which is the result of Esko's co-operation with EFI. Esko built in some of EFI's Best Color technology. FlexProof/E uses drivers from the EFI's Color Proof XF to drive the proofers in its native language, while profile and color management is done fully using Color Engine Pilot and Esko Color Management Module.

TIFF (Screened):
FlexProof will generate a composite CMYK TIFF file or (in case of a LATRAN license) separate TIFF files: CMYK, Pantone or user defined separations. The image is screened at printer resolution. The TIFF file can be passed on to any printer or printer RIP that understands CMYK TIFF.

TIFF (Unscreened):
FlexProof will generate a composite CMYK TIFF file. The image is unscreened. The TIFF file can be passed on to any printer or printer RIP that understands CMYK TIFF.

PS (Screened)
FlexProof will generate a composite CMYK PS file. The PS file consists of a header and an image. The image is screened at printer resolution. There is full PPD support. The PS file can be passed on to any printer that understands PostScript.

PS (Unscreened)
FlexProof will generate a composite CMYK PS file. The PS file consists of a header and an image. There is full PPD support. The image is unscreened. The PS file can be passed on to any printer that understands PostScript.

RTL file
FlexProof will generate an RTL file. The RTL file can be passed to any printer that understands this printer language. The following printers should be configured

using RTL: HP650c, HP750, HP755, HP2000, HP2500, HP3000, HP3500, HP800, HP1055cm, SpinJet 1055, SpinJet 5000, Mutoh 6100 RJ, Agfa Sherpa 42, ENCAD NovaJet, NovaJet Pro, and Kodak 3043.

PDF Screened
FlexProof will generate a CMYK PDF file. The file will be screened and can be passed on to any printer that understands PDF.

PDF Unscreened
FlexProof will generate a CMYK PDF file. The file will be unscreened and can be passed on to any printer that understands PDF.

Note
You will only see the output types you have a license for.

Advantages over PostScript RIPs:

- The overall speed, accuracy and repeatability.
- The complete range of Esko screens is available.
- Esko Curve Pilot: Dot Gain Compensation tools.
- Esko's flexo distortion.
- Esko's optimized imaging quality.

3.4 FlexRip basics

3.4.1 General PS and Esko native workflow

This is a general presentation of a FlexRip workflow:
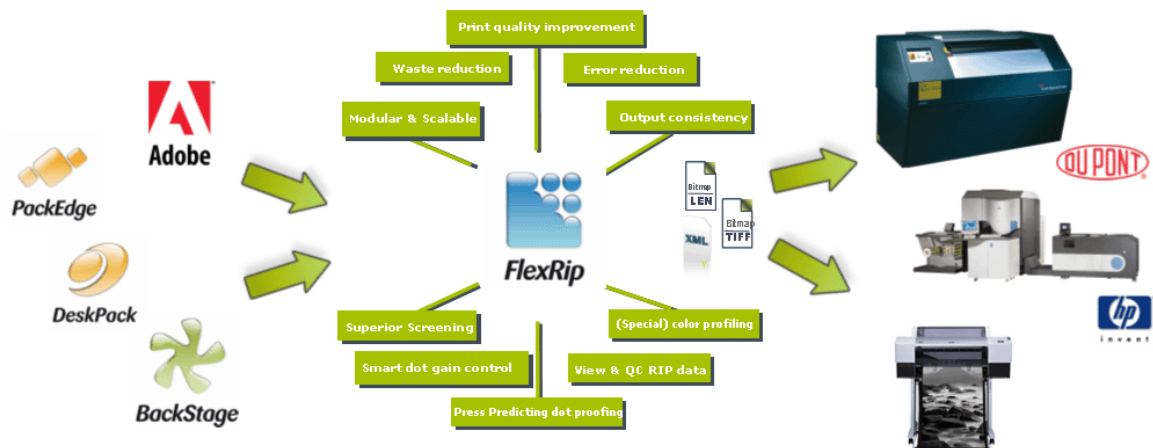
3.4.1.1 PostScript workflow

In a PostScript workflow, the DTP operator (Macintosh or PC) will print an output-ready job via the Print menu in the application. Using the printer driver of Adobe PS and Esko's dedicated output device PPDs, the operator sets following job parameters in the (separated) PostScript file:

- the selection of separations to be printed
- screening parameters: dot, screen ruling (lines per inch or lpi), angle
- job size
- DGC, Strategy (*.icpro) or CurveSet (*.prsync) Esko's compensation curves. See the Esko Curve Pilot (page 83) chapter for a short introduction and the dedicated Esko Curve Pilot documentation on the Suite 12 DVD for an in-depth explanation.)
- positive or negative; right or wrong reading
- distortion (flexo-printing issue)

Some settings may be left out as they can be set default in a specific RIP queue (e.g. expose resolution, output folder,...). The PostScript file ends up (via AppleTalk print queue, Hot Folder,...) on the FlexRip and is ripped automatically, using default or job-specific RIP options.

The output files will be written in a folder on the FlexRip PC.

See the flavor-specific workflows for more in-depth information.

3.4.1.2 Native workflow

As well as being an Adobe Certified PS3 and PDF RIP, FlexRip can also rip data from all Esko PrePress applications without any additional calculation or processing time, since the format used in the Esko PrePress applications is exactly the same format used in the FlexRip. This enables an unrivalled level of throughput and consistency.

You can choose to print to the FlexRip directly from Esko PrePress applications like Esko PackEdge and Esko Plato and all output options can be set interactively. To maximize throughput, operators can rip files via a ticket-driven workflow (Automation Engine Server or FlexRip Pilot), offline from the graphical editors. Jobs can be selected, assigned a ticket and then launched in the background, reducing workstation time. Users can see the ripping progress of any job on either the Mac or Windows PC. Logging information can be obtained.

See the flavor-specific workflows for more in depth information.

3.4.2 Which file formats can be sent?

As the FlexRip is a certified PS level 3 RIP, following file formats can be sent:

- Separated PostScript: Level 1, 2 or 3.
- PDF 1.3 – PDF 1.4 – PDF 1.5 – PDF 1.6
- Esko's native file formats.

A normal PostScript workflow will only be based on **separated** PostScript, although FlexRip can handle composite PS files as well. The PostScript interpreter of the FlexRip will read composite PostScript, analyze it into separations and hand over the data of each separation to the RIP, which will make 1 output file per separation. However, customers that receive composite PDF files have to realize that errors may occur when handling the files.

Separated PostScript files for a FlexRip were made with a specific FlexRip PPD. Composite data may not be made via a FlexRip PPD and will probably miss some RIP settings, like the correct screen ruling (angle, LPI, dot type), output name, etc... Most of these then have to be set in the Dispatcher's queue settings. In the Screening tab, you can define the missing screen ruling parameters or overwrite the ones that are incorrect.

Note
In a PostScript workflow, Esko strongly recommends using separated PostScript as standard and preferred input channel.

For FlexRip / FlexProof, separated Postscript files are required to maximize

consistency between plate/film and proof.

Difference between composite and separate PostScript

In general, DTP applications output their data in the description language "PostScript" (PS). When the output has to be a color version (e.g. a proof), one will write "composite PostScript". This 1 file generally includes all the data, their color attributes and their relation to each other. Output for a specific proofer will be done using a PPD file (printer description) of that proofer, meaning that the PS file will be adapted for that specific output device.

When outputting to a film- or platesetter (e.g. CDI), the job has to be delivered to the RIP as a "separated PostScript" file. This means that all the data are already split up per separation (ink). This is also 1 file, but now written in chapters ('pages'). Each Chapter describes 1 ink. The RIP of the film- or platesetter will recognize these "chapters" and handles each ink separately. The color information in this file is in fact redundant info (the laser in the machine does not care about color); so each 'chapter' describes the separation in black.

Also **PDF** files may not contain the correct info. The correctness of the PDF files will heavily depend on the applications that write the PDF files. Very common mistakes, such as missing special colors or missing separation info (LPI/angle) are not limitations of the PDF format itself but of the applications that produce these PDF files. PDF files written from Esko applications such as Esko PackEdge, Esko Plato and Automation Engine will contain the correct info.

3.4.3 Workflow description

In a FlexRip / FlexProof workflow, Esko-native data or separated PostScript files are sent to a specific FlexRip queue.

The FlexProof workflow consists of the following steps:

- A native Esko file is selected from the Pilot and sent to an FlexProof Dispatcher
- or a PostScript file is printed to the FlexProof
- The Dispatcher produces separations (in CT format).
- All separations are re-combined to a CMYK file (or an RGB file in case of GDI).
- The composite file is sent to the proofer directly or indirectly via a 3rd party RIP.

Separations produced by the FlexRip can be re-combined by an **Image Downloader** task on the server or by the FlexRip itself. Recombining separations on the server by

a separate task will result in an extra entry in the Automation Engine monitor and will free up the Dispatcher as soon as the separations are produced, which can result in a considerable speed improvement. For more information on the Image Downloader task, please consult your Automation Engine manual.

Normalize Task

PackEdge

Plato

GRS

PLA

BackStage

Rip Task

PLA

GRS

HotFolder Queue
Apple Talk Print Queue

FlexRip

CT

1 temporary monochrome CT per separation will be
recombined in the FlexRip or the Image Downloader Task

1 CMYK file
(TIFF, PS, RTL)

CMYK

or

RGB

1 RGB file
(PRN)

GDI
Windows driver

E printer

PS, TIFF, PS printer
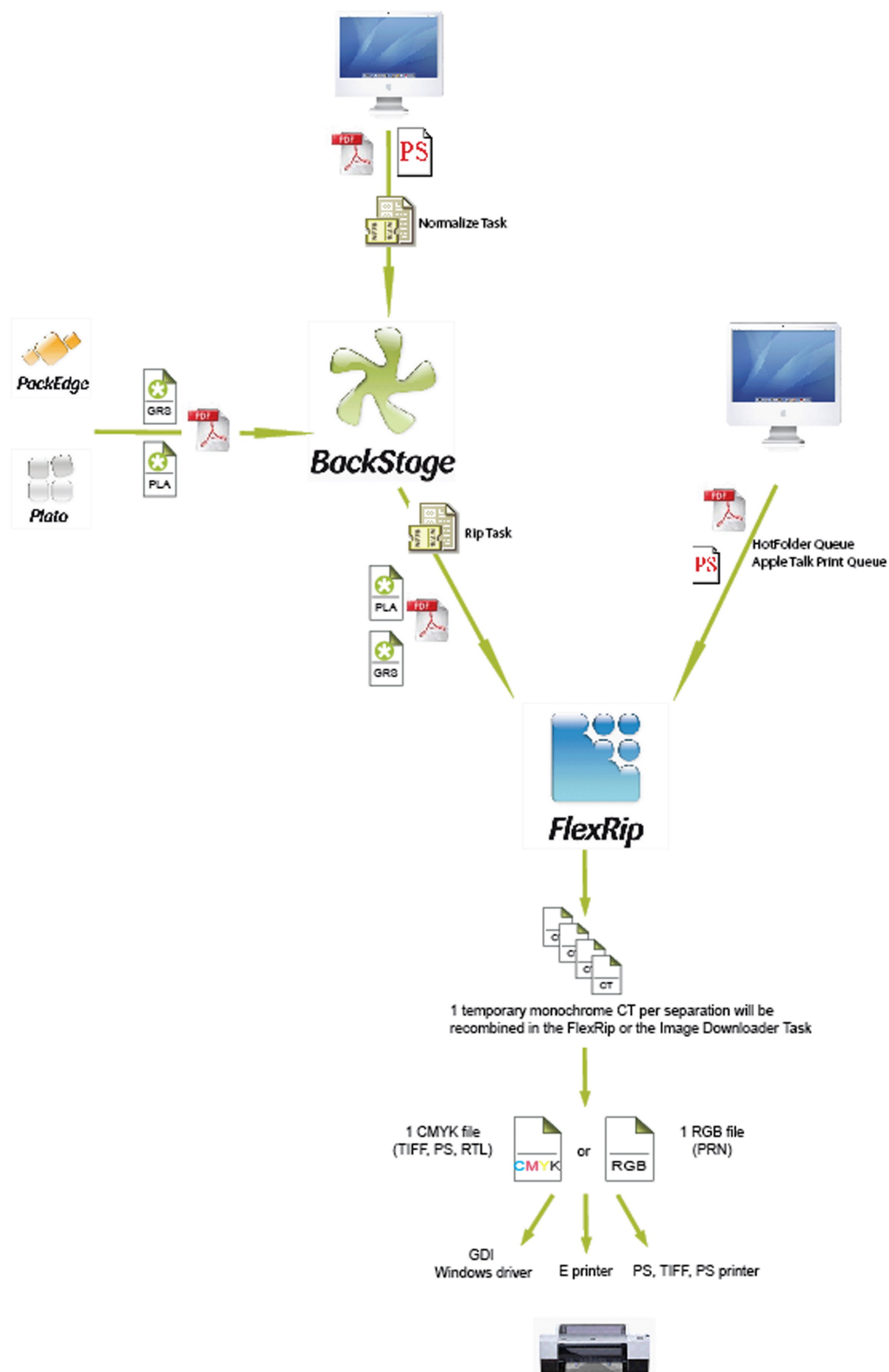
3.5 Output file type

The output file type depends on the FlexProof flavor you have installed.

- FlexProof/E: E printer uses drivers from the EFI's Color Proof XF to drive the proofers in its native language, while profile and color management is done fully using Color Engine Pilot and Esko Color Management Module.
- FlexProof /TIFF: generates a CMYK TIFF file from any separated PS file or Esko native file and sends it to any installed printer that accepts TIFF files.
- FlexProof /PS: generates a CMYK PS file from any separated PS file or Esko native file and sends it to any installed PS printer.
- FlexProof /RTL: generates an RTL file from any separated PS file, PDF, Esko native file or set of screened files (like LEN files) and streams it to any device that understands RTL like HP650c, HP750, HP755, HP2000, HP2500, HP3000, HP3500, HP800, HP1055cm, SpinJet 1055, SpinJet 5000, Mutoh 6100 RJ, Agfa Sherpa 42, ENCAD NovaJet, NovaJet Pro, Kodak 3043.
- FlexProof/PDF: FlexProof will generate a CMYK PDF file. The file will be screened and can be passed on to any printer that understands PDF.
- FlexProof/GDI: generates RGB bitmaps (Microsoft Windows printing language) and is passed to a standard Windows driver which converts into the Color space of the printer. The following printers are supported: HP5000/5500 and Epson 7600/9600/10600.

3.6 What is a FlexRip Queue?

The heart of the FlexRip is a program called the **Dispatcher**. A Dispatcher controls the RIP and manages input queues for one specific device. Queues receive the PS data that were printed from the DTP station. The behavior of the queue ('how will it rip') is determined by its 'settings'. Each queue can have different settings.

There are several queue types. The most common are:
- An AppleTalk print queue (Macintosh)
- A Hot Folder
- A 'Named Pipe' queue ("PC-talk").
- An EskoLink queue

The FlexRip queue receives the data and rips it to a CT file according to its specific settings.

4 Startup and shutdown of FlexRip

4.1 Why and when?

In any normal FlexRip workflow, the FlexRip computer should never be shut down. Even reconfiguring RIP queues does not require shutting down or rebooting the computer.

So why shut down the FlexRip?
- You expect a power failure.
- You physically want to move the computer.
- You have to open the computer (hardware service reasons).

Or why reboot the FlexRip?
- The Windows software asks you to. This will often be the case when re-installing Windows software or peripherals on the computer.
- Some (Esko) service intervention requires to do so (changes to configuration of the network, modem or display might require a reboot afterwards).

A Windows shutdown will automatically stop all running processes. This means that also all running Esko programs will be stopped automatically. We do advise you to separately stop all programs before rebooting or shutting down the FlexRip computer.

As the FlexRip is made to rip, and the RIP itself is a client process of the Dispatcher program, the most important program running on your FlexRip is the Dispatcher! This will also be further explained in detail.

4.2 How to start up a FlexRip?

4.2.1 Start up the computer

The FlexRip computer is switched off.

- Check the network cable.
- Switch the monitor on.
- Remove all floppy disks or CDs from their drives.
- Press the power button (top-left on front panel).

Windows will make your computer boot automatically. If you are not familiar with PC operating systems, never intervene during the boot process. The boot sequence should end with a screen that has the window:
"Begin logon"

'Press Ctrl + Alt + Delete to log on'

If you wish to use the normal FlexRip software, log on as user 'FlexRip' with password 'FlexRip'.
For FlexRip / FlexProof in a native (Normalized PDF and GRO) workflow (i.e. when part of an Automation Engine configuration) this is mandatory, unless you mount specific shares separately.

Only log on as user 'Administrator' for Windows system-management reasons or to install software.

4.2.2 Starting up the Rip

Starting the Dispatcher program starts the RIP.

1. Start up the "Dispatcher(s)" by double-clicking its desktop icon or by choosing the right Dispatcher via Start => All Programs => Esko => FlexRipProof 12.
2. Start up the 'Status Monitor' in the Tools menu in (each) Dispatcher.
3. Start up the 'History View' in the Tools menu in (each) Dispatcher.

More detailed info on these programs can be found further in their separate sections: Status Monitor (page 72) and History View (page 75).

Note
Renaming the desktop icon can only be done in the FlexRip Configurator. See the FlexRip Configurator manual for more information.

4.3 How to shut down a FlexRip?

4.3.1 Stopping the Rip

Closing the Dispatcher program stops the RIP.

Note
When stopping the Dispatcher program, it is always advisable to close its client programs Status Monitor and History View first.

How to stop the Dispatcher:

- Choose Exit from the Server menu and confirm by clicking Yes on 'Are you sure? Or simply click the close button (top-right in the Dispatcher window) and confirm with Yes on 'Are you sure? '.

4.3.2 Shutting down the computer

To shutdown the FlexRip computer:
1. Close all programs.
   Other programs that could still be open:

   - Esko Curve Pilot editor
   - Text editors Notepad or WordPad

2. Start / Shut Down. Choose 'Shut down the computer' and click YES.

4.4 How to reboot the FlexRip computer?

- Close all programs.
- Go to Start / Shut Down / Restart the computer and click YES.
  The computer will automatically shut down and restart again.

5 An overview of programs on the Esko FlexRip

5.1 General

Logged on as user 'FlexRip' (see next section for details on logon users (page 25)), you will probably find at least 3 icons on your desktop that start up following programs: the Dispatcher, Esko Curve Pilot (Esko's Dot Gain Compensation editor) and FlexRip Configurator 10. If you do not find any desktop icons go via Start / Programs / Esko...

1. The *Dispatcher* is the 'heart' of the FlexRip. It is both the 'daemon' (continuous automatic process) that makes the RIP run and the place where all queues and RIP options are set up.
    Each output device requires a new Dispatcher. This means that if you make files for 3 different output devices, you will have 3 Dispatchers.

    Note
    Note that each Dispatcher needs a separate licence.

2. The *Status Monitor* is a dedicated monitor of the Dispatcher processes. This Monitor is opened from within the Dispatcher Tools menu.
    It is recommended to activate the Status Monitor immediately after starting up the Dispatcher. Starting up the Status Monitor after having launched a job will not immediately show the actions of the job that is being ripped.

3. *History View* lists the finished processes and their log files. History View is opened from within the Dispatcher Tools menu.

4. *Esko Curve Pilot*: this DGC (Dot Gain Compensation) editor offers you the possibility to make the compensation curves that are necessary for specific printing processes (e.g. flexo). The strategies (the curves, *.icpro files) will reside on the FlexRip or the Automation Engine server.

    Curve Pilot
    12.0

    Note
    Esko Curve Pilot is further explained in a dedicated Esko Curve Pilot document that can be found on your Suite 12 DVD.

    Note

Automatic PlateMaking curves can be created in the FlexRip Configurator.

5. The **FlexRip***Configurator* allows you to add, modify or delete configurations.

Note
You should be logged on as 'Administrator' to be able to use the FlexRip Configurator.

5.2 Which logon to use?

- When do you log on as user **Administrator**?
  When you are installing or removing software or configuring your FlexRip computer on Windows level (networking, connectivity etc).

- When do you log on as user **FlexRip**?
  In all other cases. All daily use of your FlexRip: the Dispatcher or its queue management, Esko Curve Pilot, Esko Bitmap Viewer.

The following sections cover the Dispatcher (page 26), Status Monitor (page 72) and History View (page 75) in detail.

6 Dispatcher

6.1 General

The Dispatcher program is used for:

- Starting and stopping the Rip
- Setting up input queues and their Rip options
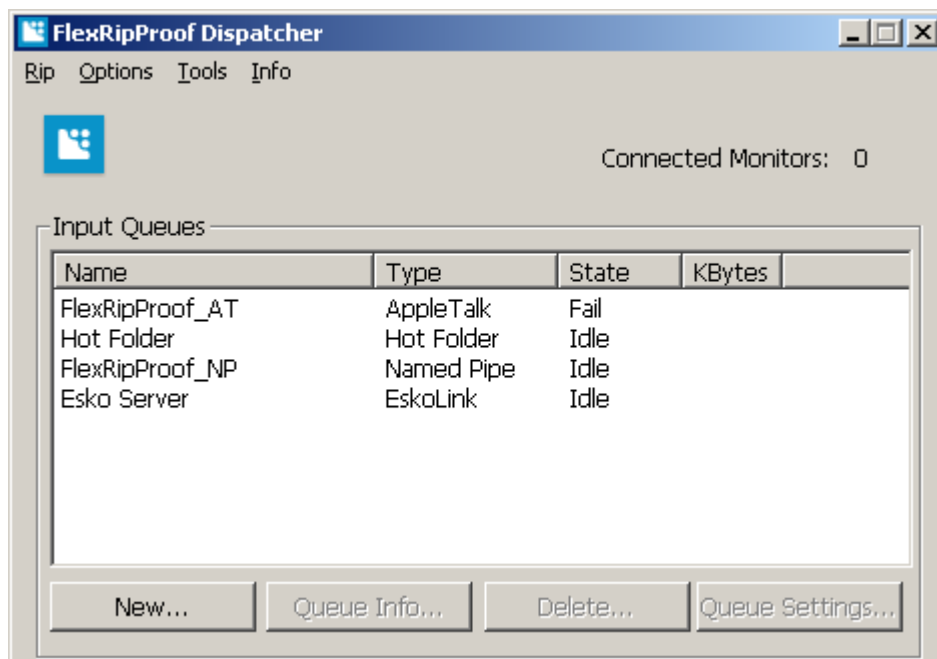
The Dispatcher is started by:

- Double clicking the icon on the desktop.
- Clicking Start ⇒Programs ⇒Esko /FlexRipProof 12 ⇒FlexRipProof Dispatcher.

This starts up the Dispatcher program itself, but also puts the actual RIP in an 'idle' status, which means stand-by for action.

Warning
When the Dispatcher program is stopped, all ripping processes stop executing and the RIP itself is stopped.

When an ongoing RIP process has to be stopped for some reason, then choose 'Abort job' from the Server menu. This stops all ongoing RIP processes, but leaves the Dispatcher program alive. As soon as you send a new job to the RIP, the RIP will start up automatically. When the Dispatcher is started for the first time, there will be at least 4 queues visible, one of each standard type. FlexRip/B will start up with only one queue, the EskoLink queue.

6.2 Rip menu

Clear History...

Send Job(s)...
Abort Job...
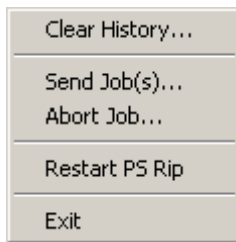
Restart PS Rip

Exit

The Server menu contains the following items:

1. Clear History (page 27)
2. Send Job(s) (page 27)
3. Abort Job (page 28)
4. Restart PS Rip (page 28)
5. Exit (page 28)

6.2.1 Clear History

Choosing *Clear history* will delete all messages in the History View selection. You will be asked to confirm first. As this deletes all entries in the history database, they cannot be retrieved. This 'cleaning' will also delete the corresponding RIP log files.

Note
It is normally not necessary to clear this history database manually. In the Options menu
⇒ Program Options, you will be able to set a limit for the amount of history entries that have to be remembered. If this number is exceeded, the oldest entries are removed automatically.

Tip
It is advised not to enter a high number for the amount of history entries. The higher the amount of entries allowed, the slower the History View and RIP logging will function.

6.2.2 Send Jobs

Click *Send Jobs* to open the 'Select and Send Jobs' dialog. Here you can browse to the job you want to send.

Note
This will only work if a Hot Folder is selected in the Dispatcher.
You can also right click the selected Hot Folder queue to make the Select & Send Job(s)dialog pop up.
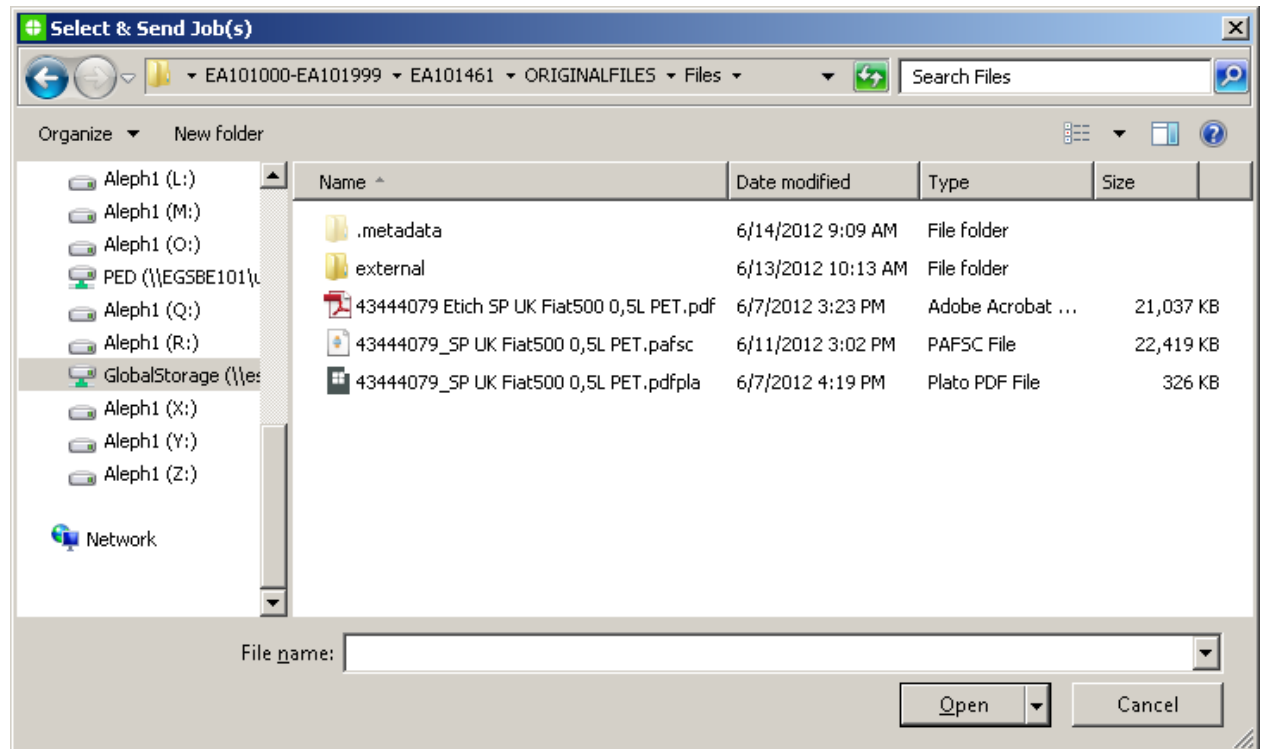
6.2.3 Abort Job

As explained above, *Abort Job* stops the RIP (and as a consequence any current ripping process). Remember that the RIP is automatically started again as soon as another job comes in. You could choose to abort a job when you are sure you do not need the output (e.g. you know the input file was wrong or a mistake was made in the queue options).

Output files that were already generated by the RIP are not automatically removed.

6.2.4 Restart PS RIP

When Japanese fonts are downloaded, *Restart PS RIP* allows restarting the PS engine of the RIP to activate the fonts in the RIP.

6.2.5 Exit

This will stop the Dispatcher program (and the RIP). Clicking the close button of the

Dispatcher dialog will have the same effect. You will be asked to confirm first.

6.3 Options menu
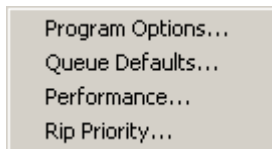
The Options menu contains the following items:

1. Program Options (page 29)
2. Queue Defaults (page 31)
3. Performance (page 31)
4. Rip Priority (page 31)

6.3.1 Program options

The program options are general Dispatcher settings. They can be set per Dispatcher.
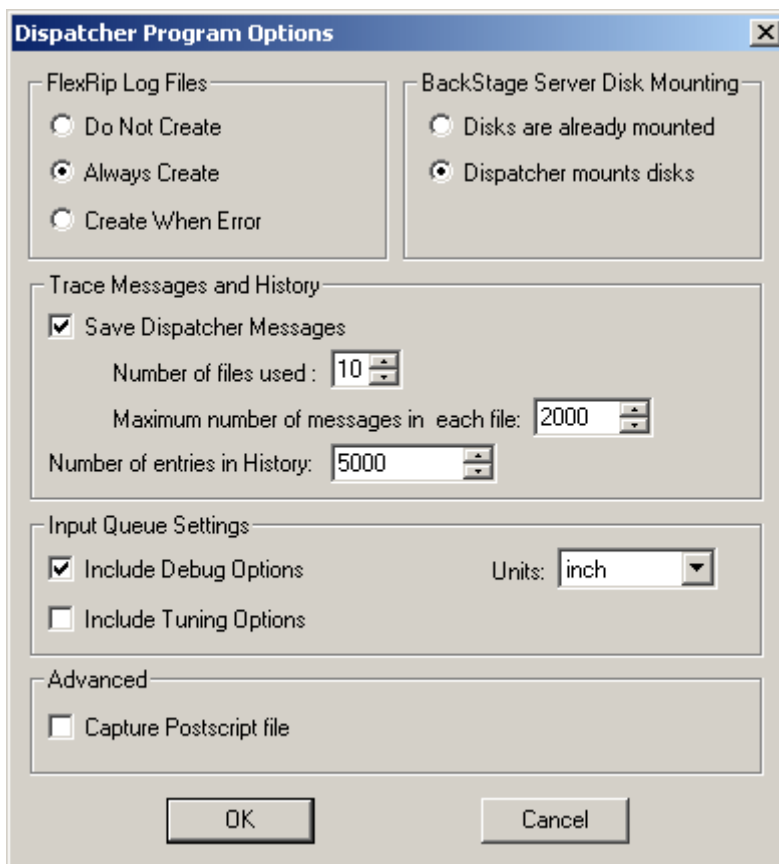
6.3.1.1 FlexRip Log Files

You can decide here whether or not you want the RIP to create log files. They can be interesting to find out what happened if something went wrong. It is advised to always create log files. Log files can be viewed in *History View* and are physically located in the *Logging* folder.
C:\Esko\bg_data_FlexRipproof_v120\proof\LOGGING.

6.3.1.2 Automation Engine Server Disk Mounting

Enable *Dispatcher mounts disks* unless specifically mentioned otherwise.

6.3.1.3 Trace messages and History

- *Save Dispatcher Messages*. It is advised to activate this toggle. 'Trace messages' keep track of the general status of the Dispatcher. Esko will only consult these in case of problems.
- *Number of files used* indicates the maximum number of trace files that will be stored.
- *Maximum number of messages in each file* indicates the number of entries that will be stored in one and the same trace file.
- *Number of entries in History* indicates the number of log files History View will show you. The number of entries in the History can be set as wished. 500 will probably be enough. This means that when entry number 501 appears, entry number 1 will be deleted.

6.3.1.4 Input Queue Settings

- *Include Debug Options*: When checked, an extra tab sheet in the default queue settings will appear: 'Debugging'. Please activate this Debugging (page 65) tab, because it enables you to control the contents of the log files. This is especially interesting for fast troubleshooting by customer services. They will advise you which settings to change in order to speed up problem solving.

- *Include Tuning Options*: Should not be active (again unless Esko Customer Service asks you to activate it).

  Enabling the Tuning options makes a number of extra tabs appear in the Queue Settings:

  - CopyDot Tuning (page 67), which is explained further on.
  - LineWork Tuning

- Contone Tuning
- Memory Tuning

Note
Linework, Contone and Memory Tuning are specific tabs for our Customer Service department and may only be used to solve or find a workaround for a specific customer workflow or FlexRip problem.

- *Units*: Can be set to INCH, CM, MM or MIL (1000 MIL = 1 Inch).

6.3.1.5 Advanced

Capture PostScript file: This should not be activated unless Esko Customer Service asks you to. When activated, then after ripping every PostScript file together with a lot of extra information will be stored in a special folder as an extra text file. This is not the same as keeping the PostScript file in a Hot Folder after ripping! See further in the appendix: Some classic errors and their explanation (page 87).

6.3.2 Queue defaults

A FlexRip can have several queues of:

- different types
- the same type

Each queue will have its own settings (how to rip, where to write the output file…). The settings in *Queue Defaults* however are valid for all queues. We refer to the Queue Settings (page 43) chapter for more details on queue settings. (The different tabs look exactly the same).

The priority of the settings (page 43) is described further on.

6.3.3 Performance

This panel was used to overrule the default scheduling behavior of the Windows operating system. Recent Windows versions do this very good by default, so we no longer allow to overrule this.
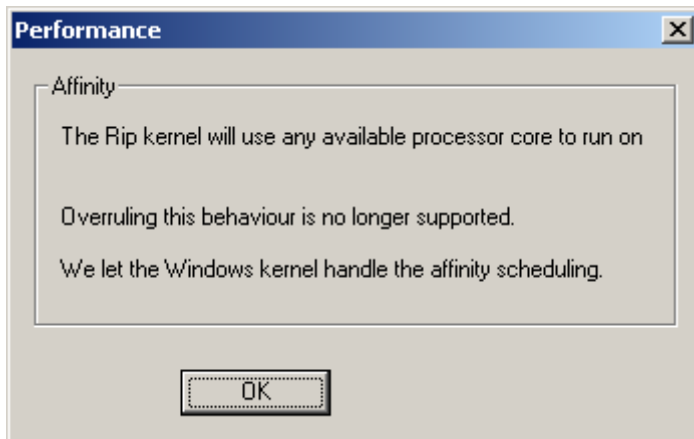
6.3.4 Rip priority

This field allows you to set the priority of the ripping process over other processes. You might for instance have noticed that changing queue settings (working with the interface of the Dispatcher) is very slow when the FlexRip is ripping at that same moment. That is because the RIP process (the kernel) had all the priority. Now, some customers will want to use applications on the FlexRip a lot (working with Dispatcher, Esko Curve Pilot, and Esko Bitmap Viewer) and some almost never. The recommended setting is Normal.
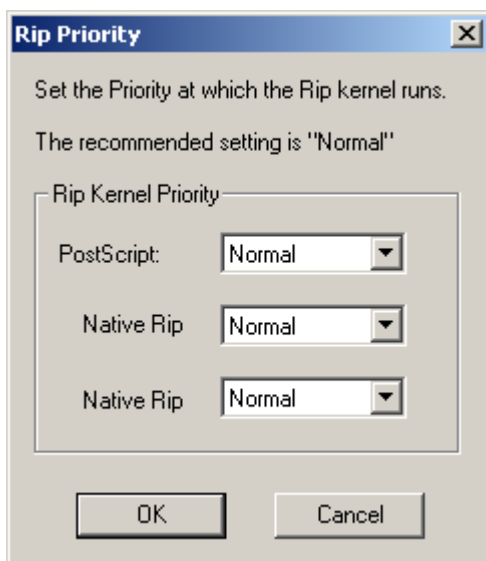
6.4 Tools menu
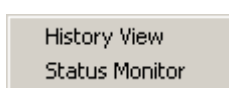
The Tools menu contains the following items:

1. History View (page 33)

2. Status Monitor (page 33)

6.4.1 History View

The Dispatcher program itself will not show you the list of actions that are finished. *History View* will. All further info on the History View (page 75) program can be found in a separate section.

6.4.2 Status Monitor

The Dispatcher program itself does not show any detailed information on the ripping action. The *Status Monitor* program of that Dispatcher will show you more. All further info on the Status Monitor (page 72) can be found in a separate section.

6.5 Info menu
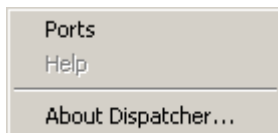
The Info menu contains the following items:

1. Ports (page 33)
2. About Dispatcher (page 33)

6.5.1 Ports

The Dispatcher is the server program of the Status Monitor and History View programs. The Dispatcher ports are used by its client applications to be able to communicate with the Dispatcher. Technically they are TCP/IP socket port numbers.

6.5.2 About Dispatcher

Shows the date and version number of the Dispatcher program. This is useful information when reporting some problem with Dispatcher. It is NOT the version of your FlexRip software (see FAQs).

6.6 Connected monitors

The Tools menu allows you to start up a History View or Status Monitor of that (specific) Dispatcher. Both are actually client processes of that Dispatcher and count for a 'connected monitor'.

As there is no need to start up a History View or Status Monitor a second time, you will mostly see that the number of connected monitors is 2. If you see a number over 2 then you probably already started up these client programs and 'minimized' them. This indicates that this number is only there for your information.

6.7 Input queues

First we have a short look at the possible queue types and then a closer look at their settings.

6.7.1 Possible queue types

- **AppleTalk**: From Snow Leopard onwards (Mac OS X 10.6), AppleTalk is no longer supported on Mac. The preferred solution now is to use Esko Shuttle functionality to directly send files to the EskoLink channel of the Dispatcher.

- **Hot Folder**: A FlexRip Hot Folder is a folder on the FlexRip station that is mounted/shared (made visible) to other computers on the network. The DTP operator will print 'to file' and save the file directly in this Hot Folder. See also the section in the appendix 'How to mount FlexRip volumes on a Macintosh? (page 111)'.

- **Named Pipe**: From Windows Vista / Windows Server 2008 onwards, our Named Pipe workflow no longer works (as it relies on an Adobe kernel printer driver, and kernel printer drivers are no longer supported). The preferred solution now is to use Esko Shuttle functionality to directly send files to the EskoLink channel of the Dispatcher.

- **EskoLink**: 'EskoLink (or previously 'BarcoLink' or 'DigiLink') is a queue that represents a link with an Esko Server (Automation Engine or FlexRip Pilot). This kind of queue will 'receive' RIP requests for Esko native files.

6.7.2 New - Queue Info - Delete

Should you have deleted the only queue of a specific type, (e.g. you deleted the only AppleTalk queue present) then click the line below the other still existing queues (so

no specific type is selected), and then click 'New'. The Create Queue window will pop up, allowing you to select a particular type of queue.

These three types of queues are PostScript channels. They cannot be used for Esko-native files.
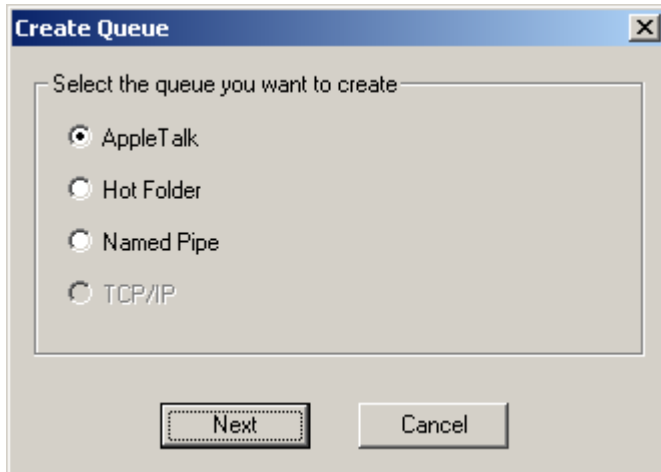
For an AppleTalk queue you can only set the name and priority. Two situations are possible:

1. You create a new queue that is a **copy** of an existing queue. Here you can either use the queue settings of the queue copied, or you can take the default queue settings. Activate or deactivate the toggle to specify your choice.
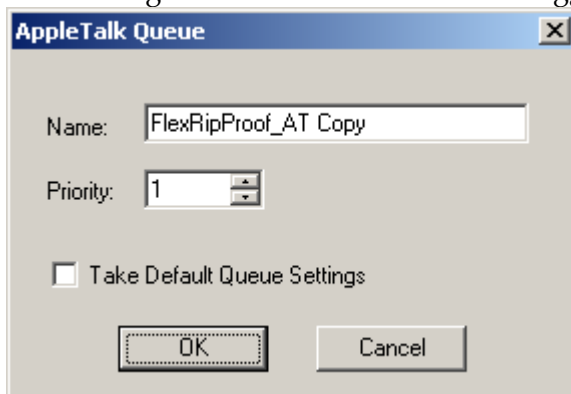
2. You create a completely **new** queue.
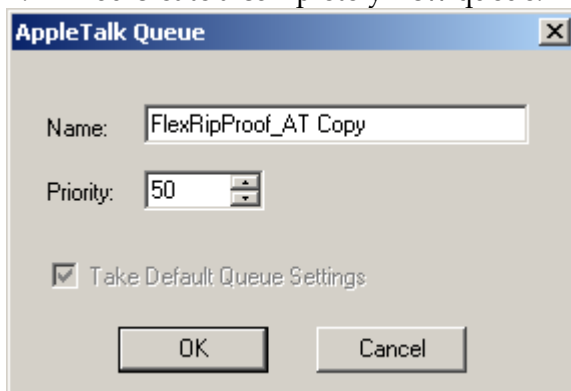
The default queue settings option is greyed out, since these settings will automatically be taken. As this queue is no copy of an existing one, no settings can be copied.

For Hot Folder queues, apart from the name of the queue, the folder also has to be set up. For more information, see the next chapter: General (page 37).
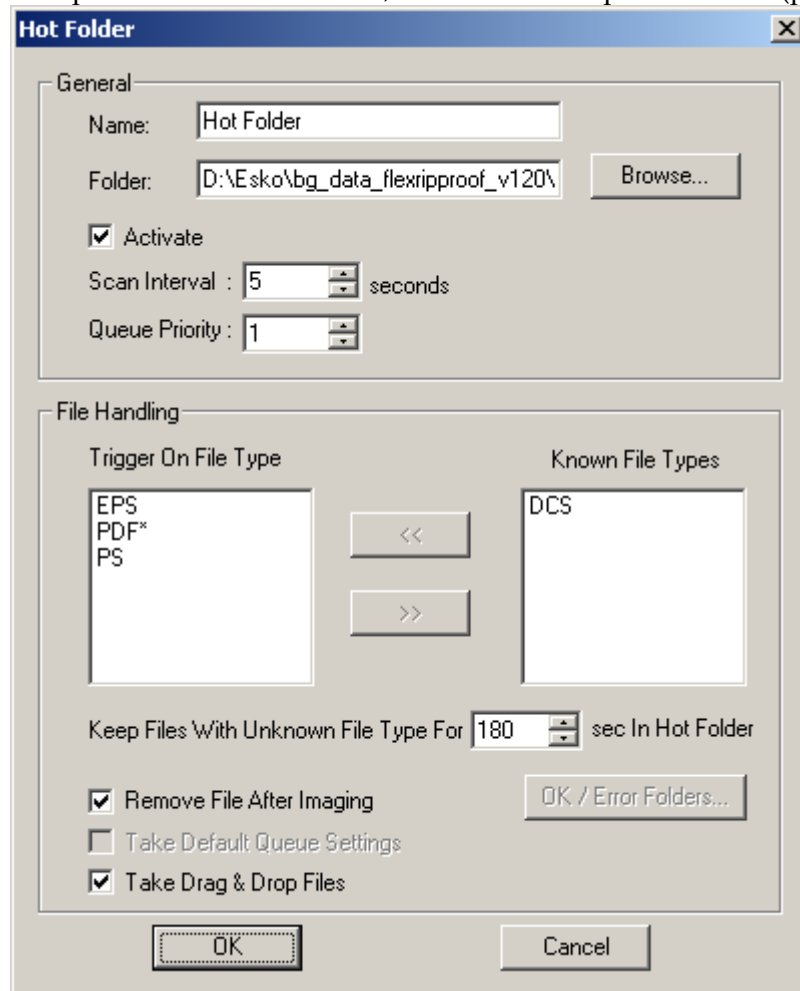
For Named Pipe queues, two situations are possible:

1. You create a new queue that is a **copy** of an existing queue.
    Here you can either use the queue settings of the queue copied, or you can take the default queue settings. Activate or deactivate the toggle to specify your choice.
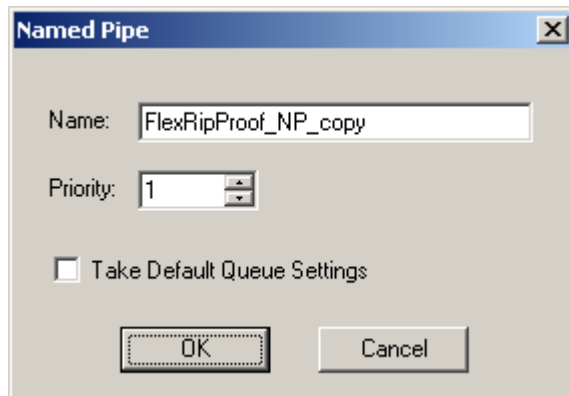
2. You create a completely **new** queue.
    Please give it a short name, preferably in one word: e.g.: Flexpipe.
    The default queue settings option is greyed out, since these settings will
    automatically be taken. As this queue is no copy of an existing one, no settings can
    be copied.
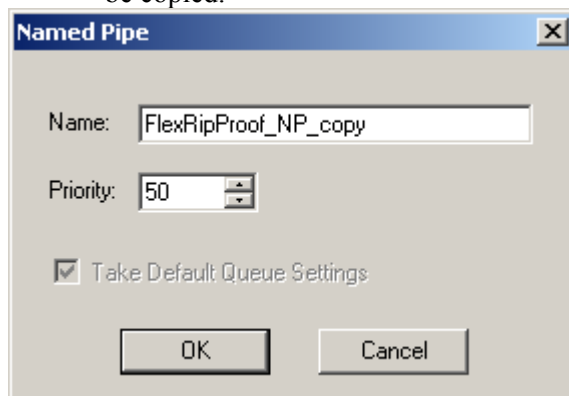
6.7.2.1 General
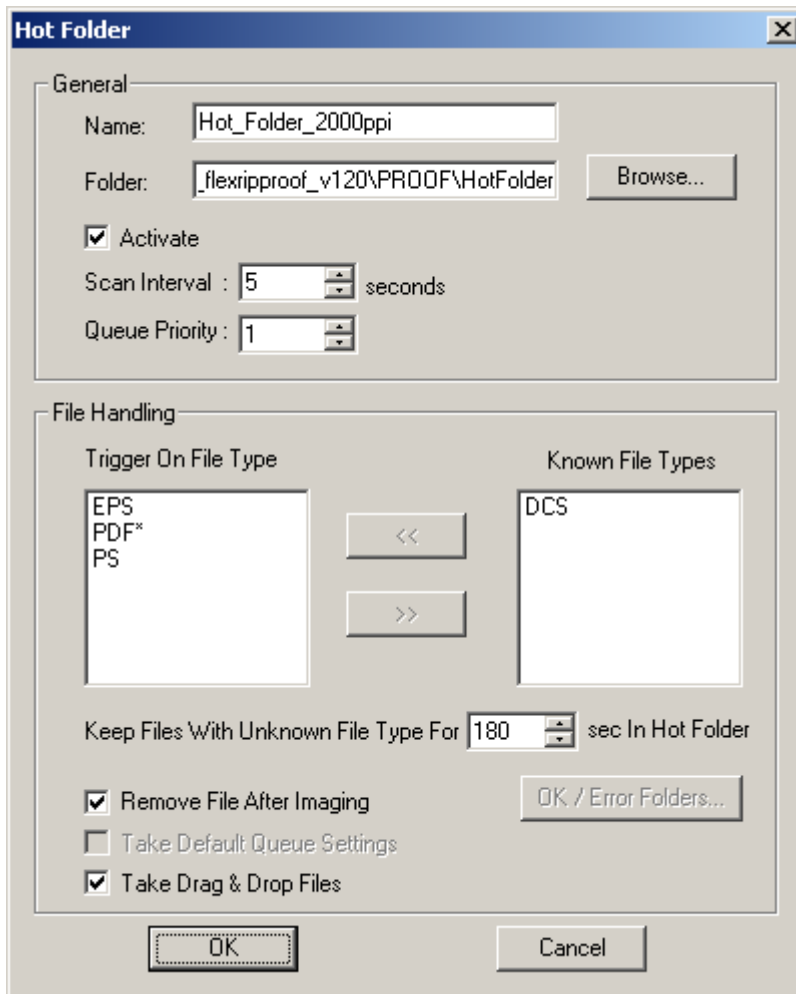
1. **Name**:
    Give your Hot Folder queue a logical name. The operators will then have a
    clear idea what the nature of the output will be. As seen in the above
    graphic: the name of the Hot Folder already shows that the file is ripped at
    2000 ppi. So it is advisable to 'summarize' in the name of the queue the 'hard'
    queue settings that influence the output (as these queue settings will
    overwrite the settings in the PostScript file).

2. **Folder**:
    Type in the correct path of the folder on the FlexRip that will serve as Hot
    Folder.
    Note
    Create the actual Hot Folder (using Windows Explorer) before you start creating the
    Hot Folder queue.

Note
On Windows level, you could delete a folder that is used by a Dispatcher queue as the actual Hot Folder. When this happens, the Dispatcher will detect that the construction of this Hot Folder is no longer valid. When you consult its 'queue info' and click 'OK' following warning will appear:
"New Folder"
The Folder 'name' does not exist.

3. **Activate**:
   Checking the box activates the folder as Hot Folder. A de-activated Hot Folder will not rip incoming files automatically.

4. **Scan Interval**:
   This indicates the period after which the Dispatcher checks the Hot Folder for incoming files.

   Note
   If you are scanning Hot Folders over the network, you should decrease the frequency of which the Hot Folder is scanned, otherwise you might create unnecessary network activity. In other words, if your Hot Folder does not reside on the FlexRip, increase the number of seconds.

5. **Queue Priority**:
   The RIP will (only) consult the priority settings when several jobs are waiting to be ripped. While the first job is being executed the RIP will consult the queue priority setting to decide which one to rip next.

   Example:
   When the RIP is processing a job in queue A, and both queue B and C have a job waiting to be ripped, then the queue with the highest priority settings will have its PostScript file ripped next (e.g. B has priority 3, queue C has priority 2. When queue A has finished, the job in queue C will be next).

6.7.2.2 File handling

1. **Trigger on file type**:
Select the file types you want the Hot Folder to trigger on and put them in the 'Trigger on File Type' column. Move the extensions from the right to the left column by clicking the << button. If you do not specify file types in the 'trigger' column, the RIP will start up for any incoming file, regardless if this file can be processed or not.

PDF* stands for all types of Esko PDF Native files (PDF, PDFPLA, PDFSTA,...)

2. **Keep files with unknown file type for x seconds in Hot Folder:**
File types you told the Hot Folder not to rip are best not kept in that Hot Folder.

These unknown file types will be moved automatically to the subfolder named 'error'. Determine after how many seconds you want them to be removed. The maximum value here is 1800 seconds (30 minutes).

3. **Remove file after imaging**:

When the option is not activated, the PostScript file will stay in the Hot Folder after it has been imaged (in an appropriate subfolder named 'OK'). If you want to use the same PostScript file for imaging on other devices via other FlexRip flavors you should not activate this box. If it is active the PostScript file will be deleted and you will need to make a second PostScript file for the other devices.

Note
This is only about known files that have actually been ripped. Not having these removed (deleted) after ripping means they will be automatically moved to the subfolder OK or Error.

4. **Take Drag & Drop Files**:

makes it possible to drag and drop files onto a Hot Folder that is defined in the FlexRip Dispatcher. It is also possible to select and send an (E)PS/PDF file to a Hot Folder from the FlexRip itself. Checking the 'Take Drag & Drop Files' box prevents you from actually having to drop the files into the defined Hot Folder before the file would be ripped. Files can be selected from any folder visible from Windows Explorer. To activate this mechanism:

1. Click the Hot Folder to highlight it.
2. Click Queue Info.
3. Activate Take Drag and Drop files.
4. Click OK.

Note
It is only possible to activate this 'Take Drag & Drop files' feature for 1 Hot Folder at a time.

To select (E)PS/PDF files to be ripped on this Hot Folder using the Windows Browser:

1. Click the Hot Folder to highlight it.
2. In the Dispatcher, select Send Job(s) from the Server menu or click right and select Send Job(s) from the pop-up menu..
3. Browse to the job(s) and click Open.

The selected files will be copied automatically to the Hot Folder and will be ripped normally.

5. **OK/Error Folders**:
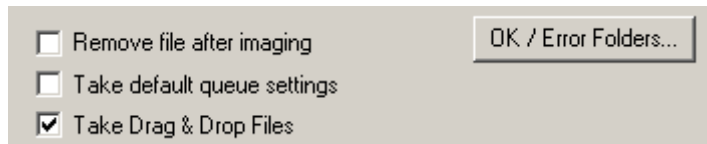
The settings above allow you to either keep the incoming files after ripping or to remove them. If you decide that files should be kept after ripping it is advised to define exactly to which folder you want them to be moved. Per Hot Folder, 1 folder can be specified for all files that went through the FlexRip successfully and another folder for those files that errored out or were aborted by the user. To define these folders:

1. Click the Hot Folder and click the Queue Info button.
2. Now click the OK/Error Folders… button

   Note
   This button will be greyed out when the Remove file after imaging option is activated.
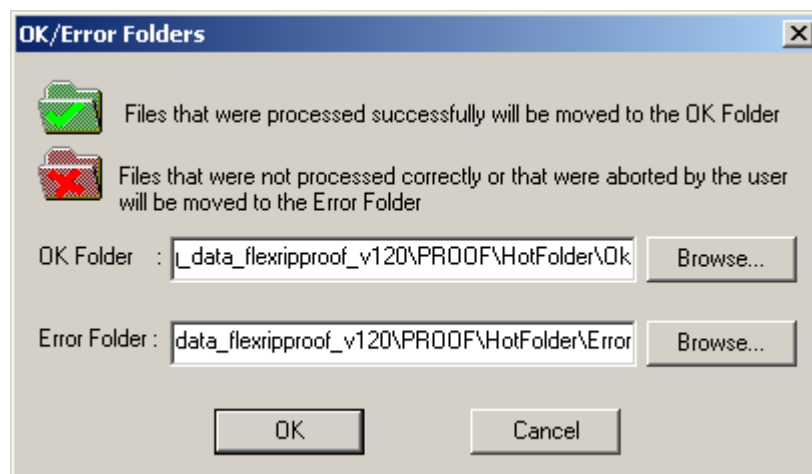
3. Select 1 folder for the files that went through the FlexRip successfully (OK folder) and 1 folder for the files that errored out or that were aborted by the user (Error folder). Note that before you specify the folder of your choice, the default folder is defined.

   Note
   It is advised not to put the processed files in the Hot Folder.

4. When specifying the folder name you can browse to it or you can type in the name of your folder. If the folder you specify does not yet exist the system will ask if it needs to be created.

   Note
   These fields cannot be left blank.

7 Queue Settings

Many of the settings that are explained hereafter can also be set as print options can be set in the Automation Engine or FlexRip Pilot for Esko-native workflows and in DTP applications for PS/PDF workflows. But then, which settings will the RIP take into account? What if opposite settings occur? And what if options are not set? The next section explains how different settings interact.

7.1 Priority of settings

When an operator has set specific options, the file ends up in a Dispatcher queue that also has its specific queue settings, and possibly also extra settings in the 'default settings' window. Which RIP settings will then be taken?
This is the order of how the RIP consults the settings:

1. FIRST: **Dispatcher: specific Queue Settings**. Queue settings will overrule all others. Settings you always want to apply should be set here. See the section 'Workflow: flavors and hints' for an important remark on the settings 'image' and 'emulsion'!

    Note
    Options that are set in the Dispatcher Queue Settings will be greyed out in the server tickets.

2. SECOND: **settings in the ticket or PostScript file**. On this level you can set the options that are job-related. In an Esko native workflow, the settings in the ticket will be taken. In a PostScript workflow, settings in the Print menu, using the correct PPD, will be used.

3. THIRD: Dispatcher: (menu 'options') **Queue Defaults**. Queue Defaults are settings that apply to all queues. The RIP will only consult them if options are not set in the Dispatcher or the ticket/PostScript file. This means that they are only executed in case there is still a "none" setting to be answered! If a "none" settings is still not answered by the Queue Defaults, the default setting inside the FlexRip software will be taken.

    Tip
    To set up a logical workflow, it is advised to set the options that are always applicable as high in the order as possible as these will overwrite occasional mistakes in ticket or print settings.

    Example
    You always want to expose on a device at 2000 DPI. Then enter the resolution setting in the Queue Settings. As soon as a setting is required only from time to time, you might consider:

- *to put it in the name of the (newly made) specific queue.*
- *to leave the (default) queue settings on 'none' and specify it (each time when wanted) in the ticket or PostScript file.*

Note
A number of options, like output path and (scr)dgc can also be set in the FlexRip **Configurator**. *These settings will overrule all settings mentioned above! To make you aware of Configurator settings, options that are set in the Configurator aregreyed out in the Dispatcher, ticket and Queue Defaults.*

7.2 Basic

The Basic options allow you to decide on how the output should look.
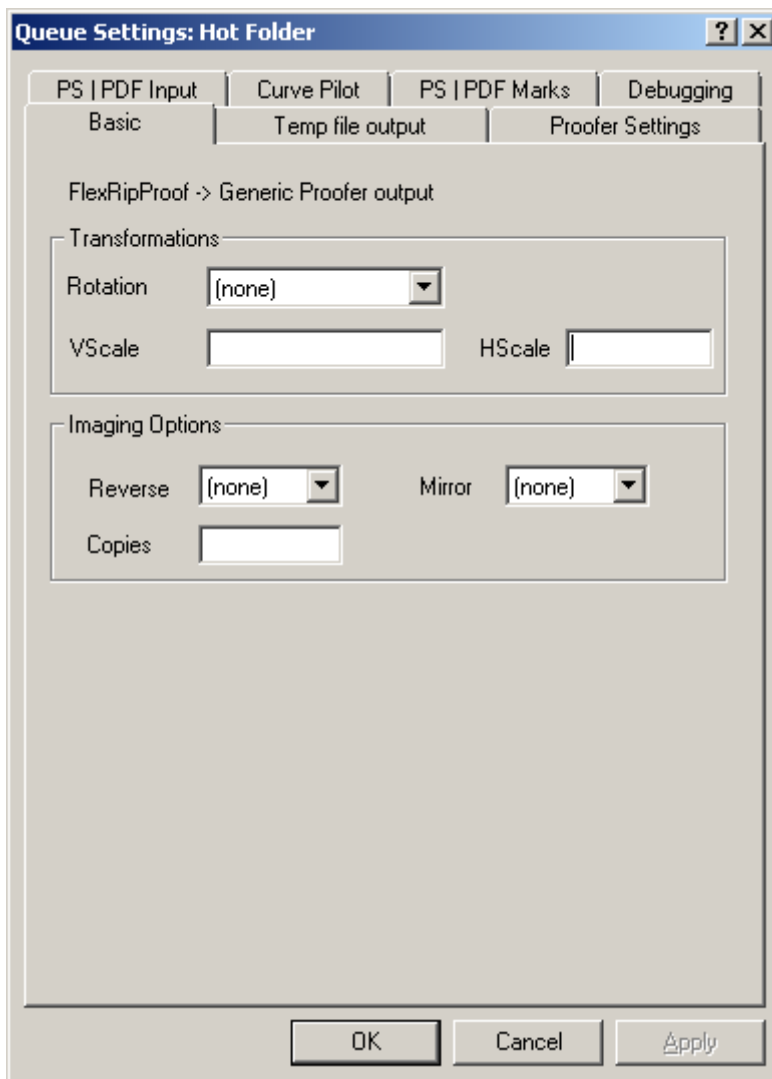
Warning
Do not enter 0 (zero) in a value field. It will be considered as a 'hard' value and possibly overwrite others! Leave the value field 'empty' before clicking OK.

7.2.1 Output module

This shows the type of Output module this specific Dispatcher was made for. Each Dispatcher is based on a specific 'fid' file. A fid file describes a machine type (device, printer description), which is why specific resolutions and size options will appear in the dropdown lists.

7.2.2 Rotation

For PS/PDF (Hot Folder, AppleTalk or Named Pipe) or native input it is possible to preset a rotation.

7.2.3 Scale

Scale options can be used for real job scaling (whole job at 50 %) or for the flexo distortion factors (e.g. Horizontal: 0.982 - Vertical: 1). It is advised not to set the distortion factor here (leave the fields blank!) as it is rather job-related and it is easily set in the PostScript file settings when printing from the application or in the setting options in the Automation Engine or FlexRip Pilot ticket.

Warning
If no scaling is required, then do not enter '1' as any value here will be seen as an actual queue setting that overrules all others. It is advised to leave this field blank.

What if I printed Transverse?
Or in other words, what if the job is rotated in the RIP? The H and V seen here are still the H and V as you 'see' in the job when viewed in the application. Scaling factors have to be a value ranging between 0.000 and 2.000 (between 0 and 200 %). It is not possible to set a value for one direction and leave the other value field blank. This means that if you want a vertical scaling of 96,7 % you have to enter 0.96700 for Vscale and 1.00000 for Hscale.

7.2.4 Imaging options

7.2.4.1 Reverse

If you want your file to be reversed (negative-positive), set the Reverse option to 'Yes' or 'No'.

7.2.4.2 Mirror

Set the mirror option if you want the job to be mirrored.

Warning
LEN files are already mirrored by default. So if you want to proof LEN file readable, you have to switch on the option Mirror. This behavior is consistent with ShowCT and Bitmap Viewer Standalone.

The behavior of the program concerning the Mirror option is consistent with the Esko Bitmap Viewer. This means that if you don't set the mirror flag, the job will be proofed readable, only when it is shown readable in Esko Bitmap Viewer.

7.2.4.3 Copies

Indicate how many proofs you want to output.
The RIP will only rip once, but the resulting file is submitted a number of times to the printer.

7.3 Output
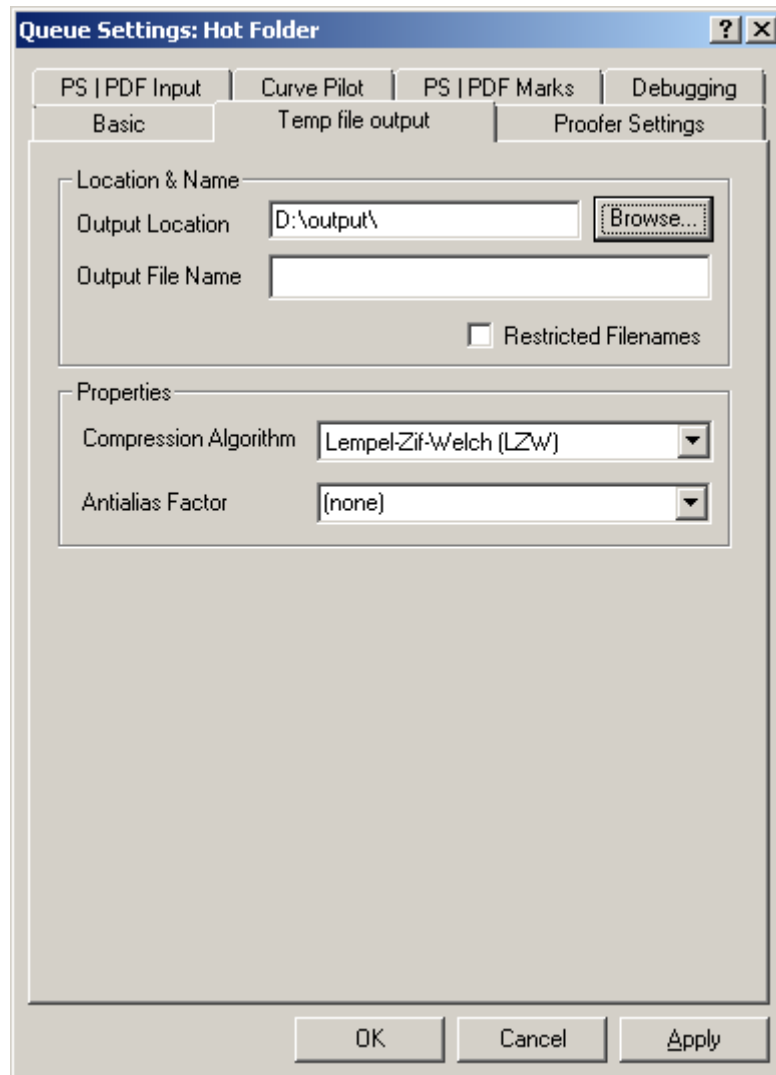
7.3.1 Location & Name

7.3.1.1 Output location

The location of the output folder(s) for the temporary output files is free to choose. It is logical to define the output folder(s) on a hard disk with enough space available (often drive D:\ on a FlexRip).

Note
*Remember that this chapter concerns the output location of the **temporary** Monochrome CT files, not the final output file that is sent to the printer. The actual output for the printer is defined in the FlexProof Setup.*

Tip
If you want several output folders, then it is a good idea to create them under one general

output folder. So, after making the top folder visible to other computers, any new folder under that top folder will automatically become visible as well.

Note
There are different places where you can specify the required output location. If the output path is specified in the FlexRip Configurator (which has the highest priority), the output path will be greyed out in the Dispatcher, ticket and Queue Defaults.

Example
D:\output
> *Is the 'top' folder*
> *This folder is not used as a real output folder.*

D:\output\komori_urgent
D:\output\komori_normal
> *are actual output folders that contain the output files. The operator will already see*
which output files are urgent and on which plate type they should be imaged.

Note
Select the actual folder by using the Browse button, before filling in its path here.

7.3.1.2 Output file name

Note
This option is not applicable to FlexRip/Approval and FlexRip/B.

Here you can specify the name of the output file.
It is possible to use template variables, as explained below.

Template variables

All variables listed below must be specified between left and right angle brackets (<>). The variables currently supported are:

- **<file>** (name of the file that is sent to the FlexRip)
  For the Esko native input this equals the job name of the PDF native (PDF, PDFPLA, PDFSTA, etc.) file name.
  For PS input this equals the name found for %%Title in the PS file.

  Note
  If no name is found in the PS file, 'Unknown' will be taken.

- **<ink>**
  This indicates the color group + underscore + full ink name
  e.g. pms1000c_warmred

  Warning

This variable is not supported for FlexRip / FlexProof.

- **<sink>**
  The short ink name will be used. For process colors this means e.g. C instead of cyan. For Pantone colors this means the PMS number or a shortened name like WAR for Warm Red.

  Warning
  Designer colors will still be shown with their full name preceded by the letter 'D'.

  Warning
  This variable is not supported for FlexRip / FlexProof.

- **<nink>**
  The number of the ink will be used, based on the ink table in the original job.

- **<page>**
  For Esko-native input, this variable will add the page number to the output name in case of a multipage document. In separated PS files every separation is a page. This means that for a job with 6 inks the separated PS file will contain 6 pages. For a multipage document you will get 6 pages for every page in the document. For PS input this variable will add the correct page number to the output file name when using FlexRip / FlexProof (composite) output. For all monochrome flavors (B, C, TG and T4) the page number of the PS file will be used. This explains why e.g. the output file name for the 4th separation of the first page of the document will get page number four.

- <**date**>
  This variable will add the date of ripping in numbers to the output file name. The format is 'yearmonthday' (yyyymmdd). E.g. September 25 2003 will be 20030925'.

- **<time>**
  This variable adds the time of ripping in numbers to the output file name.
  It is also possible to give a hard name in the 'Output file name' input field or combine variables with fixed elements.
  Some characters are not allowed in the 'Output file name' input field. The following characters will automatically be replaced by an underscore (_): \ , / , : , * , ? , " , < , > , |.
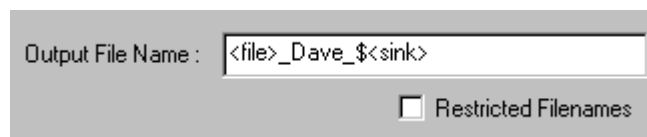
Examples of templates

Without merging

A Normalized PDF file called 'sunshine' has 7 separations (CMYK, 2 Pantone inks and one designer ink) and is sent to the FlexRip EskoLink queue which has the following template:

Output File Name :	<file>_Dave_$<sink>
	☐ Restricted Filenames
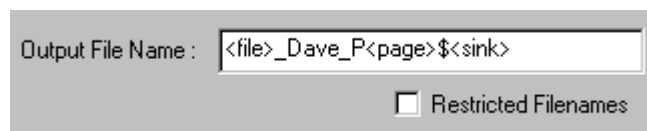
The name of the output files will be as follows:
sunshine_Dave_$123.tif
sunshine_Dave_$C.tif
sunshine_Dave_$Dblue sky.tif
sunshine_Dave_$K.tif
sunshine_Dave_$M.tif
sunshine_Dave_$WaR.tif
sunshine_Dave_$Y.tif

The fixed element could be used e.g. to specify the name of the operator (in this case Dave).

With merging

Let's assume we have two files. One called 'sunshine' which contains one page and a second file called 'moonlight', containing two pages. The template has been changed to include the page number in the output file names and the file is sent via the merge queue to optimize the film:

Output File Name :	<file>_Dave_P<page>$<sink>
	☐ Restricted Filenames

Cyan and Warm red from 'sunshine' will be merged with Magenta and Pantone 123 from 'moonlight'. The name of the output file will be as follows:
sunshinemoonlight_Dave_P12$CWaRM123.tif.
The names of the jobs are merged while inks and/or pages are concatenated.

7.3.1.3 Restricted file names

When activated, the names of your output files will be restricted to names that will not give any problems in the VMS operating system. This basically means that all characters that are not letters (abc) or numbers (123) or underscores (_) will be replaced by underscores. So if you are not writing these output files on a VMS computer, you do not have to activate this option.

Example
$#@^%!&-will all be replaced by _ (the underscore)

7.3.2 Properties

7.3.2.1 Compression algorithm

Select the appropriate algorithm from the dropdown list. Choose between LZW, PackBits, Uncompressed and None.

7.3.2.2 Enable Anti-aliasing

Anti-aliasing is relevant for the line-art objects in the design that require pre-processing to CT. Enable anti-aliasing to smoothen the staircase effect in the generated CT for line-art objects that need pre-processing.

7.4 PS/PDF Input

*Please note that the PPDs used in FlexRip 5.2 will **not work** in FlexRip 12!*
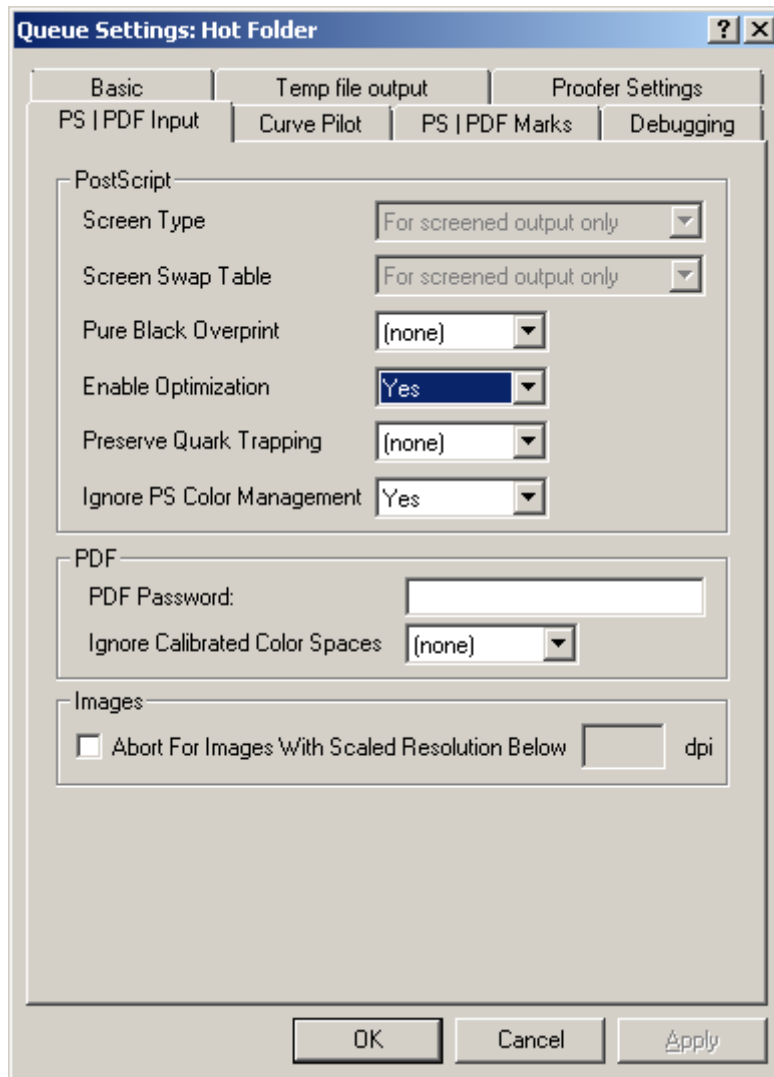
7.4.1 PostScript

7.4.1.1 Screen type

Enable the appropriate screen type. You can choose between: Esko Classic, DynaCell, PostScript or none.

- *Esko Classic (Precalculated)* means that the aspect, the form, the rulings and the angles of the screen are pre-defined in the Esko screening labs. These screens are the result of advanced engineering work. The screens are optimized for a smooth aspect, good behavior on the different printing processes, lack of artifacts etc. Furthermore, the screens are designed following a system of screen angles that avoids moiré between the main colors (cyan, magenta and black). The use of precalculated screens allows supporting advanced screening features like stochastic screening (Monet Screens) and transitional screening (SambaFlex Screens). Precalculated screens have only one disadvantage: since they have been designed and

tested one by one, there is only a limited number of them available. Although the total number exceeds 2000 different screen ruling/angle/dot shape combinations, it is very well possible that no precalculated screen is close enough to a customer's wish. This happens specifically when other angles than flexo or offset angles are demanded. A typical example is silk screen printing where unusual angles and screen rulings are used to avoid clashes with the silk screen mesh. Esko DynaCell technology was developed particularly for this purpose (see below). The pre-calculated sets are also made to provide maximum protection against moiré. For more information, please check the Screening manual.

- Using *PostScript* screening implies that all the information needed to build up the dots has to be in the PostScript file. Combining PostScript screening and Esko-Graphics screening in the same file and/or separation is only possible using the optional ScreenFilter application. Please see the documentation on the ScreenFilter for more details.
  In every DTP application, you can choose the LPI from the Esko PPD or you can overrule it. Also the print angle will be offered by the PPD but the DTP applications permit you to enter other angles. If you send these data to the RIP, the 'Esko screening' setting will again change these values via its own 'jump-to' mechanism. This means that the RIP will automatically jump to the nearest LPI or angle that is supported. If you do not use 'Esko screening' but 'PostScript screening', these 'special requests' will indeed be realized by the FlexRip.
  If you activate PostScript screening, the dot shape should also be described in the PostScript file. If you cannot select dot shapes in your DTP application, then it will probably describe the standard Fogra Round dot shape (see also Esko's Fogra Round).

  Why ever use this?
  You could for instance use this if you insist on some 'exotic' angle. With exotic we mean an angle which is not standard in flexo/offset. If you need an angle of 3 degrees, then this is the only way to get it in the output file. Then of course you will be limited to the dot types that your DTP application offers you (to write in its PostScript output).

- If the *DynaCell* license is available, this FlexRip option allows the operator to specify any angle or lineature combined with Esko screening. It is particularly useful for screen printing. DynaCell differs from Esko Classic in that it doesn't use sets of precalculated screens. Because of this, DynaCell offers no protection against moiré. Esko Classic screening does, as this screening only allows moiré free combinations of resolutions with LPI and angles.
  For more information on DynaCell, please consult the Screening manual.

  Note
  Because of the nature of Monet screening and SambaFlex screening it will not be

possible to use DynaCell technology with these two screens. If DynaCell is selected together with one of these screens an error will be generated at rip time.

7.4.1.2 Screen Swap Table

Note
The Screen Swap Table option will only be activated if screened data is output.
ScreenFilter allows you to define screen swap tables so that when files, containing e.g. PS dot shapes, come into the Esko system the information of the screening is not lost.

1. In the Screens part ![icon] , all detected, but unregistered screens appear. You can register them and use them to define screen swap tables.

2. In the Screen Swap Table part ![icon] , you define screen swap tables, these can be used in other applications, such as Esko PackEdge, Esko Plato, FlexRip, Automation Engine, ...

For more information on how to create ScreenFilter rules, please refer to the ScreenFilter documentation.

Note
Selecting (none) creates an EskoFlexRip v5.1 like situation.

7.4.1.3 Pure black overprint

Set the overprint mode for objects containing 100% black only. Possible Pure Black overprint modes are:

- No: no overprint is forced on an object containing 100% black, which means that the situation is as is defined in the job.
- Yes: forces PostScript overprint for objects in 100% black.
- None: the default Queue settings will be consulted.

7.4.1.4 Enable optimization

Should be set to 'Yes'.

Example
Esko's RIP kernel will see to it that the vignette quality is enhanced.

Note
This optimization is not relevant when the vignettes are described as CTs in the PostScript file (as is mostly the case with ArtPro jobs).

7.4.1.5 Preserve Quark trapping

If set to 'Yes', the Preserve Quark trapping option forces the system to keep the trap strokes made by QuarkXpress.

7.4.1.6 Ignore PS color management

Images can be saved in PhotoShop in EPS format using an option 'Use PostScript Color Management'. The result of this operation is that the resulting EPS file contains information that the pixel values are not simply RGB or CMYK but are to be interpreted by the receiver as a CIE-ABC or CIE-DEFG image and that the receiver should reconvert that image to it's own Color space using a PostScript CRD.

In most cases this 'Use PostScript color management' option was set by accident and the image retoucher did not intend that his carefully retouched image would be reconverted from 1 color space to another changing all the separations. When this option is off, PostScript color management is applied and the image is run through a CRD, if this option is off the original data is interpreted as deviceRGB or deviceCMYK even if the EPS file specifies that PS color management should be used. Remark that PS color management is always used for Lab images even if this option is switched on.

This means that if this toggle is checked, the color management that would be applied to included PhotoShop EPS images will be ignored.

7.4.2 PDF

7.4.2.1 PDF password

In case you send PDF files that include a password, unlock them by entering the password here.

7.4.2.2 Ignore calibrated Color spaces

When this toggle is checked, FlexRip will ignore [CIE based] calibrated Color spaces and will replace them by their regular device-independent counterparts.

The color of objects like lineart and images can be defined using a calibrated Color space. This can happen because the objects already have a color in a calibrated Color space before distilling or they can acquire a color in a calibrated Color space during distilling process. This is not always intended behavior and the 'Ignore Calibrated Color space' option will ignore the calibrated Color space of such objects when converting the file to GRS. A typical example is that when you have black objects in a calibrated Color space, you risk ending up with CMY color components if you do not ignore the calibrated Color space.

7.4.3 Images

7.4.3.1 Abort for images with scaled resolution below ... dpi

Checking this toggle makes sure a resolution check on incoming images is performed. This option offers you the possibility to get the RIP abort the job if images below a certain minimum resolution are found. The resolution is calculated after scaling (effective when placing the image, including a possible global RIP scaling) and is a very solid quality check before a bad plate or film is made.

7.5 Native Input

When bitmap images are present in the job, they will only be contourized if the output resolution is not equal (or is not a multiple of) the resolution of the bitmap image or if the bitmap image is rotated over an angle that is not a multiple of 90 degrees. In case of correct expose resolution and no rotation the bitmap image will be treated in an optimized way (direct access to the image for direct exposure).

Note

This is only for an EskoLink workflow, using Esko native file formats (PDF, PDFPLA, PDFSTA,...).

7.5.1 Screening

Note
For RIP flavors that produce unscreened output the screening options are not applicable.

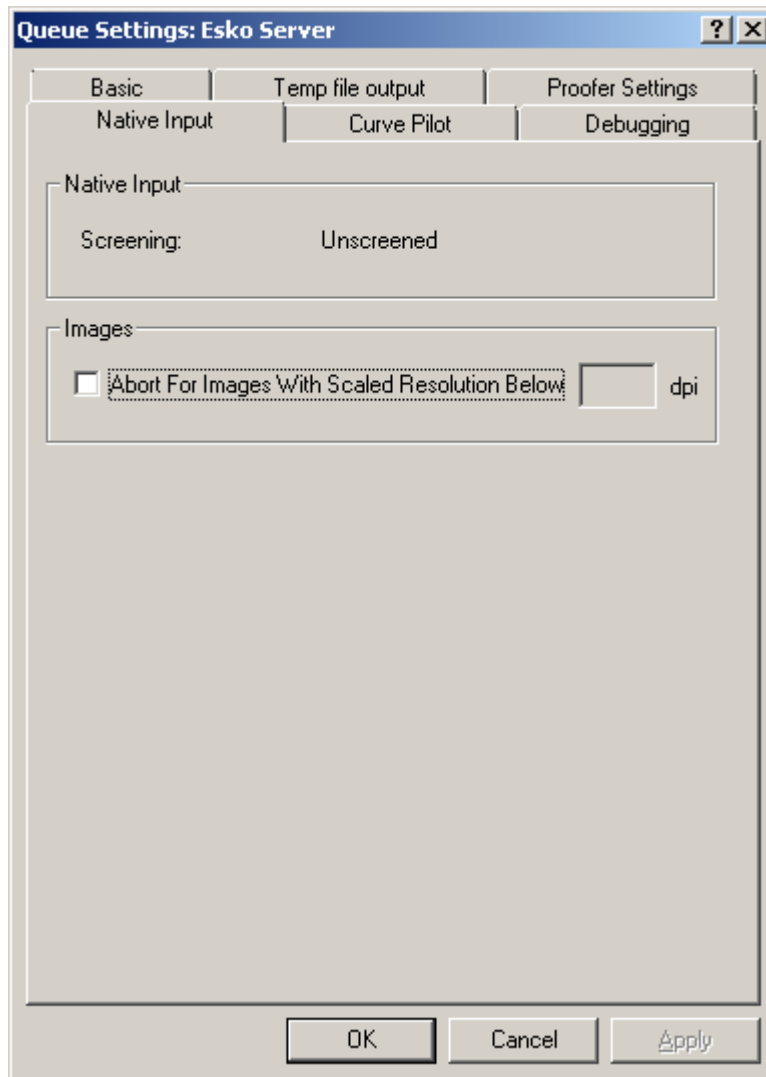## 7.5.2 Abort for images with scaled resolution below… dpi

Checking this toggle makes sure a resolution check on incoming images is performed. This option offers you the possibility to get the RIP abort the job if images below a certain minimum resolution are found. The resolution is calculated after scaling (effective when placing the image, including a possible global RIP scaling) and is a very solid quality check before a bad output plate or film is made.

7.6 PS/PDF marks

This tab offers you the possibility to have register marks added to the FlexRip output, when using the PostScript channel (AppleTalk, Hot Folder or Named Pipe). It includes a layout mode option for color strips and data legend, options for what should be shown and what shouldn't and an input field where you can enter your own text. All this can be very important for quality control. E.g. the queue info can be added to the RIP output which will allow you to quickly check if the correct queue was used.
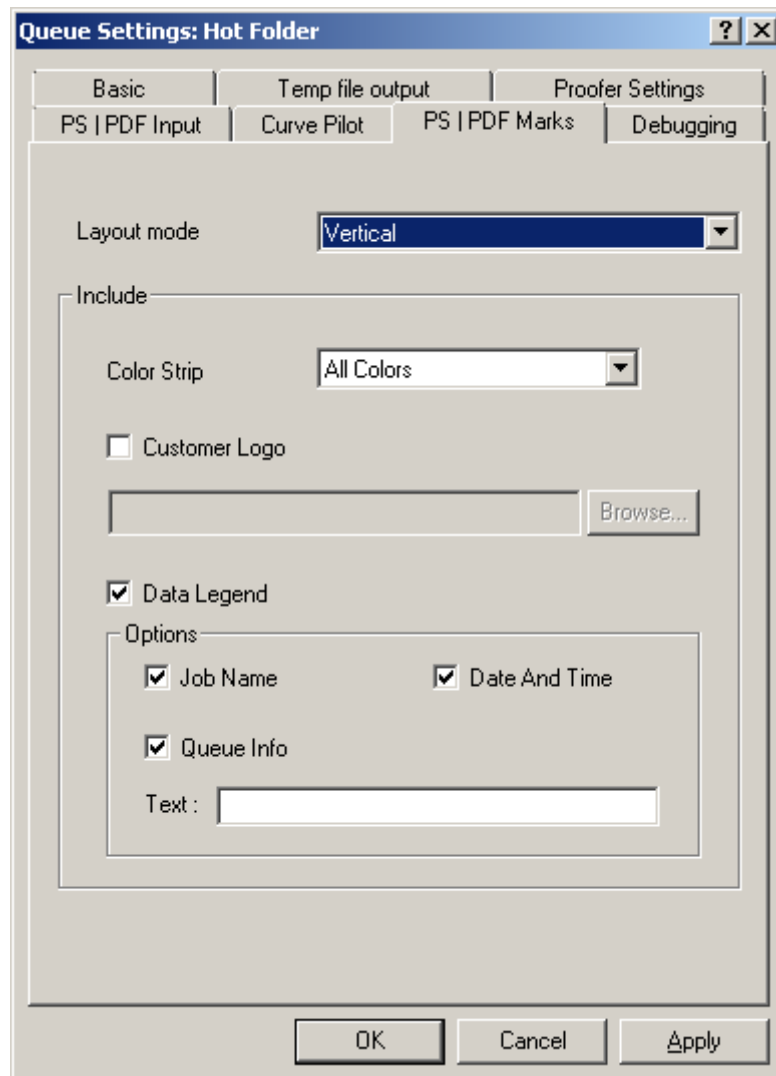
7.6.1 Layout mode

Select how you want your mark to appear: Horizontal, Thin Horizontal, Vertical, Thin Vertical and None. Starting point is the top left corner.
The default setting is *Horizontal*.
The height of the standard mark is 13 mm, a thin mark is 6 mm.

7.6.2 Include

7.6.2.1 Color strip

If you want to add a *color strip* to a film, plate or proof, specify what colors you want to include. Select: All colors or Only CMYK.

If you do not want to add a color strip, select (none).

7.6.2.2 Customer logo

Check the box if you want to add a *customer logo* to the proof.
Click the Browse button to open the 'Select a Customer logo file' dialog. Only .eps files can be used as a logo.

Note
Logo marks should be eps files in CMYK or 1 color. An RGB logo will have disappeared after ripping.

Warning
Take your logo mark into consideration when making plates for a one-color job. If your logo contains 4 colors, 4 plates will be created instead of the expected one.
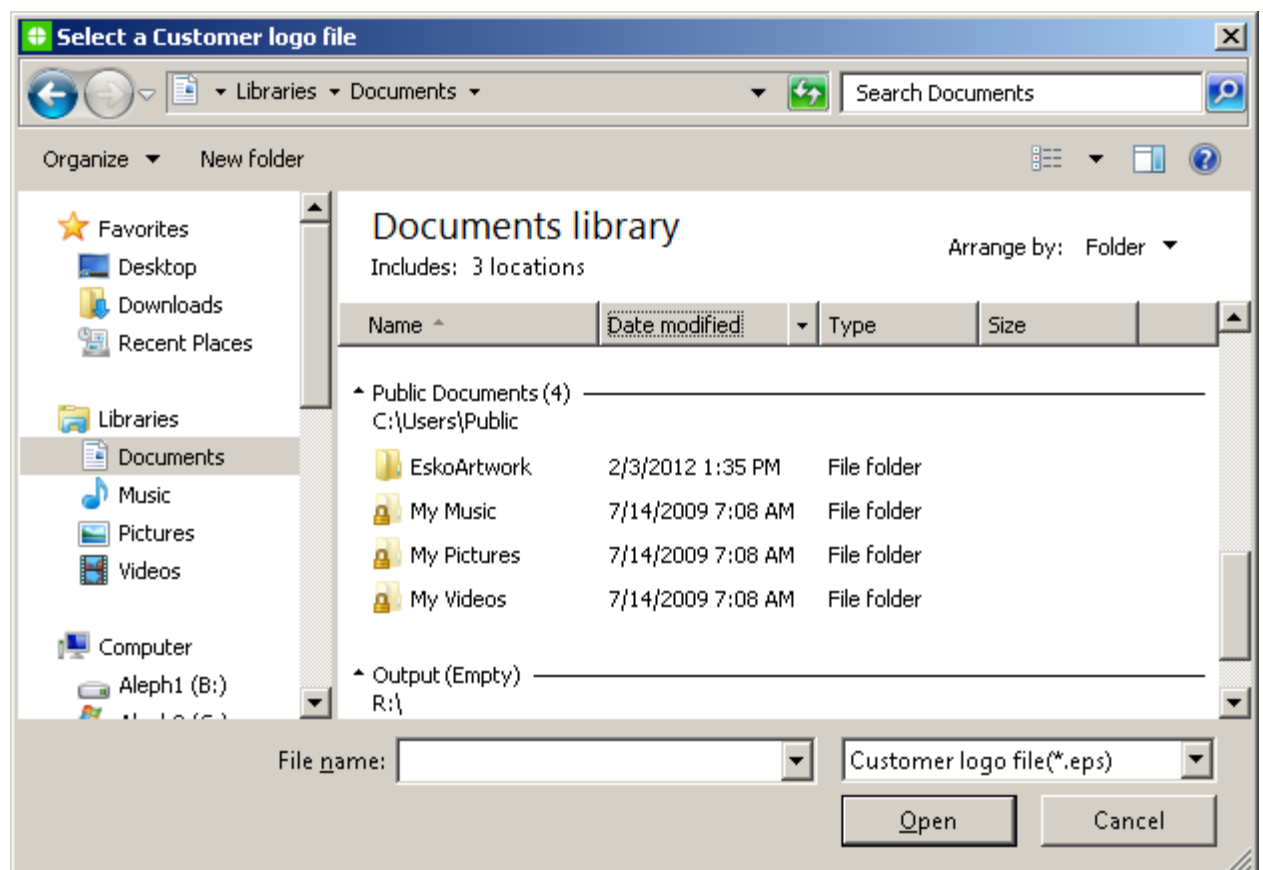
7.6.2.3 Data legend

Check the boxes to indicate which items you want to include in the data legend. Use the text field to enter user-defined text.

Note
There are no requirements concerning the text layout. Be aware that template variables do not work for the data legend field.

7.7 Proofer settings

7.7.1 Configuration Set

Before you can proof the job, select a proofer by clicking the dropdown menu under 'Configuration set'. A list of existing proofers will appear. Select the proofer you prefer. If you have two proofer rips, you'll have a list of configurations per proofer setup. If no proofers appear, you should first configure a proofer in the FlexProof Setup application. Please consult the 'Proofer Setup' manual to see how to add, change or delete proofer configurations.
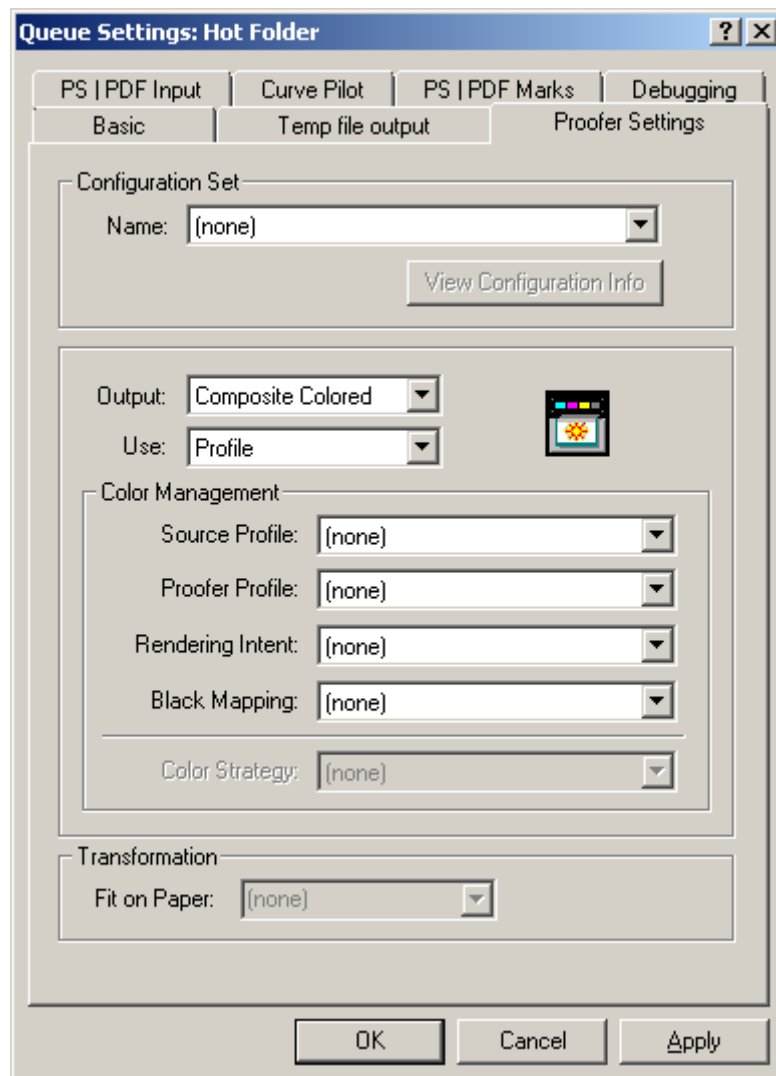
Please refer to the FlexProof Setup manual for more information on how to create proofer configurations.

Note
If you use the EskoLink queue, you can leave the configuration setting to 'none'. When PS/PDF files are sent to the RIP, it is mandatory to select a configuration.

7.7.2 Output

Here you can decide whether to make a color proof, a grey proof or proof separations. Four options can be selected. Two of them generate *Composite* output, which means that the selected separations are recombined, either '*Colored*' or in '*Grayscale*'.

The other two options generate '*Separate*' output, which means that each selected separation results in separate output, either in *Black & White*, or *Colored* in its own separation color.

Choose '(none)' if you use the EskoLink queue.
In a PostScript workflow it is mandatory to select an output option from the list.

Composite
The composite option will combine all separations to a 'Colored' or 'Grayscale' proof.

> **Colored**
> The 'Composite' 'Colored' option is used to proof all the separations on top of each other in COLOR.

> **Grayscale**
> The 'Composite' 'Colored' option is used to proof all the separations on top of each other in GRAY.

Note
When printing to a Windows printer, "grayscale" can also be set in the driver. The Image downloader will give feedback if "grayscale" is set in the driver options. It can not be overruled.

Separate
The separate option will proof all separations listed in the 'Separations' box sequentially in color or Black and White.

Black & White
All separations you added to the job will be proofed sequentially in black.
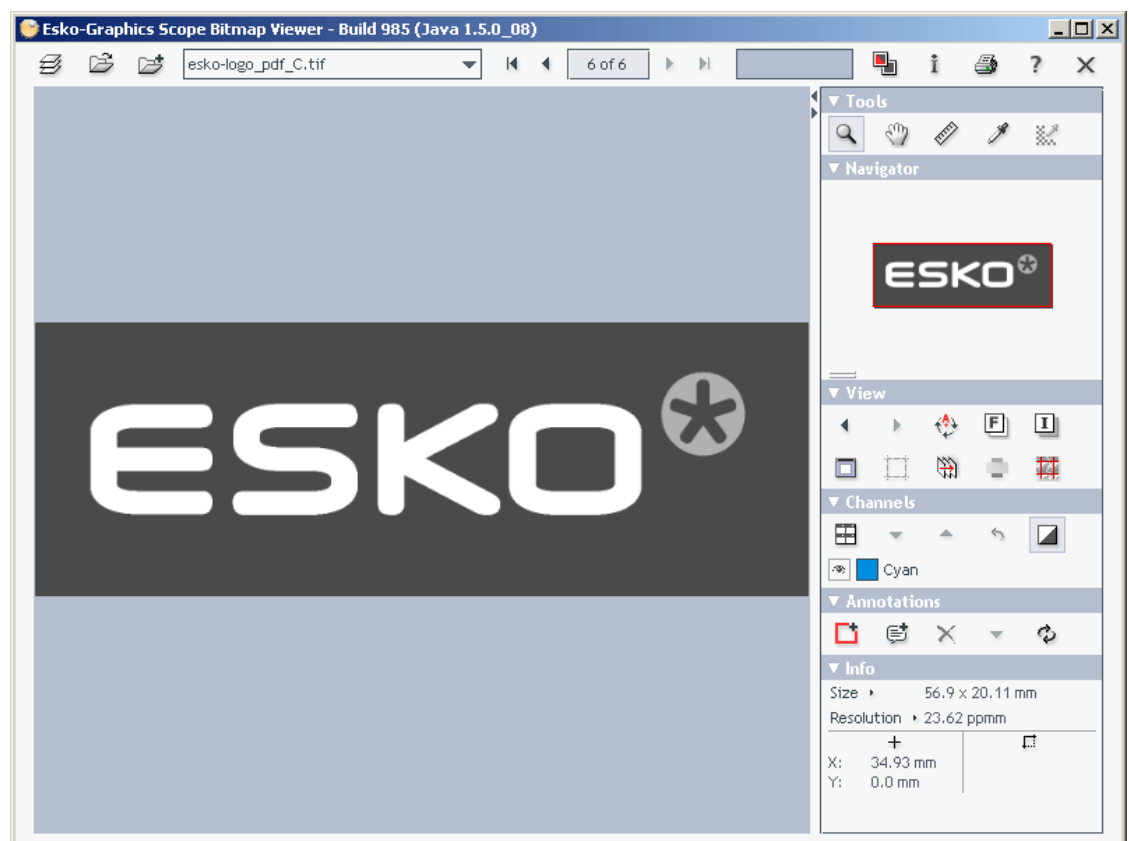
Note
When printing to a Windows printer, "grayscale" can also be set in the driver. The Image downloader will give feedback if "grayscale" is set in the driver options. It can not be overruled.
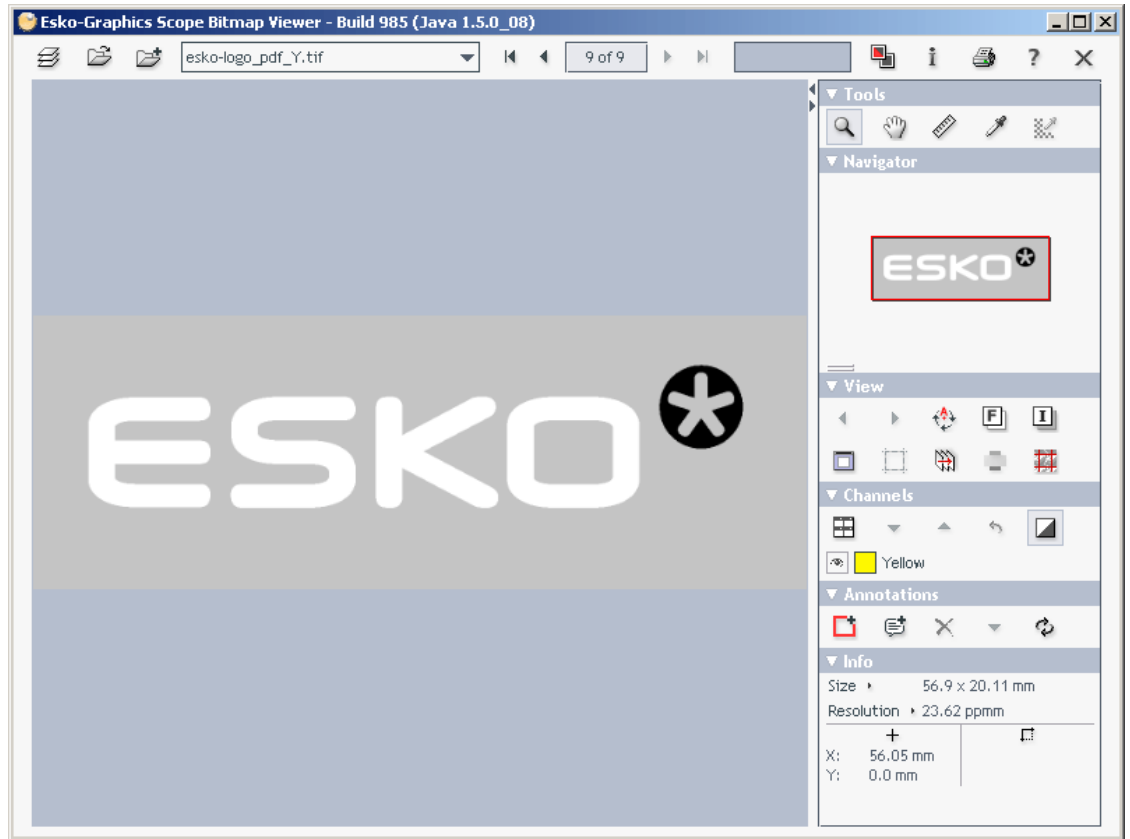
Colored
All separations you added to the job will be proofed sequentially in color.

7.7.3 Use & Color management

Note
Please check the Color Engine Pilot manual for a more detailed description on the Esko Color Management System. It contains elaborate information on how to measure profiles, make color strategies or register ICC profiles.

Color Strategy:
Color strategies are a bundle of settings for Color Management. By default, there is 1 color strategy available, called 'linear', which leaves CMYK information untouched and uses a default conversion for Special inks. Color Strategies can only be made with Color Engine Pilot. Choose the color strategy that you always want to use with this queue.

Note

The color management options are available for 'colored' output only.

Warning
If a Proofer profile was filled out in the Setup of the FlexProof Image Downloader, you will only see the color strategies that use the same profile.

Note
If a new profile or color strategy was made when the Image Downloader was already started up, there is no need to restart. You can load new profiles and strategies by going to the 'Resources' menu and clicking 'Refresh CMS Data List'.

Profile:
Choose Profile if you want to use 2 ICC or Esko profiles to do color management.

Source Profile:
The source profile describes what you want to simulate (e.g. a profile of your flexo press). This process can be a registered ICC profile or a native Esko profile. There are a number of default native Esko profiles on the system (e.g. crom_offs which stands for Cromalin Offset). If you measured a native Esko profile yourself (e.g. from your own Flexo press), you will be able to select it here.

Proofer profile:
The destination profile describes the proofer. Select the proofer profile that describes the colors of your proofer. (e.g. the characteristics of your Iris proofer). Both native proofer profiles and ICC profiles of proofers are available in this list. There are also defaults. (e.g. ddcw_glossy, a description for a Digital Cromalin/WaterProof on glossy paper).

Rendering intent:
The rendering intent decides how you will visualize the simulated profile on your proofer. Since there are many differences between the simulated process (e.g. a gravure press) and the proofer, the CMS software gives some options to give you the best result for your purpose. If you choose a native Esko profile as a destination profile, you will have other options:

1.   Background: Use this option if you want to use background simulation and an exact color match, including the paper simulation.
2.   No Background: Use this option if you don't want to use background simulation. The white point of the source will be mapped on the white point of the destination process. This rendering intent takes into account the ability of the human eye to adapt to the surrounding white.

Both a rendering intent and black mapping have to be filled in. If you leave it to 'none', the system will default to 'No background' and 'No black mapping'

for Esko profiles and to 'Relative Colorimetric' for ICC profiles.

Black mapping:
This option is only available if you choose an Esko destination profile (not if your destination profile is an ICC profile). Black will be mapped onto black or, in other words, the black separation will only be printed in black ink. If you have black text for example, it will only be printed in black. Switching off this option means that your text will be made up out of 4 inks on the proofer, which can cause some unwanted effect if the proofer is slightly out of register. In case you want to simulate a very dark black, which is darker than the black of your proofer, you might want to switch this option off. The other inks will have to reach the dark black that you are trying to simulate.

Tip
ICC profiles can be imported with the "Import ICC Profiles" tool.

7.7.4 Fit on paper

It is possible to ask for the output to be downscaled to fit the imageable area of a paper size as preset in a proofer configuration. If no real paper size was selected in the proofer configuration, the 'Fit on Paper' option will be disabled.

Define the paper size via Start > Programs > Esko > FlexRipProof 12 > FlexProof Setup.

When the option "Fit on paper" is set to 'Yes', selecting a paper size in the FlexRip Dispatcher will automatically scale the job up or down to the size of the printer. When using the native channel it will also automatically rotate the job to make optimal use of the paper (not for PS jobs).

7.8 Debugging

This tool enables you to control the content of the log files. You can make your log files report basic info or you could have them report all kinds of details on the complete RIP action.
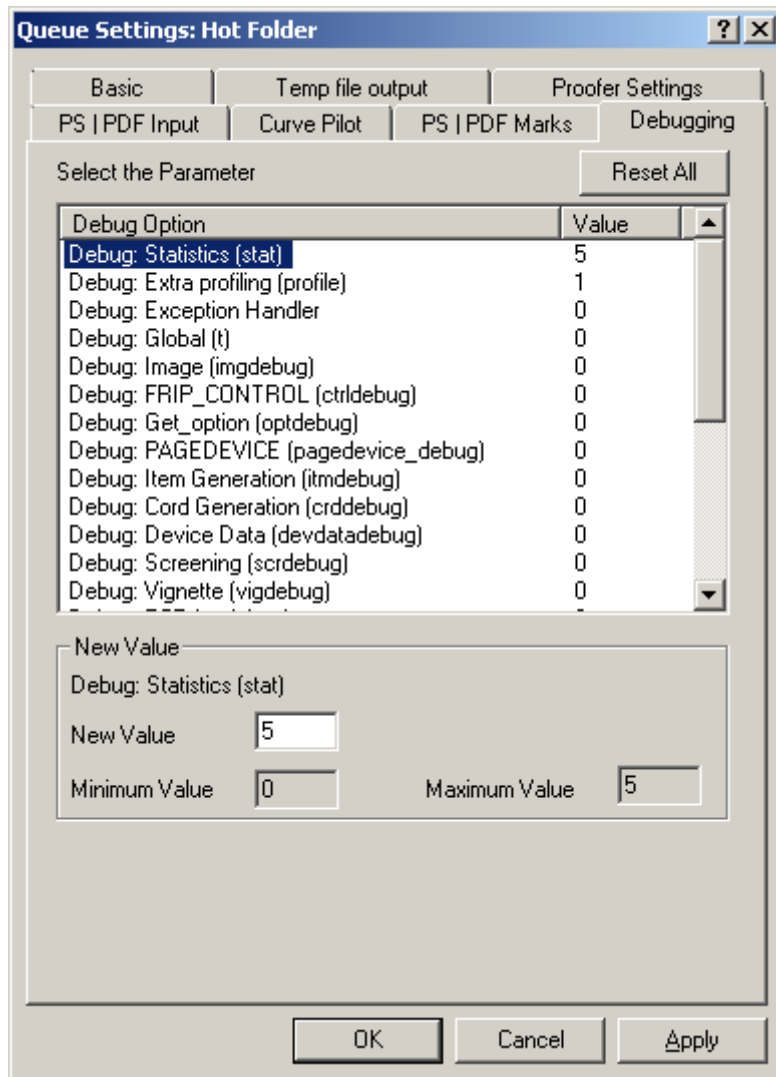
Why is this so interesting?

Extensive log files are very helpful when a problem occurs and you or our Customer Service is looking for an explanation and solution to the problem. Our advice is to always have extensive log files made. The actual log file can be consulted by double-clicking the process number in History View (first column 'job') or can be opened in WordPad or NotePad (standard text editors from Windows).

The log files (per Dispatcher) always reside in the Logging folder. Note that it is possible that the output folder has another name that you specified while configuring the FlexRip. The path listed below is the default path:
C:\Esko\bg_data_FlexRipproof_v120\LOGGING

To change a debug setting, select the debug option and enter the new value in the input field. The minimum and maximum values are indicated.
Some advised settings:

- *Statistics*: advised setting: 5
- *Extra profiling*: advised setting: 1

- *Expose Ticket* (exptdebug): advised setting: 0
- *Statistics on error*: advised setting: 3. This will provide more info when errors occur.
- *Screening*: advised setting: 0

Warning
The higher the value, the more chance the system generates huge log files.

In the History View (page 75) chapter, you will find some guidelines on how to read log files and in the appendix there is a section that explains some classic errors (page 90).

Reset All: Will reset the debugging parameters to their default settings.

7.9 Copydot Tuning

7.9.1 Background

7.9.1.1 Performance & Memory Management

Lineart Pixel images are contourized in the FlexRip. This is the best solution for simple images (logos etc.) because, by contourizing, the images are handled as other linework. Transforming, clipping, trapping or screening of those images is done the same way linework is processed. This method however, gives problems for huge images containing extremely fine detail like screens. In such cases, contourizing needs a lot of memory, which slows down the FlexRip. To overcome this problem, the FlexRip uses a copydot optimization.

7.9.1.2 Copydot workflow

Copydot images are bitmap images, representing pre-ripped or scanned pages. These images are stored in a bitmap file format (TIFF, DCS, EPS, ..). Most of the time we cannot see the difference with bitmap images representing logos or simple drawings. This makes it rather difficult for the RIP to decide if the bitmap should be contourized or not. In some cases, we can extract that information out of the job. Copydots included in a DCS file are recognized as copydot. Copydots that are manually placed in the job by means of an editor are not recognized as copydot and by consequence, will be contourized.

7.9.1.3 Copydot and paint modes

A bitmap image can be set in 3 different modes:

1. ImageMask

Paint is only applied to black areas. White points are not part of the image. They always leave the background unaltered.

2. Image
   Paint is applied to both black and white pixels.

3. Copydot
   In paint mode masking, it behaves always as Image. For all other paint modes, the copydot image is bitwise stored into the background.

By default a bitmap image is set to 'ImageMask'. This means that when the paint mode is masking (e.g. opaque ink mode in Esko PackEdge), the bitmap image will always be contourized!

7.9.2 Queue Settings

To define or change the RIP copydot recognition, you must check the 'Include Tuning Options' box in the 'Input Queue Settings' of the Dispatcher / Options / Program Options / Input Queue Settings / Copydot Tuning Options.
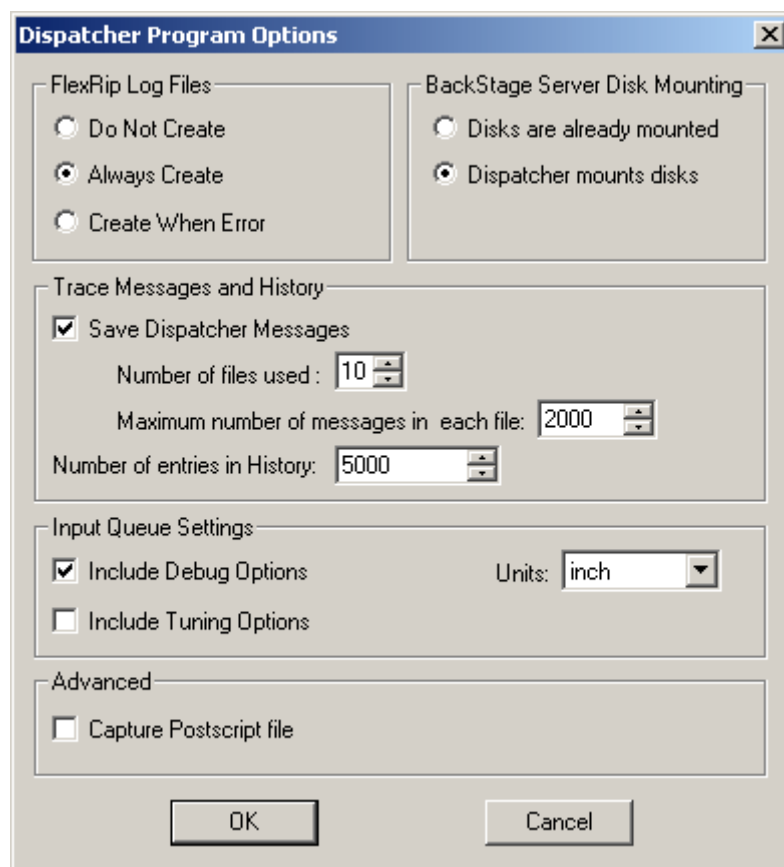
This will give you four extra tabs in the Dispatcher, one of which is the 'Copydot Tuning' tab.

By default the 'Automatic Copydot recognition' is active.
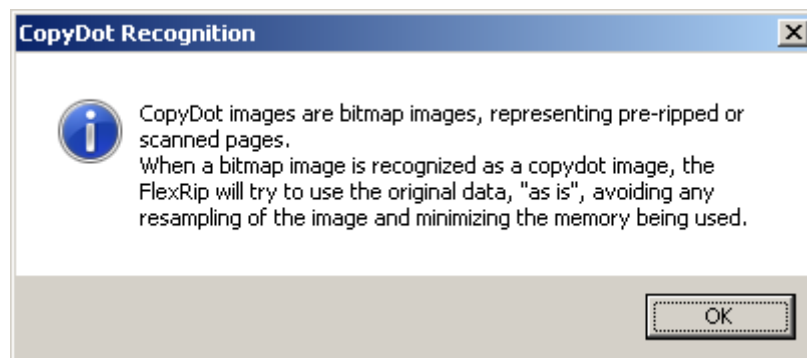
The following 'rules' are used to treat an image as a copydot image:

- A copydot image must be a solid object. A screened bitmap image is never handled as copydot.
- A copydot image has a rather 'high resolution' and is not 'small'. A copydot image must have at least 1000 rows or columns.

7.9.2.1 Resample

When the RIP treats and image as a copydot image, the following happens:
1. With the size of the copydot image (inches, mm, ..) and the requested output resolution the number of resulting output pixels is calculated = X pixels.
2. The FlexRip checks the actual number of pixels that are in the copydot image itself = Y pixels.

If the difference between X and Y is higher than the value defined (default 1), then the copydot image will be re-sampled.

In case different copydots images in a job have slight differences in resolution, and you want to keep that resolution, you should set the resample value a bit higher (ex. 10).

Note
However, if the copydot image is set in a masking mode, then the image wil again be contourized.

7.9.2.2 Abort
If the difference between X and Y is higher than the value defined, the RIP will be aborted. When set blank (also the default), the FlexRip will never be aborted.

7.9.2.3 Use Copydot preview

If you choose to use a copydot preview, set the following options.

- Enter your *preferred resolution* in pixels per inch.
- If there is *no preview available*, then specify how the RIP should behave:
    - Abort.
    - Revert to Copydot itself.

8 Status Monitor

Start up the Status Monitor by selecting 'Status Monitor' from the Tools menu in the Dispatcher that you want to monitor. The Status Monitor gives information on the status of the current and past ripping processes.
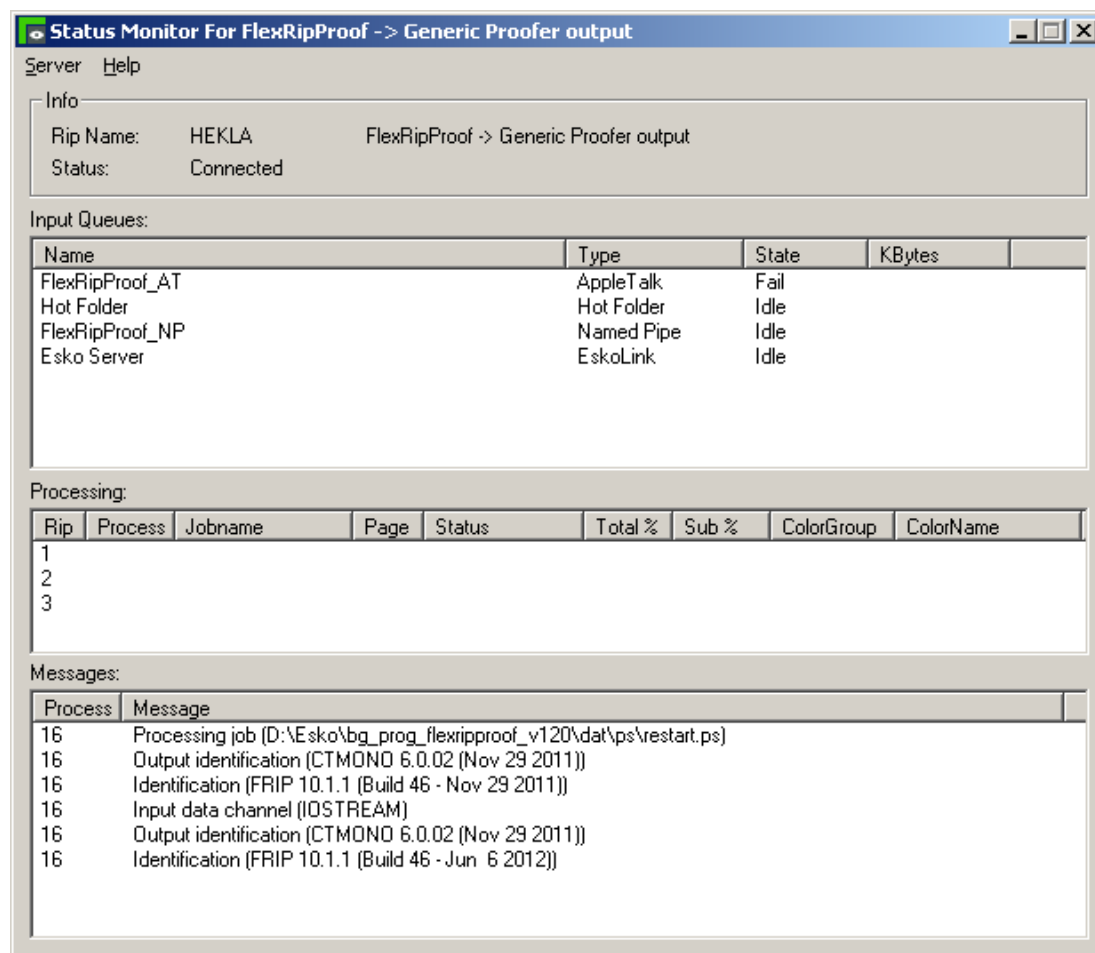
8.1 General overview

In the Status Monitor three panes can be distinguished:

1. The *upper* pane presents all queues with their type and current status.
2. The *middle* pane displays **info** about the 3 RIP channels (2 Esko-native channels and one PostScript channel).
3. **Messages** are shown in the *lower* pane of the monitor.

The Rip kernel sends two types of information: messages and info.
Info data supersedes the previous data, such as the actual page number the RIP is processing. When ripping, the information "page number" starts with 1, becomes 2, etc. When the RIP sends this kind of information, the Dispatcher knows that it can replace the previous value of "page number" with a new value.

Messages, however, are stored in a list by the Dispatcher. New messages are constantly added to the list. That is why you will see entries like 'processing job' when the job has long been processed already.

For each standard RIP process (or every time the RIP 'wakes up' after an internal error), you will see these 4 different messages (as seen also in above graphic of the Status Monitor window):

1. Identification (FRIP 12.0.0 + version date). The software version number and date of the Rip kernel.
2. Output identification (output module version number + version date). Shows the type of output module.
3. Input data channel (IOSTREAM): Reading the input (PS).
4. Processing job (path): Actually ripping, exposing, making output. All following jobs will only show the 'processing job' message.

8.2 Server menu

8.2.1 Connect to

This function allows the monitor to connect to a specific port number on a particular computer running a Dispatcher application. By default the Status Monitor connects to the Dispatcher that started up the application. If connection is to be established with another Dispatcher, possibly on another system, enter the host name and port number and click OK.
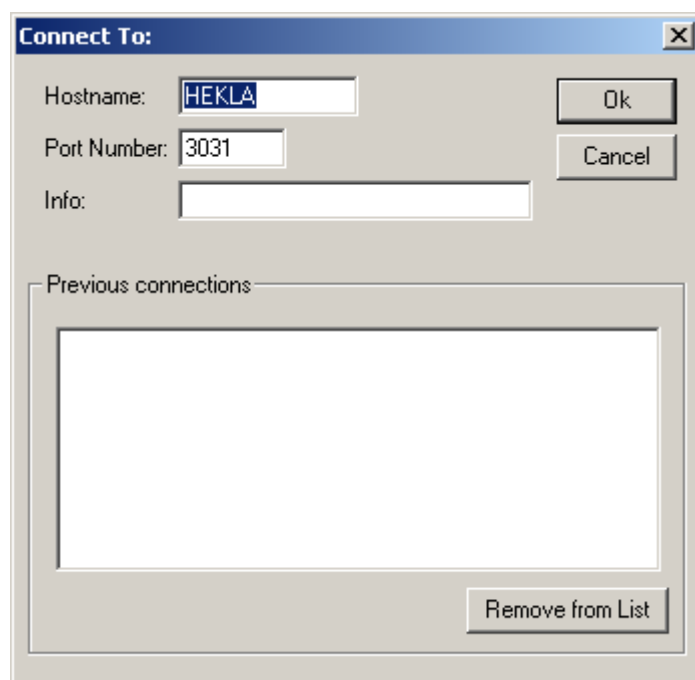
8.2.2 Trace messages

Trace information is info created by the Dispatcher each time an important event occurs (a job that is started…). It is used primarily for troubleshooting. Trace files are created by the Dispatcher and viewed in the Status Monitor. They are stored in the Logging folder.

Active: In the Dispatcher user interface it is possible to deactivate tracing. If tracing is not active then the option "Not Active" will be shown. Always leave tracing active. You will only need these trace files when Esko Customer Service asks you to consult or send one.
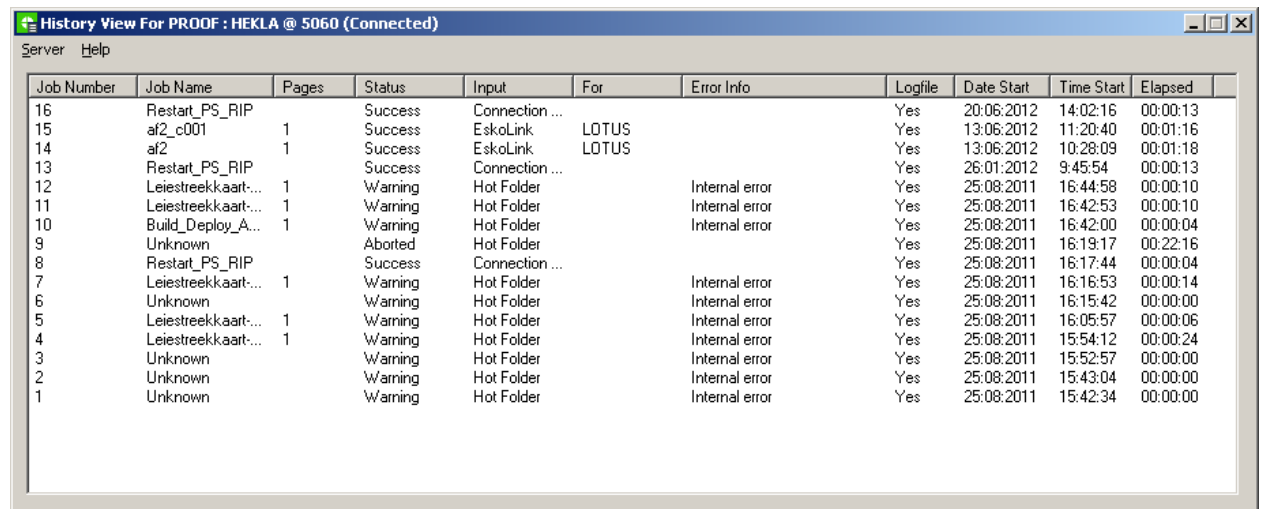
Note
Trace files can be viewed in text editors. The files contain hexadecimal characters, but WordPad has no problem showing them. You may, however, experience problems when opening trace files in other editors.

Note
If it is not possible to open a trace file, take a copy of the file and open this copy in a text editor.
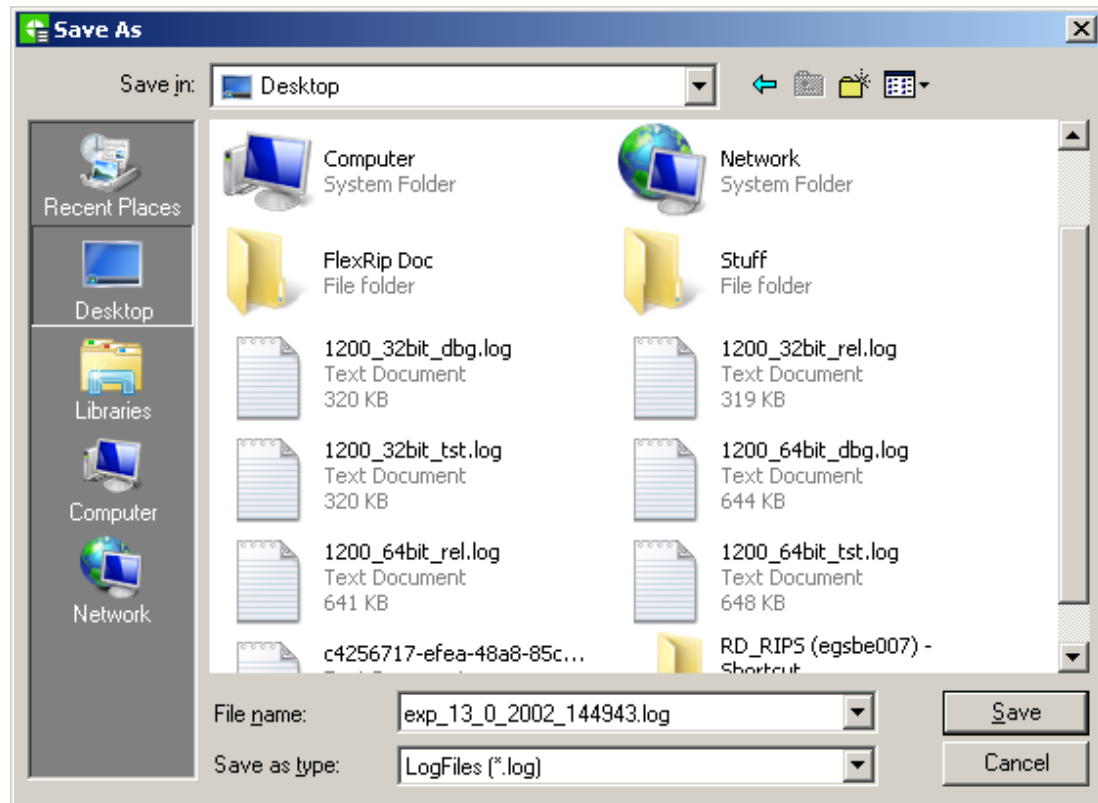
9 History View

The History View program keeps track of processed jobs and enables you to consult their log files. The amount of messages in the History View is determined in the Program Options (Dispatcher / Options menu). The list can be emptied by choosing 'Clear History' from the Dispatcher Rip menu, which also deletes the actual log files. History View is a 'client' program of a Dispatcher. It will only show the history list when it is connected to a Dispatcher. When you start up History View, it will connect to the default port number of that Dispatcher (3031). In case you have multiple Dispatchers in your FlexRip configuration, History View will want to know to which Dispatcher it has to connect. Right-click the top window bar of the History View and choose Connect.

'Save As…' in the Server menu will save the currently selected log file.

Enter the correct Dispatcher port. The History View is now connected to that specific Dispatcher and will only show its specific history. You can now start up another History View and connect it to the other Dispatcher, etc...
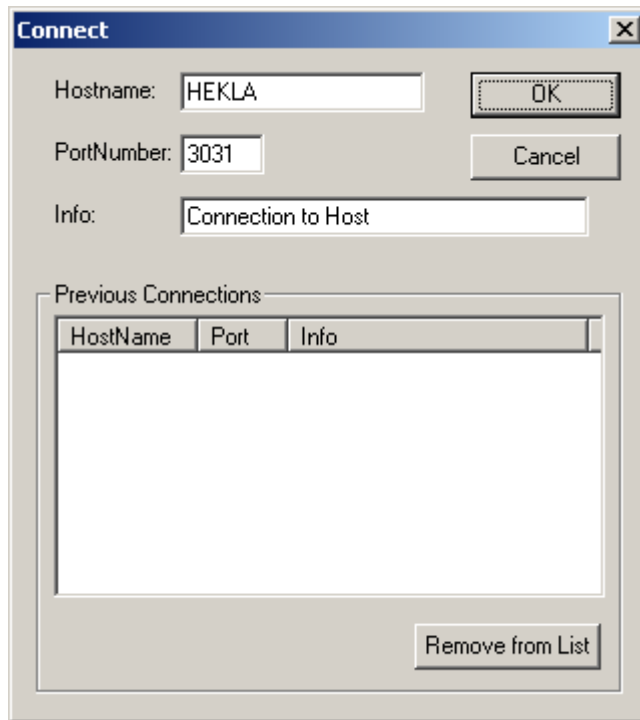
Double-clicking the processed Job Number (left column) opens a view window of the log file that the RIP made of the entire processing of the PostScript file. The log files (per Dispatcher) always reside in the Logging folder. Note that it is possible that the output folder has another name that you specified while configuring the FlexRip. The path listed below is the default path.

E.g.: C:\Esko\bg_data_FlexRipproof_v120\proof\LOGGING.

Note
Log files are text files so they can be viewed with standard Windows text editors like NotePad and WordPad. These offer search functionality, which is convenient when looking for specific info in these (possibly huge) log files.

```
JobNumber: 14  JobName: "af2"                                              ×

Total number of lines in file:    999    Logfile shown from line:    1

*** Localini file: D:\Esko\bg_data_flexripproof_vl20\PROOF\tmp\localini_1.ini ***
*****************************************************************************
[setup]
Output= "af2";Added by FastRip base task
PROOFOUTDIR=    C:\Users\ped\AppData\Local\Temp\;Output Directory
Reverse=        0;Reverse
ServerVersion=  BS12.0;Added by the FastRip base task
ShortID=        42033;Added by FastRip base task
antialias=      0;antialias from proofer configuration
copies= 1;Added by FastRip base task
fit_on_paper=   0;fit on paper
frip_mode=      multipleseparation
left=   0;Left
merging=        0;RIP needs to stop before proofing
noemptypage=    0;Added by the FastRip base task
nrcopies=       1;NUMBER OF COPIES for the proofer
numcopies=      1;Added by FastRip base task
omode=  multipage;Changed because "PageRange" detected
proof_blackwhite=       0;0:composite color;
proof_colorstrategy=    preview;color management strategy name
```

The appendix of this document contains a more detailed explanation of possible
errors that can be described in log files. The contents of the log file can be managed
with the debug options in the Queue settings (see the Debugging (page 65) chapter).
The next section will help you to read log files.

9.1 Log files: guidelines

When opening a log file, the *local INI* file is the first thing you see. But except for
that, the log file is also extended with the *set of environment variables* that were used
when ripping (those set up by the server, if any, and the ones specified in the
FlexRip Configurator), and an indication of the *dispatcher queue* that was used to
process the job. All this should make it easier for our Customer Service to determine
the problem and for you to supply the required info to our Customer Service.

- **What dot / LPI / angle did the RIP really take?**
  You will find this screening information by searching for these words:
  'BG screen'
  'Sampled Screen'
  'lin'
  In a PostScript workflow, the log file might first show some incorrect LPI
  and angle information, depending on the application and your debug
  settings (Typical are the offset settings of LPI 120 and angle 45). What you
  see here is the search order that the RIP is following. It starts with the
  default offset settings and then looks in the PostScript file to see what the
  correct values are.

The RIP will take the requested PostScript file screening settings and the log file will show them. Use the following rule to check the correct dot, LPI and angle settings: the last time the screen info is mentioned just before the actual ripping starts ('start expose'). The screening settings shown there will be used to create the output file.

- When printing from Freehand, you can also search for 'Application' (and the next line will contain the really used screen settings).
  'Sample Screen'
  The first appearance is e.g. the fake default LPI of 120, but just continue to search. Usually, the third one already shows a change and you will see the actual 'lin' (lineature/ruling) taken by the RIP.

- **Output folder**: search for the word outdir'

- **Output name** (name of the output file): search for the word 'output' (at least in one of the expose ticket tables.)

- **Rip version**: search for following words:
  I_CTRL_FI Identification (e.g. FRIP 12.0.0)
  I_CTRL_OI Output Identification (e.g. TIFF MONO 12 02 (month day year))
  The FRIP version is the version of the 'FlexRip kernel' (the base).

- **Font replacement**: search for the words:
  'Not found', using (then you will find):
  I_OSTREAM_BB   Byte Buffer Dump
  'fontname' not found, using Courier...

- **How many colors, separations, files were made?**
  'start expose': Shows the time indication of each new file that is written.
  'Progressline': Shows the actual ripping moment + progress info per inch.
  'I_CTRL_PN' and 'page number': Shows the number of PostScript pages that the RIP is looking for.
  Every log file will show this error at the end:
  W_CTRL   Warning: 'No data in output'
  W_CTRL Warning: endpage (FALSE), page discarded
  This simply means that there are no more separations described in that job, so immediately after this warning the RIP will end processing that file.

- It is important to know that there can be **2 steps in the FlexProof workflow** (depending on the workflow chosen):
    1. Ripping to separated, temporary files
    2. Merging the separated files into 1 CMYK or RGB file The information you will find in the log file on the first stage is very similar to what you find when you expose to an ImageSetter for example. You will see the scan lines for every separation.

Example:

I_CTRL_PROGRESSLINE 300

I_CTRL_PROGRESSLINE 600

I_CTRL_PROGRESSLINE 900

I_CTRL_PROGRESSLINE 1200

I_CTRL_PROGRESSLINE 1500

I_CTRL_PROGRESSLINE 1800

I_CTRL_PROGRESSLINE 2100

I_CTRL_PROGRESSLINE 2400

I_CTRL_PROGRESSLINE 2700

I_CTRL_PROGRESSLINE 3000

I_CTRL_PROGRESSLINE 3300

I_CTRL_PROGRESSLINE 3600

The information on the second stage is also very important. This is where Color Management is performed and where all separations are merged together.

- **What color strategy has been used?**
  Look for a line that says:
  Loading color strategy …

  Note
  A color strategy "linear" is used by default. This color strategy does not do any color
  conversion. The cyan will only be printed with cyan. For special inks, Esko CMS is used by default.

- **What happened to the output file?**
  1. When printing to a Windows printer the file will be submitted to the printer.
  2. When printing to file, the final output file is moved from a cold folder to a final output folder.

  Note
  If you are working in an Automation Engine environment and use the Image Downloader task to merge separations, the log file will end with "Ripping to separated, temporary files".

10 Workflow: flavors and hints

10.1 Who decides: the FlexRip or the operator?

You will have noticed that there are several ways to work with the FlexRip (See the Priority of Settings (page 43) chapter).

- Some people want the FlexRip to decide settings and even overrule the ones that the operator chose. This is often referred to as the 'fail-safe' method to avoid mistakes from operators.
- Some, however, do not want the FlexRip to take any decisions, but want it to keep all the settings the operator set in the PostScript file, or in the ticket in case of an Esko native workflow. This could be referred to as "All Power to the Operator" method.
- Settings that are not answered by the Dispatcher or ticket/PostScript file are taken from the Queue Defaults.

The decision is completely up to the customer. The difference between these choices is visualized by the use of the priority of RIP settings and the amount of Dispatcher queues. If queues take hard decisions, then their names better reflect what they do.

10.2 What is best: AppleTalk or Hot Folders?

As AppleTalk is no longer supported from Mac OS X 10.6 (Snow Leopard) onwards, Hot Folders is the remaining choice.

10.3 What if you rip for more than one output device?

If you have more than one output device that you want to send FlexRip output files to, you need more than one Dispatcher. Each Dispatcher is configured to serve one specific machine.

11 Esko Curve Pilot: Esko's Dot Gain Compensation tool

This section merely serves as an introduction. For more detailed information we refer to the Esko Curve Pilot documentation on your Suite 12 DVD.

11.1 Terminology

- A DGC file stands for Dot Gain Compensation file. It is a curve.
- A DGC Strategy (*.icpro) is a set of curves. One of the included curves will be chosen depending on specific a screen ruling, dot, angle or ink (separation).
- A SCRDGC (Screen Based DGC) is a former set of curves. They can still be used; however, Esko Curve Pilot 12 will not create SCRDGC's anymore.

11.2 Basic explanation and general workflow

The high dot gain of e.g. the flexo printing process results in the need for compensation curves. With these curves, the imaged data are lighter, so the printed result is closer to the intended densities.

Esko prefers compensation curves to be executed in the RIP, since a fully digital workflow has many advantages:

- All data are print-process independent (same image for offset and flexo output).
- Digital tools can be trusted and are 100 % repeatable.
- Time gain.

A CtP (Computer to Plate) workflow will use different compensation curves than a CtF (Computer to Film). All the physical 'problems' with films and the 'film to plate' copy do no longer exist.

Example
The dot gain of digital flexo (CDI) approaches or even matches the Offset dot gain.

The main effect of the CtP workflow is the quality of the plate: dots are sharper (and stronger). This also results in very specific compensation curves.

Another reason for using curves is because of the nature of the printing process, but depends on your workflow.

If you work with '**independent**' data (i.e. your data are not, or only slightly, retouched for specific printing process reasons), then you will have to specify a flexo/offset compensation curve that will take care of the dot gain of the flexo/offset process. Again, this one may be general (DGC: one curve for all separations) or a specific one (Strategy: set of DGC's per dot/lpi/angle). These press curves will not be similar to curves that are used for conventional plates that were made through film contact! (Difference is less apparent for offset processes).

You also have a tool called '**target**'. In general, all curves can again be compensated with a 'target'. Adding these curves to (inside) an existing curve means: "Let's not forget that at image scanning time and while looking at monitors, we were already in an offset-Cromalin/WaterProof environment that was precompensated for offset". You might have the approval this flexo job based on an analogue Cromalin/WaterProof that shows offset dot-gain. If then you want the flexo print result to look like that Cromalin/WaterProof, you should deduct that offset gain from the one happening on the flexo press! That deduction is done by using that target (or reference) curve inside your flexo press dgc. What is then left over is the difference between flexo and offset dot gain.

Depending on the entire printing, the press compensation curves that are used to adapt the output files for a device will vary.

Advanced DGC requirements such as color based DGC strategies, are best handled in Esko Curve Pilot (optional).

How do you make your DGC and ICPRO files?

Here's a short overview:

1. Output test jobs (strips) without any compensation curves.
2. Print on press in typical conditions.
3. Measure results (percentages / densities).
4. Fill in data in Esko Curve Pilot.
5. Output test jobs again now with the compensation curves you made.
6. Print on press in typical conditions. The result should reflect the digital construction of the job.

11.3 Where are my SCR(DGC) files and ICPRO files?

Esko Curve Pilot can be installed on the FlexRip or Automation Engine, but it is also possible to install it on other PCs.

If you have a server, all dgc files and Strategies will be located on the server. If you

do not, they are stored locally on the FlexRip.

Make sure that:
1. the editors know where to find and write the curves.
2. the RIP (=Dispatchers) know where to find them.

On a new, non-customized FlexRip, the dgc files and Strategies are standard on
C:\Esko\bg_data_dgc_v010

The target curve(s) are in a subfolder 'refdgc':
C:\Esko\bg_data_dgc_v010\refdgc

More information on how to install the Esko Curve Pilot, please refer to the Esko Curve Pilot documentation on the Suite 12 DVD.

Tip
Always keep a backup copy of your curves, you do not want to loose all the work you put in there. Even a floppy disk could contain all your curves.

11.4 Using old DGC files

If you have DGC files from a FastLane v9.4 system or even older, you can continue using these DGC files on the FlexRip.

Best results are obtained after having loaded and saved the DGC files into Esko Curve Pilot. This will improve the quality and smoothness of the curve. We refer to the appendices in the Esko Curve Pilot manual on the Suite 12 DVD for more elaborate information.

12 Data backup and customization

A working FlexRip contains the standard FlexRip software that was configured to the customer's specific devices and workflow (Dispatcher Queues: their type, amount, names and their settings). This configuration results in small files that are very typical per customer. Configuration files are backed up by the FlexRip Configurator. Please refer to the Configurator documentation for more information on backing up configuration files.

The FlexRip contains output files. We see that some customers back up their output files and some do not. This depends very much on other archiving methods in the workflow. How you back up all these data is your decision. Your system manager should advise the workflow responsible what devices and procedures are available with this Windows2003 computer. You could copy data to another disk to avoid loss in case of hard disk problems. You could share a part of the FlexRip hard disks and copy the data to another computer that has a CD writer (or optical disks or...). Some more advice though:

Back up your DGC data
Copy your DGC files to the backup folder you made on your data disk or copy them all to an external disk. Do this regularly.

Warning
Never put a (any kind of) file that was on a CD or a DVD on an EskoFlexRip Hot Folder. A file that comes from a CD or DVD-ROM is R.O.: Read Only! This means that after ripping the file, the RIP will not be able to delete the file and will rip it over and over again until the hard disk where your output folder is situated, is completely filled up.

13 Classic errors and their explanation

The History View program will show if a RIP action was completed successfully or if it encountered an error. Error Info usually concerns 'Internal Errors' or 'PostScript Errors'. As said before, a warning in a FlexRip log file is not always an error, but still it will appear in the log file.

For instance, in some log files, you will see the following warning a number of times:

W_DATA   Warning: Output resolution not integer...
This is completely normal. Since the effective PPI has to be an 'integer' number, the RIP will change your resolution in background just a little bit, e.g. from 2104.9 to 2105 ppi.

Another warning that appears in every log file (at the end) is

W_CTRL   Warning: No data in output!
*W_CTRL   Warning: endpage(FALSE), page discarde*d
I_TCTGEN_INFO   no Contone data Processed.
This all means that the PostScript Interpreter is looking for the next color ('page') but does not find any. It indicates that there are no more separations described in the PostScript file and that all pages (=inks =separations) have been ripped.

You should in fact only be alarmed if you do not see the word 'Success' in the Status column of the History View.

- **PostScript errors** are encountered by the FlexRip's PostScript Interpreter. This could be e.g. because the PostScript file is not complete, because it contains inappropriate PostScript commands for the FlexRip ("dirty PostScript"), or because the FlexRip does not understand the commands.
- **Internal errors** have to do with the general working of the FlexRip or with the status of the RIP itself. If someone, during a RIP action, closes the Dispatcher or chooses the 'Abort job' function, you are bound to get this kind of error. You will also get an internal error if the RIP is asked to do things it cannot do. An example: the PostScript file might be read without problems, but it asks the RIP to execute a DGC curve that does not exist or to output the e.g. LEN or TIFF file to a folder that was deleted. Both of these operator mistakes will cause internal errors.

Warning
Double-clicking the job number in the History View will show you the log file in an internal window. You may find it much more practical to read large log files when you open them in a simple standard text editor (with a search function!) that Windows offers like 'NotePad' or 'WordPad'.

What follows is a list of some typical errors and the way they are described in the log file. An error is always first described with a code, followed by some more or less 'readable' explanation.

Example
Example of such a code: 'E_DGCNAM_IE':
E   = Error (I = Info; W = Warning)
DGCNAM   = something wrong with the name of the dgc file
IE   = It is an Internal Error

These codes are very valuable for our Customer Service, so do mention them too when reporting problems.

13.1 Classic PostScript errors

13.1.1 Examples

- **General warning**
  E_CONTROL_PE PostScript error occurred (parser warning: PS error happened)
  This is a standard line for most PostScript errors, and will be preceded or followed by a more specific message.

- **Rip was stopped during reading of the PostScript file**
  W_CTRL   Warning: FastRip cancelled
  This indicates that something interrupted the RIP. It was suddenly stopped and the PostScript file could not be read anymore.
  To check: Did someone choose 'Abort Job' from the Dispatcher's Server menu? Did someone close the Dispatcher program or even shut down the FlexRip?
  See to it that the RIP is started and just try to send the job again. It is possible that you do not have to restart the Dispatcher, because the RIP normally restarts automatically when any Queue or Hot Folder receives a new PostScript file.

- **'Illegal' dot types in PostScript**
  If you input from ArtPro, you might find following error in the log file and similar 'Error Info' in the History View:
  I_OSTREAM_PEMSG %%[Error: rangecheck: Offending Command: set halftone;ErrorInfo: Halftonetype 95]%%
  In ArtPro it is possible to select a non-standard dot (in the 'Separations' menu). These dot types for a Nexus RIP should not be allowed in PostScript code that is not made for such a RIP. Please see the Printing documentation (chapter 'Remark on printing from ArtPro).
  Solution: Overruling the dot in the Dispatcher's Queue settings does not

help. As said before, the job has to be printed again from ArtPro and a standard PostScript dot (top part of list) or no dot has to be selected in the menu 'separations'. Then the PostScript file will be fully readable and the RIP will continue to see what Esko dot has to be used in the end.
Using ScreenFilter is another option. If multiple dots are defined in ArtPro you will need the ScreenFilter to handle these jobs. ScreenFilter will capture the screening info and will allow you to define swap tables for incoming screens.
For more information, please refer to the ScreenFilter documentation on the Suite 12 DVD. There's even a third solution to overcome this problem. You can rewrite the PostScript file in ArtPro using PS screening instead of Nexus screening. The PS screening of ArtPro will work if you switch to "PostScript screening" in the FlexRip Dispatcher. All dots as described in the PS file will then be correctly output.

- **Ink name descriptions**
  W_CLASS   Warning: Multiple invocations of PLATECOLOR on this Page
  Meaning: Output file names always get a suffix based on the ink name description in the PostScript file. This official description of the separation name is the command 'PlateColor'. If the RIP finds (in 1 page, so within the same separation) multiple descriptions of this ink, it will give this warning. The warning indicates that this behavior is not standard, but does not have to be a problem.

- **Font not available**
  When a font is not included in the PostScript file, and not available in the RIP itself, the following error messages will be displayed:
  I_OSTREAM_BB Byte Buffer Dump (length: 46 bytes)
   TextileRegular not found, using FontNotFound..
  I_OSTREAM_BB Byte Buffer Dump (length: 55 bytes)
   %%[Error: invalidfont; OffendingCommand: findfont]%%.
  I_CONTROL_INFO Parser info: %%[Error: invalidfont; OffendingCommand: findfont]%% I_OSTREAM_BB Byte Buffer Dump (length: 63 bytes)
   %%[Flushing: rest of job (to end-of-file) will be ignored]%%.
  I_CONTROL_INFO Parser info: %%[Flushing: rest of job (to end-of-file) will be ignored]%%
  E_CONTROL_PE PostScript error occurred (Parser warning: PS error happened)

13.1.2 Problem solving: 'capture' the PS file

If there is some mysterious problem with reading a PostScript file, and all other obvious rules have been checked, then our Customer Service may ask you to provide us the 'Captured PostScript file'. This is a text file that includes the PostScript file itself plus a lot of other relevant data. So a 'captured PostScript file' is not just the PostScript file that was intercepted, it is more than that.

How to 'capture' a problem file?
1. Try to reproduce the problem with a small PS file (less data? only one separation?)
2. Wait until all Dispatcher queues are in idle status.
3. Enable the 'Capture PostScript file' in the Program Options of the Options menu in the Dispatcher and confirm with OK.
4. Have the problematic Postscript file ripped again and wait until the error shows up again. This time the PostScript file was also 'captured' in a temp folder.
5. The captured Postscript file will be called ps_trace_1.txt and can be found in the Tmp folder. Note that it is possible that the output folder has another name that you specified while configuring the FlexRip. The path listed below is the default path.
C:\Esko\bg_data_FlexRipproof_v120\proof\tmp
Now deliver this .txt file to our Customer Service.
6. Do not forget to switch off the 'capturing' afterwards! So disable the 'Capture PostScript file' in the Program Options of the Options menu in the Dispatcher and confirm with OK.

13.2 Classic internal errors

- **Screen not found**
  E_SCRSEL_IE Internal error (Screen file xxx not found...)
  Meaning: The screen file (.isb or .csb file) you requested was not found. A screen file is an area of dots of 1 type, 1 angle, 1 size (lpi) and 1 resolution (ppi).

  Example
  the screen file f8205c.isb represents:

f:	*flexo angles*
82:	*angle 82*
05:	*number of resolution set of that type*
c:	*circular dot*
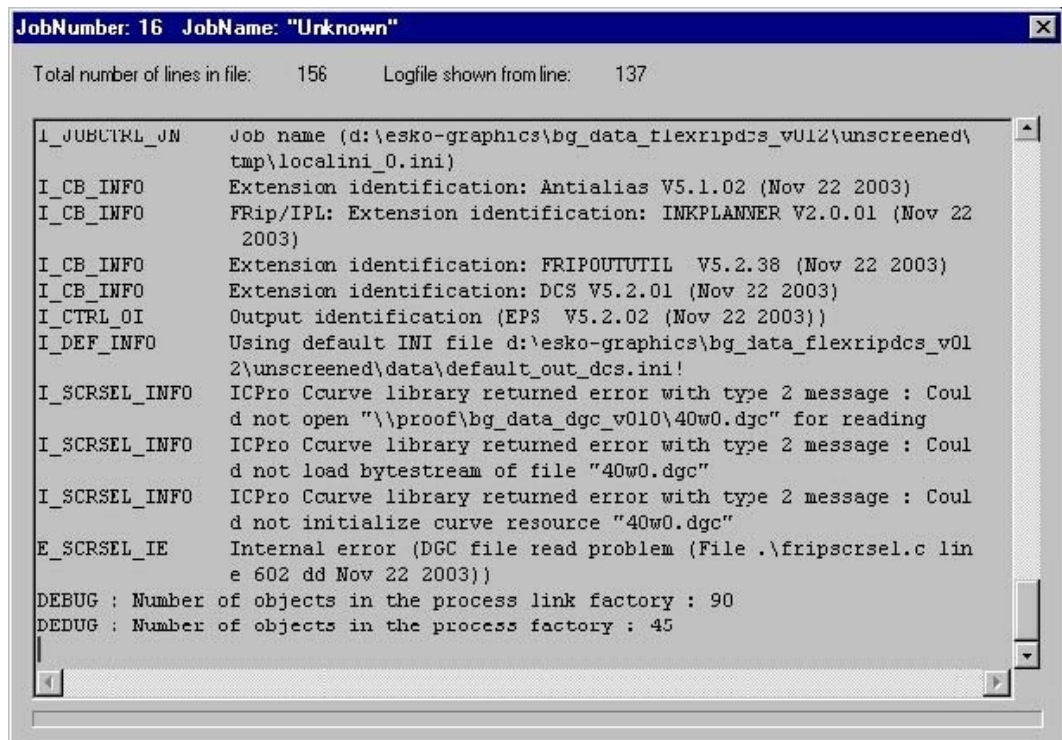
  Check if that dot is available on your FlexRip. If it is not purchased, it will not
  be in the central folder for the 'screen files':

  C:\Esko\bg_data_screens_v010
  Is the angle you requested a flexo angle? If not, the RIP will look for an Offset
  screen file and those have a name starting with an 'o'.

- **(Scr)dgc files not found**

E_SCRSEL_IE indicates that the RIP has trouble reading the DGC file.

This means that the FlexRip is not able to read the (scr)dgc file specified, because:

- the share could not be reached.
- the file is not present.
- the file is corrupt.

Perform the necessary checks to verify if the DGC file is present and opens correctly.

- **Problems with writing the actual output file**
  E_CB_IE   Cannot create output file(s) ...
  E_CTRL_CCF Cannot create file (fripout(5): E_openfile)
  Meaning: The RIP would like to, but just cannot create a plate file or the original output file. The output directory will be created when necessary. Check the Queue settings to see where the RIP wants to write that output file.

Or in case of:

E_DEVCOM Output Device communication Error

Check if the hard disk (the one where the output folder is) still has space left to write the output file? The hard disk may be filling up. If so, clean up and delete some files or re-direct the output to a folder on another disk.

14 General troubleshooting

14.1 Queue settings 'disappear'

My Dispatcher Queue Settings seem to disappear…

Although this is not known as a bug in the FlexRip software, we would like to comment on that. If you notice that queue settings get 'lost', then this is not a problem in the FlexRip software itself, but in what surrounds this software. So please look for the problem in the 'environment'.

When you click OK after checking or changing Dispatcher Queue Settings, a small .usr file is adapted. This .usr file (as all your specific settings of your Dispatcher) is in: C:\Esko\bg_data_FlexRipproof_v120\proof\Data

The date and time of these files indicate when the Queue settings have been changed. When that C drive is full, the RIP will have problems accessing and writing those .usr files. So do check if your system drive is full and certainly why it was full. Make sure that all your Hot Folders (large incoming PostScript files) or output folders (where the CT files are written) are on your Data drive. Also check whether or not your Hot Folders (Queue Info) delete the PostScript data after ripping. Make sure that they do.

14.2 My input queue shows a 'fail' status

The AppleTalk queue is not automatically put in the 'idle' status.

If an item is not working because certain elements are not installed, the Dispatcher will go into a "fail" status.

In this case the AppleTalk services are not running. Activate the AppleTalk services and open the Dispatcher again.
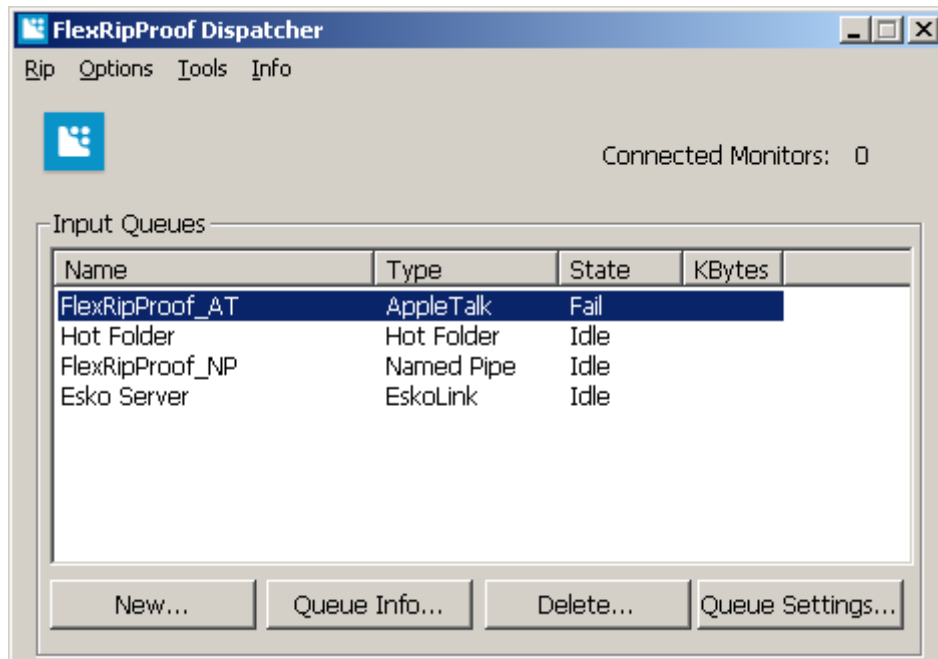
14.3 The system disk is filling up

Why is my C drive so full?

If your C drive is filling up and you have no idea why, then check the contents of the Tmp subdirectory of the data tree of the FlexRip flavor. If you see files with strange names like 'stream_cdlclass57628_6234' (always begins with stream_cdlclass, then one or two numbers and no extension), then these may be remains of a PDF file that has not been ripped successfully. Before ripping a PDF file, it is first converted to PostScript. The temporary PostScript files that are generated are stored in the bg_tmp directory and will be deleted after ripping. However, if the RIP ends with an internal error during ripping (crash, read only PDF file from a CD…), it will stop but it will NOT delete these temporary files. In this case, you'd better delete them yourself. Keep at least one to show at Esko Customer Service.

14.4 FlexRip rips my file over and over again

I can't stop the RIP from ripping a certain job over and over again.

This is what happens when you have put a read-only file on a Hot Folder. The RIP will try to delete it after the ripping but it can't, since this requires writing permission. Solve this by stopping the Dispatcher (so 'abort job' is not enough!), deleting the read-only file, and deleting all the unnecessary output files it created. Restart the Dispatcher.

14.5 No output was generated from a PS file

There are several possibilities:

1. **The job contains unregistered Designer inks.**
   Unregistered designer inks are inks like "Special red" that have no relation with any real inks. These inks are often used in DTP. If you write a Separated PS file from a job that contains such an ink, some applications write no information on the kind of color it in the PS file. This is kind of normal since Separated PS files are usually made for film output. This is why FlexRip/Proof cannot reconstruct the color in the job. FlexRip/Proof will not proof the design because there is no real information on the ink.

   There are a couple of workarounds to this problem:

   > 1.   Register the ink your Designer ink book on the FlexRip, using Color Engine Pilot. You can just copy a PANTONE ink in the Designer book and rename it to exactly the same name as the name in your job.
   > 2.   Use a PANTONE ink instead of the designer ink.
   > 3.   Convert the special ink to CMYK when writing the PS file. If that 'Special Red' is not present in the Esko ink database the whole job will not be proofed! Look in the log file if that is the case.

   Example
   You will see something like: 'Error: The designer color rood4 is not available in the CMS database and there is no color simulation available Processing of the job will be stopped.' It depends on whether or not the application writes a CMYK equivalent for that Designer ink in PS file.
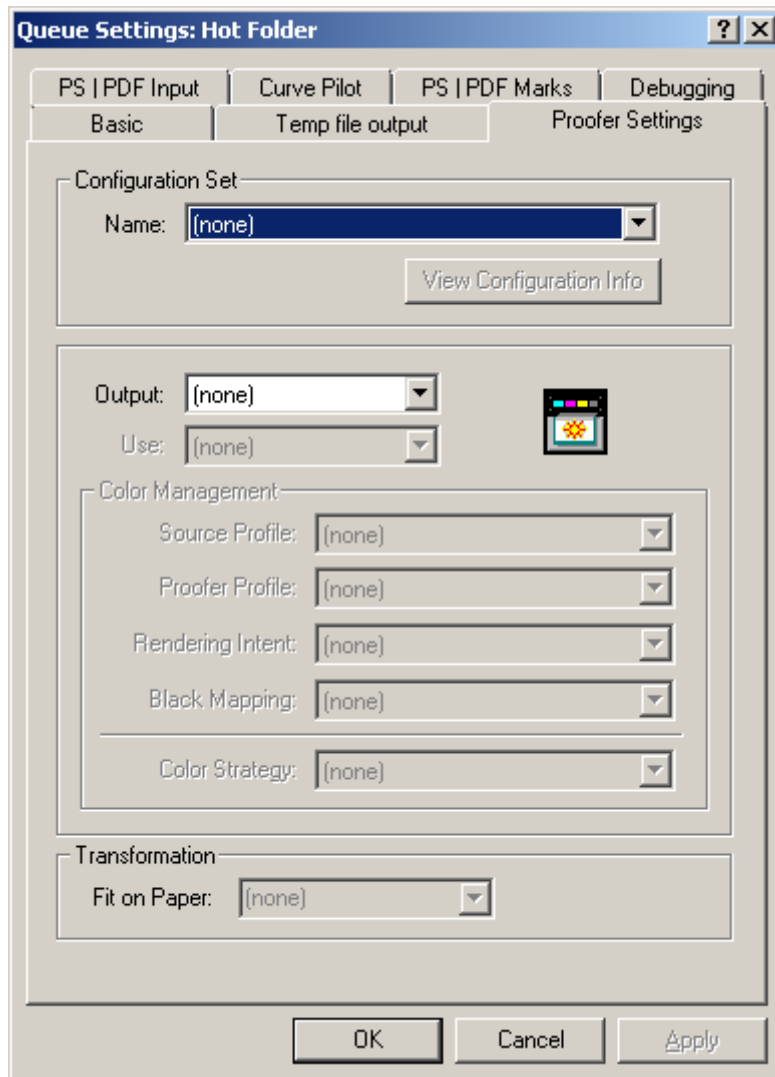
   Note that Esko PackEdge and Illustrator do not generate color information in SEPARATED PS files.

2. **Configuration was not filled in.**
   Please check if the proofer configuration (done in the FlexProof Setup) is filled in the Dispatcher.

   Warning
   Remember that for all PS queues (Appletalk Hot Folder, Named Pipe), a configuration has to be filled in!

14.6 I changed something in the CMS database but the RIP does not take it

Every time you change something in the CMS database the Dispatcher has to be restarted.

Example
if you have just measured a new Esko profile and you made new color strategy, then this new color strategy can only be applied after the Dispatcher has been restarted. The same is true when a new designer ink has been added to the database. The Dispatcher has to be restarted before this ink will be recognized.

Tip
If you run into this problem sending PS files to a Hot Folder, a named pipe or an AppleTalk queue, clicking "Abort Job" in the Server menu of the Dispatcher. "Abort Job" re-initializes CMS.

14.7 In the log file, I get "access violation while writing"

Example
Processing block 1
E_?_IE Internal error (exception: access violation while writing)

If you get this error, there is probably not enough space on the disk where the final output file is written.

1. Check where the file is written. You can find this in the Setup of the "Image Downloader".
2. Check if there is enough space on that disk.
3. Clean up the disk.
4. Try to find out why the disk was filling up and try to solve it so the error does not occur again.
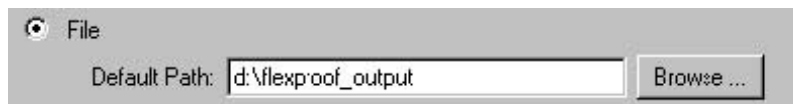
14.8 In the log file, I get "Internal error (Parser error: BG font not found)"

Example
E_CONTROL_IE Internal error (Parser error: BG font not found: 1204)

An Esko font in your job could not be found.

14.9 In the log file, I get "Internal error (Could not allocate license "frippdf")

There is a license problem. Maybe you are running two FlexRips on the same box and you only have 1 FRIPPDF license. Make sure you have enough FRIPPDF licenses.

14.10 The designer ink "fond" can not be found in the CMS database

See the first item in No output was generated from a PS file (page 95).

14.11 Cannot find external image

An external image (a CT, an LP,..) cannot be found. Make sure all the external images are present.

Tip
In case you are working with Esko native files, you can switch on the 'Foreign' button so that all external images are searched on the local directory.

15 Frequently Asked Questions

15.1 FlexRip software version

What version of FlexRip software do I have?

The software version can be found in every log file. You'll first see the ini file, then the environment variables en below that, the software version will be mentioned.

15.2 Extra software on the FlexRip

Can I install some extra software on my FlexRip?

No, unless approved by Esko. Whenever you add, remove or reconfigure of software on your FlexRip should be requested and reported to Esko Customer Service. In general, upgrading any of the software that is already installed (Windows, modem software, DiskShare) has to be reported and requested. Installing additional new software will probably be forbidden. Any request will be considered though. Send this request to the Customer Service department.

15.3 Screensaver

Can I use a screensaver on my FlexRip?

No! Even screensavers use CPU activity and all CPU on a FlexRip should be dedicated the RIP itself. When a FlexRip is well configured, it should be quietly doing its RIP work all day. Nobody should change any Queue settings or monitor or read log files. This means it would even be logical to switch the monitor off.

15.4 Windows version

What version of Windows do I have?

In Explorer, choose 'About Windows' from the 'Help' menu and you will get an exact description of your version of Windows on the second line.
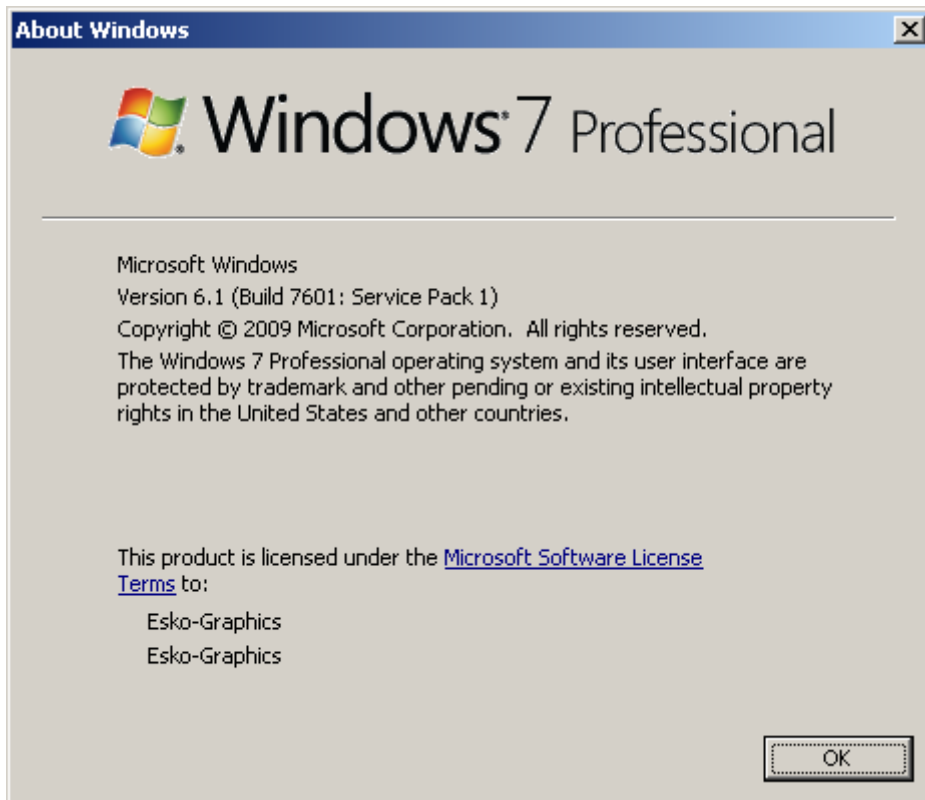
15.5 Rebooting the FlexRip

Should I reboot the FlexRip occasionally?

Yes. We have experienced that this WindowsNT-driven computer likes a 'shower' every week. It will free up some hanging memory and therefore be a little faster afterwards. Please do this occasionally, even when you would not even notice any loss of speed.

15.6 FlexRip's computer name

What is the name of my FlexRip?

If in doubt: open a command prompt window (Start / Programs / Command Prompt) and type: set computername. This will show the actual computer name and more network information. This name is set by Esko. Do not change it. When still desired, contact Esko first.

15.7 Info on the network address

TCP/IP info:

If in doubt: open a command prompt window (Start / Programs / Command Prompt) and type *ipconfig/all*. This will list all necessary info on the TCP/IP configuration of this machine.

16 Appendix

16.1 Connection to DTP stations

16.1.1 How to share FlexRip volumes for a Macintosh (Microsoft Windows 2000 or 2003 Server)

Windows 2000 Server

1. Right click "My Computer" and select "Manage".
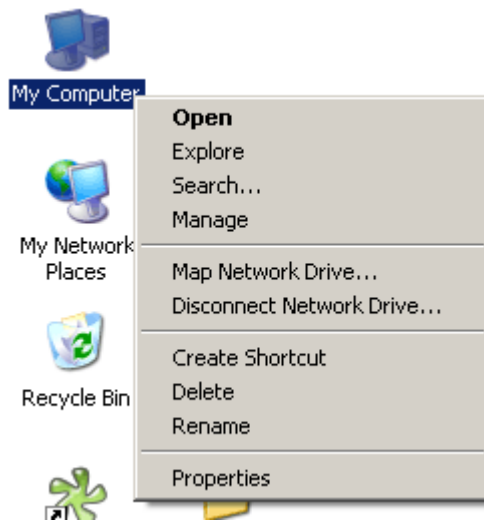
2. Go to "Shared Folders" / Shares and select "New File Share..."
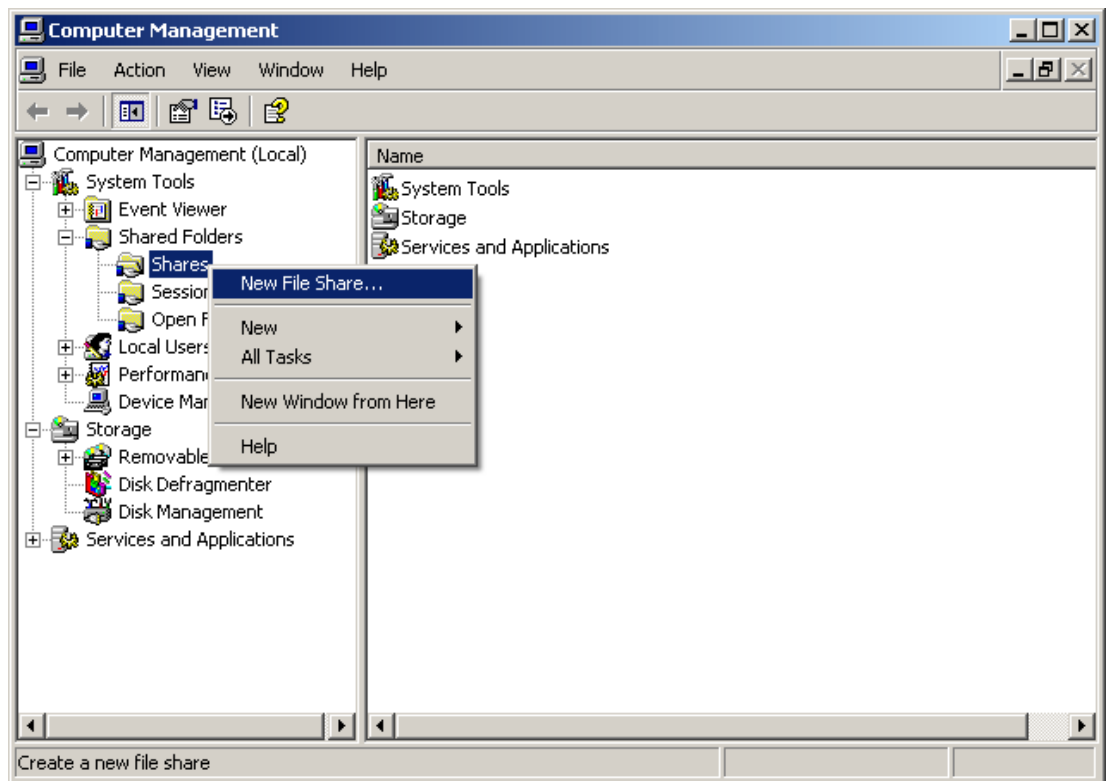
3. Select the folder or drive and fill in the share name. Do not forget to take the naming policy into account.
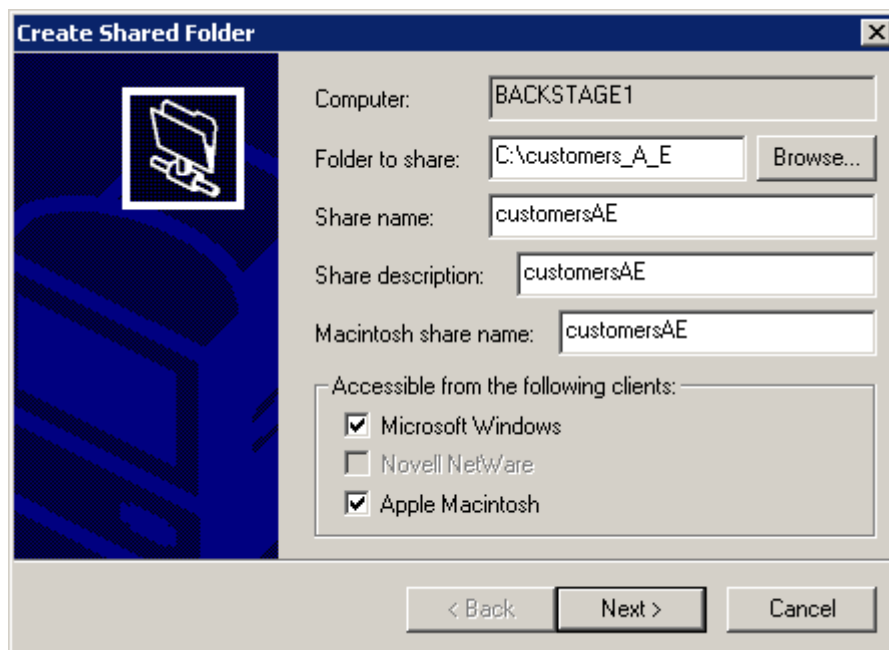
4. The next dialog allows you to set the permissions. Keep the default selection (All users have full control).

Windows 2003 Server

1. Right click "My Computer" and select "Manage".
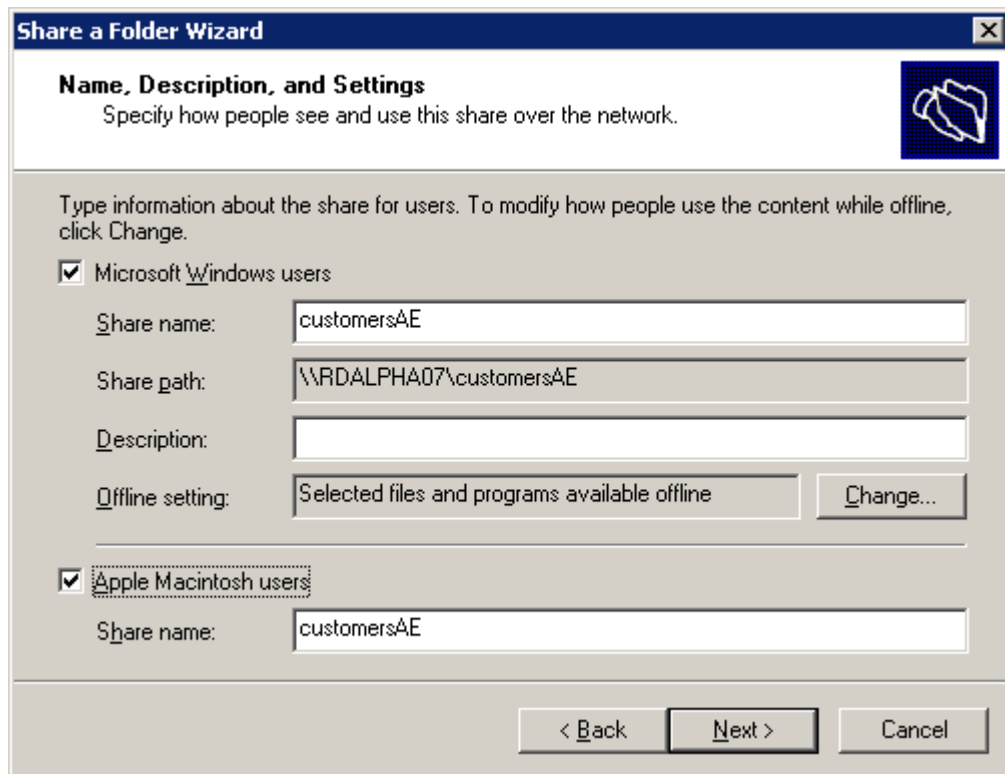
2. Go to "Shared Folders" / Shares and select "New File Share..."
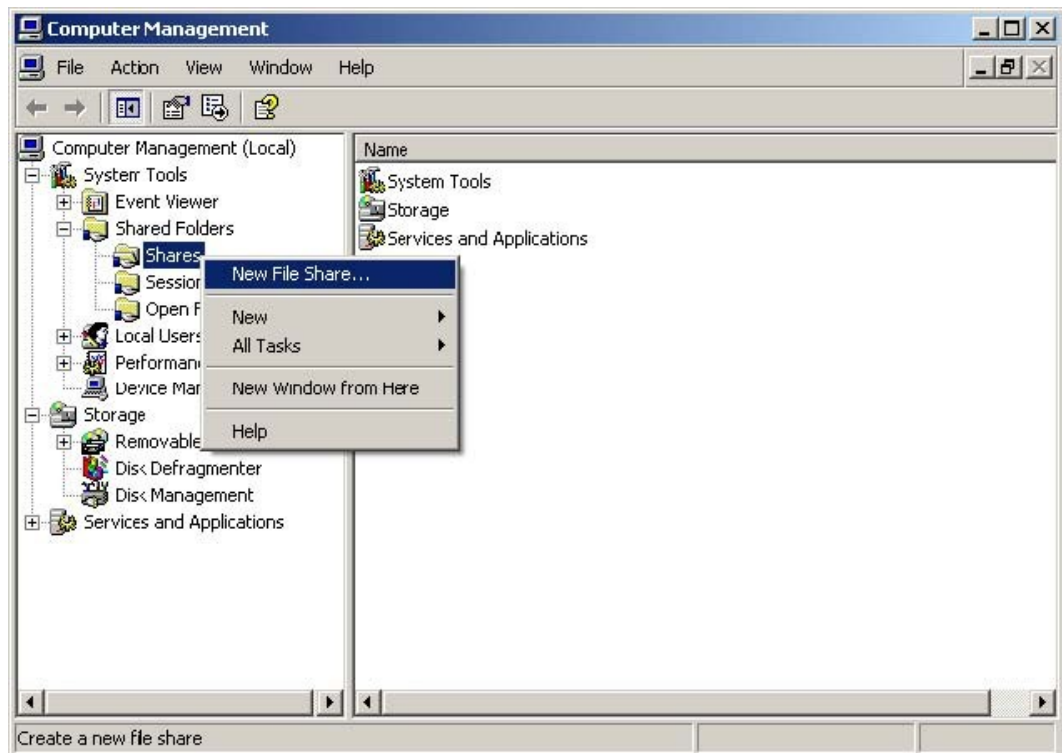
3. Browse to the folder you want to use as a share.
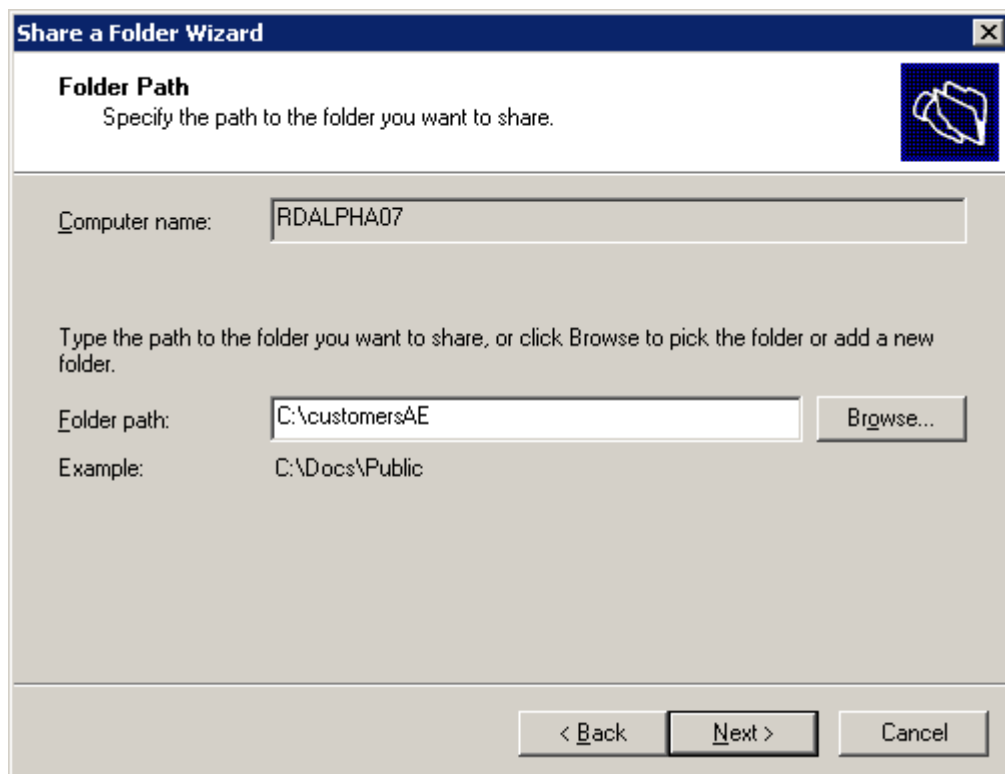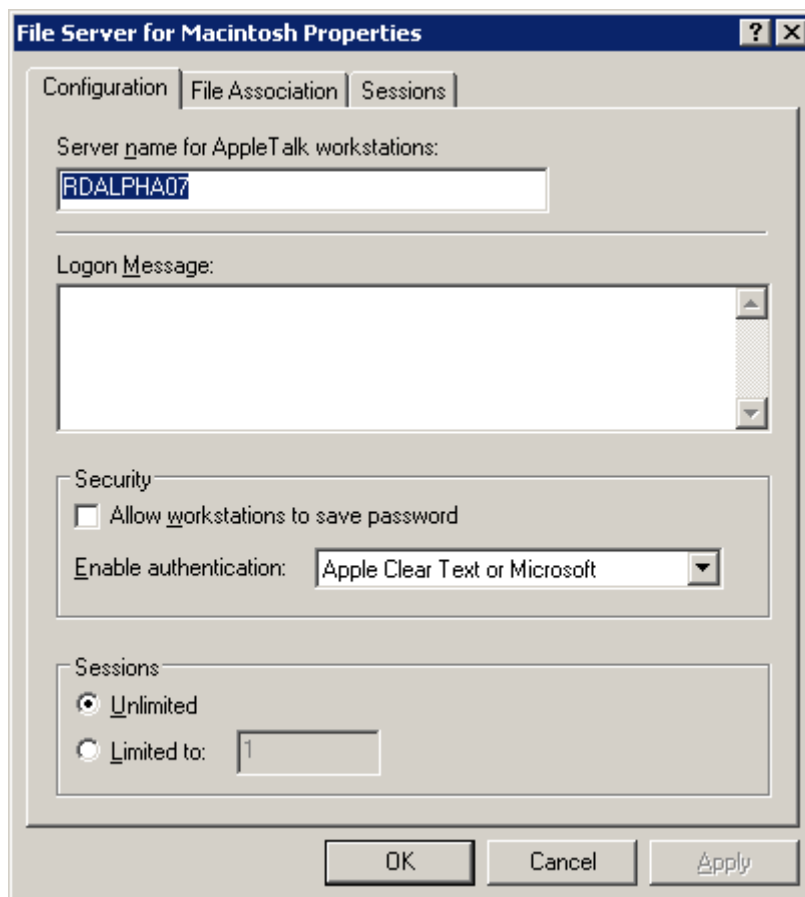
4. Define the share settings.
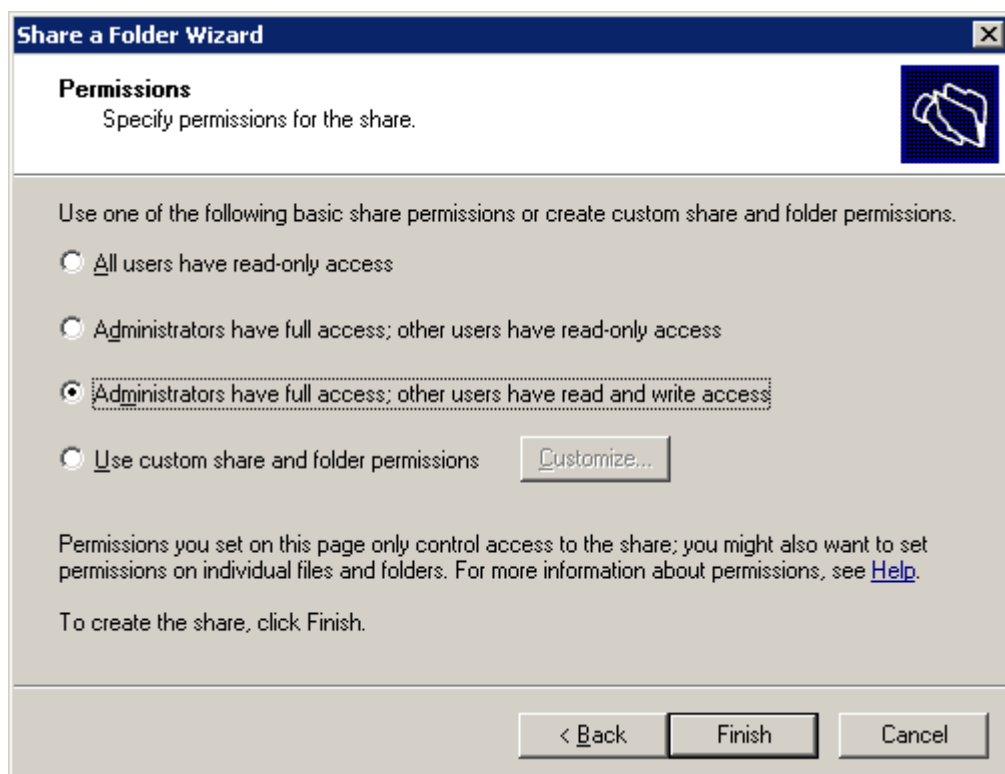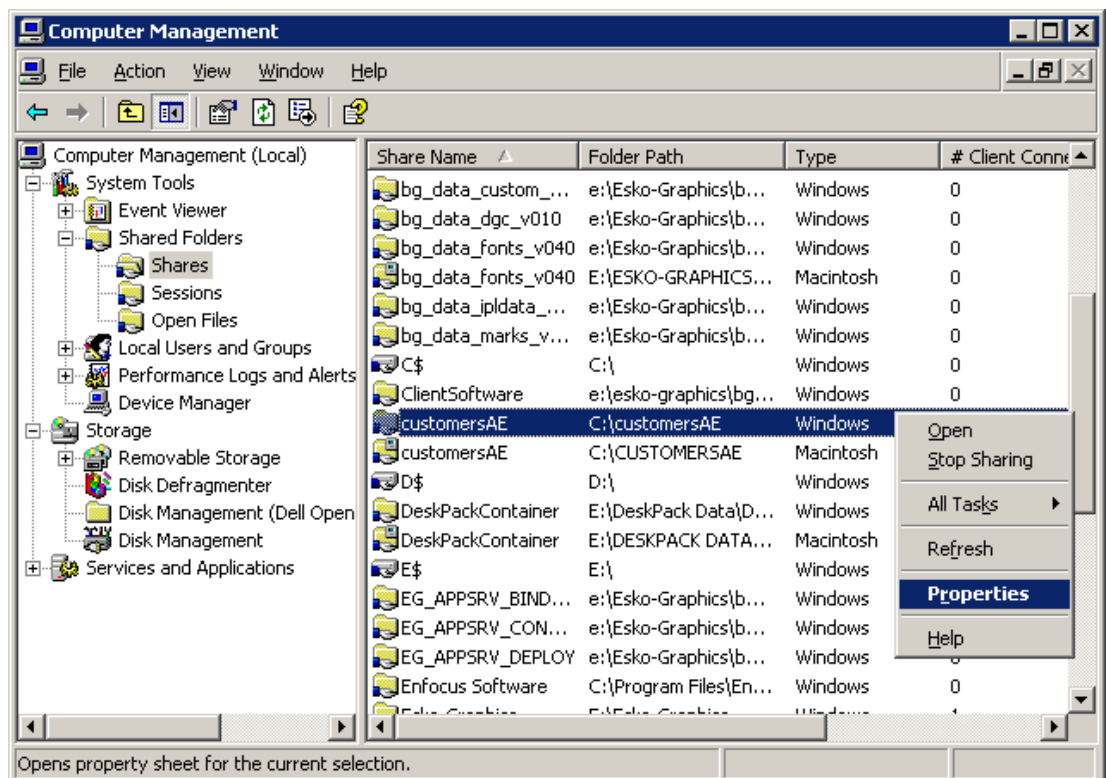

5. Set the permissions and click Finish.

6. In the Computer Management dialog, right click "Shared Folder" and select "Configure File Server for Macintosh…"
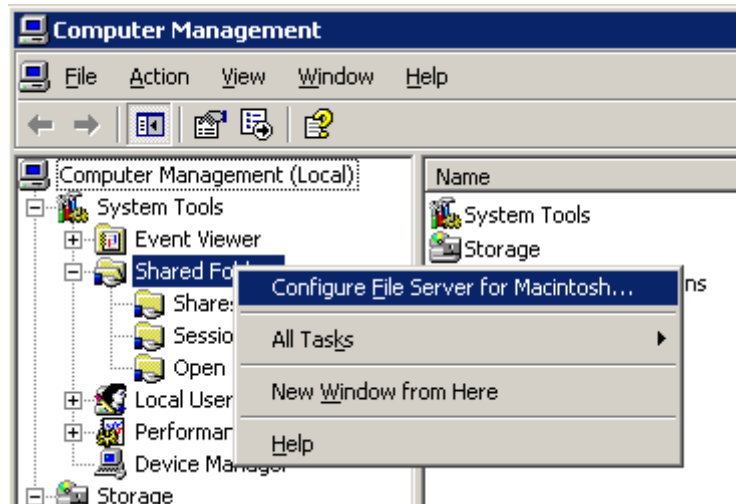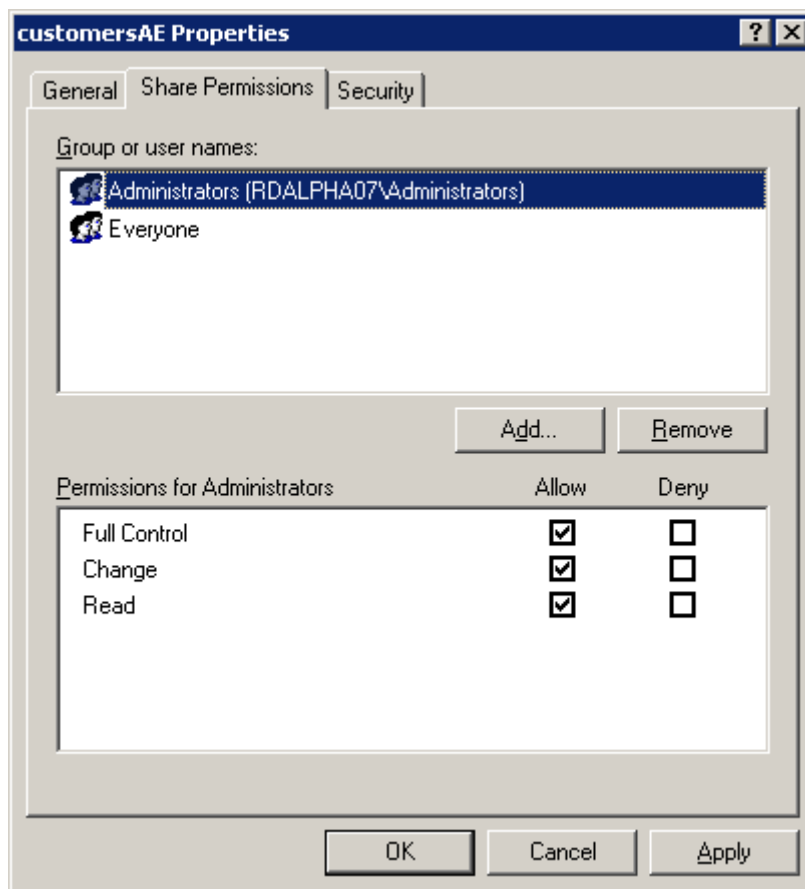
7. Choose "Apple Clear Text or Microsoft".

8. In the Computer Management dialog, go to "Shares" and select the correct share.

9. Change the properties for that share. By default "Read only" is activated.

16.1.2 How to share FlexRip volumes for a PC (Microsoft Windows 2000 Server)

Before being able to share, two conditions have to be met:

1. The FlexRip folder has to be 'shared' open enough for the user who wants to access it (so there are no problems with file permissions).
2. The user on the DTP PC has to be known on the FlexRip or has to be able to log in as user 'Guest'.

Therefore:

- On the FlexRip: share the volume and open its permissions:
    1. Right click the folder that you want to be visible for other PC's.
    2. Choose 'Share this folder...'.
    3. Activate 'Shared as:' and keep the proposed name (e.g. 'Hot Folders').
    4. Keep the user limit to 'Maximum Allowed'.
    5. Click 'Permissions': Set 'Full Control' for 'Everyone'.
    6. Click OK and click OK again in the 'Folder properties' window.

- On the FlexRip: enable the account of user 'Guest':
    1. Start / Programs / Administrative tools - Computer Management.
    2. You will see 3 users: Administrator / Guest / Iusr_nameofrip
    3. Double click the user 'Guest' to open its window 'Guest properties'.
    4. De-activate 'account is disabled' (= so do enable this account).
    5. Click OK.
    6. Close the Computer Management dialog (top-right X). No restart is needed.

16.1.3 How to share FlexRip volumes for a Macintosh or a PC (Microsoft Windows 2000)

Note
Following will not be possible when your FlexRip does not have the required version of Windows: Microsoft Windows2000 Server.

Note
Folders can be shared for Microsoft Windows AND Apple Macintosh at the same time. Therefore, the procedure for both will be explained together.

The FlexRip folder has to be 'shared' open enough for the user who wants to access it (so there are no problems with file permissions). The user on the DTP PC or Mac has to be known on the FlexRip or has to be able to log in as user 'Guest'.

Therefore:
1. Log on a user 'Administrator'.
2. Start / Programs / Administrative Tools (Common) / Computer Management.
3. Have the right computer selected ("local" or name of your FlexRip). If not visible, try to select the exact domain or ask your network manager for more information.
4. System Tools / Shared Folders / Shares. You will see that a default volume is already mounted (C:\Microsoft UAM volume).
5. Select "Shares".
6. Choose Action / New File Share. Enable "Microsoft Windows" if you want a Windows share, enable "Apple Macintosh" if you want a Macintosh share. Enable both if you want a Windows AND Macintosh share.
   Set the following options:
   Computer: name of the FlexRip
   Folder to Share: enter the correct Hot Folder path
   Share Name: Windows Share Name
   Share description: brief description of the share (optional)
   Macintosh share name: The volume name is what will pop up in the Macintosh Chooser application and will then be set visible on the Macintosh Desktop.

7. Click "Next".
8. Enable "All users have full control".
9. Click "Finish".

> *Note*
> *Above procedures use the standard 'Services for Macintosh' that Windows2000 offers. Customers who would like to improve the file transfer speed between Macintoshes and the FlexRip (Windows2000), could consider having this connection via a software product of CYAN Software GmbH called 'MacServerIP'. We successfully tested this in an EskoFlexRip workflow and have noticed file-transfer speeds of average 3 times faster (compared to the standard Windows services). As this is only advice, we refer for all further info (and responsibility) to this company's web site: www.cyansoftware.com.*

16.1.4 How to mount FlexRip volumes on a PC (Microsoft Windows 2000)

Mounting FlexRip Volumes on a PC will be done by simple 'mapping of network drives'. We will explain this with an example.

The DTP PC will map a drive 'X' to represent the folder 'Hot Folders' on the FlexRip. This way, the PC operator can easily print-save the PostScript files directly on the Hot Folders.

On the DTP PC: map a network drive to the shared FlexRip folder.
1. Start / Programs / Accessories / Windows Explorer.
2. In Explorer: Tools / Map network drive.
3. Choose a free drive and type the correct path to the FlexRip folder:
   E.g. X:\\fripnt01\hotfolders
   Activate 'reconnect at logon'.
4. Click OK.
5. The mapped drive should now appear in the Windows Explorer. Should you experience problems, ask your (Windows) system manager to do this for you.

Note
Mapping a network drive will not ask you for a password because you enabled the guest account on the FlexRip. If you write a PostScript file on an EskoFlexRip's Hot Folder, the PostScript file will initially have owner 'Guest', but after being ripped the resulting output file will have owner 'Administrator' (like it should be).

16.1.5 How to mount FlexRip volumes on a Macintosh OS9 or older

1. Click / Chooser.
2. In the Chooser dialog, select the AppleShare icon and choose the appropriate share from the list.
3. Enter the correct password if asked for.
4. Click Connect.
   The selected share will appear on the desktop.

16.1.6 How to mount FlexRip volumes on a Macintosh OSX or later

1. In Finder, select Go / Connect to Server.
2. Select the server and the correct share from the list.
3. Enter the correct password if asked for.
4. Click Connect.
   The selected share will appear on the desktop.

16.2 Merging

It is not possible to merge files on the FlexRip. Merging can be done via the ticket in Automation Engine or the FlexRip Pilot.

For more information on merging, we refer to the Automation Engine documentation.

16.3 What about OPI?

A FlexRip is by no means an OPI server itself (so not a 'provider'): a FlexRip should therefore always receive 'fat' PostScript data. These data may have passed an OPI server (where the missing or low-resolution images were replaced with high-resolution images). In that case, the DTP operator prints to the OPI server, which (after doing its OPI replacements) transfers (spools) the now 'fat' PostScript further on to a specific, print queue on to the FlexRip.

Note
Automatic replacement of low-resolution images by high-resolution images of course enhances the workflow. If you like OPI to be done before the PostScript data go to the FlexRip, you may do this. But as OPI links are not mentioned in the product specification of an EskoFlexRip, Esko is not the responsible for its connectivity. All info on how to connect the OPI server's output channel to the FlexRip's input channels should be available to Esko via the FlexRip pre-installation question list. The setup of this OPI workflow can then be established during the initial installation training by the Esko instructor, this only by joining forces between the 2 parties: the FlexRip instructor and the customer's in-house specialist in that OPI software.

17 Glossary

C

CCITT Compresses data using algorithm (the CCITT encoding is specialized to 1 bit per pixel. a bit-oriented encoding facsimile standard). This monochrome image data at 1 bit per pixel

D

DynaCell screens   Esko DynaCell screens don't have the limitation of a limited set of available rulings and angles. This is reached through on-the-fly calculation of the screening pattern. The screens are calculated during the RIP process based on the precise ruling, angle and dot shape definition. Since this process happens in the RIP black box just before exposure, the result of this calculation has never been watched or optimized by an Esko engineer. As a result, these screens have a lower quality than the pre-calculated screens.

E

Esko Classic (precalculated) screens   Pre-calculated means that the aspect, the form, the rulings and the angles of the screen are pre-defined in the Esko screening labs. These screens are the result of advanced engineering work. The screens are optimized for a smooth aspect, good behavior on the different printing processes, lack of artifacts etc. Furthermore, the screens are designed following a system of screen angles that avoids moiré between the main colors (cyan, magenta and black). The use of pre-calculated screens allows supporting advanced screening features like stochastic screening (Monet Screens) and transitional screening (SambaFlex Screens). Pre-calculated screens have only one disadvantage: since these screens have been designed and tested one by one, there is only a limited number of precalculated screens. Although the total number exceeds 2000 different screen ruling/angle/dot shape

combinations, it is very well possible that no precalculated screen is close enough to a customer's wish. This happens specifically when other angles than flexo or offset angles are demanded. Esko pre-calculated screens with conventional screen patterns are called Esko Classic screens.

F

Flate   The lossless deflate compression algorithm is based on two other compression algorithms: Huffman encoding and LZ77 compression. Deflate is a smart algorithm that adapts the way it compresses data to the actual data themselves.

J

JPEG   This file format for color-rich images was developed by the Joint Photographic Experts Group committee. JPEG compresses graphics of photographic color depth better than competing file formats like GIF, and it retains a high degree of color fidelity. This makes JPEG files smaller. You can choose how much to compress a JPEG file, but since it is a lossy format, the smaller you compress the file, the more color information will be lost.

- JPEG limited compression: very acceptable data loss
- JPEG low compression: very acceptable loss of data
- JPEG standard low compression:
- JPEG standard compression
- JPEG standard high compression
- JPEG high compression
- JPEG extreme compression: heavy compression, lots of data is lost.

L

LEN   A LEN file is a bitmap file that is made by a FlexRip/C. 'LEN' stands for 'run Length ENcoding', which is a way of encoding bitmap files. The only information in this kind of file is where to put dots and where not. The Grapholas

software will then expose these dots on the printing plate on the CDI drum.

The LEN file itself can not "remember" any ink information of the separation. That's why the user will have to specify which ink the LEN file is representing (unless he wants a Black & White proof of course). LEN files have high resolutions as 2100 ppi and more. Proofing on an HP proofer is typically done at a lower resolution like 600ppi.

LZW Compresses data using the LZW (Lempel-Ziv-Welch) adaptive compression method, optionally after pretransformation by a predictor function. This is a good general-purpose encoding that is especially well suited for natural-language and PostScript-language text, but it is also useful for image data.

P

PostScript screening Using PostScript screening implies that all the information needed to build up the dots has to be in the PostScript file. There is no such thing as a combination of PostScript and Esko screening! In every DTP application, you can choose the LPI from the Esko PPD or you can overrule it. Also the print angle will be offered by the PPD but the DTP applications permit you to enter other angles. If you send these data to the RIP, the 'Esko screening' setting will again change these values via its own 'jump-to' mechanism. This means that the RIP will automatically jump to the nearest LPI or angle that is supported. If you do not use 'Esko screening' but 'PostScript screening', these 'special requests' will indeed be realized by the FlexRip.

If you activate PostScript screening, the dot shape should also be described in the PostScript file. If you cannot select dot shapes in your DTP application, then it will probably describe the standard Fogra Round dot shape (see also Esko's Fogra Round).

Precalculated screens (Esko Classic) See Esko Classic (precalculated) screens.

R

RLE RLE stands for Run Length Encoding. It is a lossless algorithm that only offers decent compression ratios in specific types of

data.

RLE is one of the easiest compression algorithms there is. It replaces sequences of the same data values within a file by a count number and a single value.

RLE compression can be used in the following file formats:* TIFF files and * PDF files.

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