

# Apogee PDF RIP

for Windows

## On-Line User's Guide



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# About This Guide

## Purpose

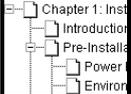
This Guide describes the Agfa RIP Pilot, and how it can be used with the latest range of Agfa software RIPs (raster image processors). The RIP Pilot runs on a variety of front-end platforms, and allows users to connect to an Agfa RIP server in order to send and control jobs.

## Intended Audience

This document is designed for users of the latest range of Agfa software RIPs. As a user, it is assumed that you are already familiar with your front-end workstations, imagesetter, and PostScript software applications, as well as prepress processing methods, printing procedures, and network traffic. If this is not the case, please refer to the relevant user or operator manuals.

## How to Use This On-Line Guide

Use the following procedures to navigate through this guide:

- Topic** Click on blue text to go to the topic indicated. Underlined text indicates text that is “linked” to another part of this guide. For example, see [Chapter 1: Introduction](#) for an introduction to the Agfa RIP Pilot.
-  Click on the Go Back button in the tool bar to return to your previous location.
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- ❖ **Note:** Due to rescaling, some of the screen shots included in this document may appear unclear when displayed at 100% magnification. You can view these screen shots more clearly by using the Zoom tool to increase the default magnification.

# Scope and Structure

Click one of the following chapter titles to jump to the chapter:

## [Chapter 1: Introduction](#)

Introduces the Apogee PDF RIP system, describes its main features and functions, and explains the various workflow options.

## [Chapter 2: Installing Apogee PDF RIP](#)

Describes how to install the Apogee PDF RIP software in your Microsoft Windows NT environment, and how to install the RIP Pilot on additional PC or Macintosh workstations.

## [Chapter 3: Starting and Stopping Apogee PDF RIP](#)

Explains how to start and stop the Apogee PDF RIP server.

## [Chapter 4: Using Apogee PDF RIP with PSE](#)

Provides supplementary information on using Apogee PDF RIP with Agfa's PostScript Environment (PSE), which is delivered together with your application software. More information on the PostScript environment can be found in the accompanying "Apogee PS Companion User's Guide", which is provided on the Apogee PDF RIP CD.

## [Chapter 5: Tuning Apogee PDF RIP](#)

Describes how to start the Apogee PDF RIP Tuner, and how to use it to customize and optimize your system configuration.

Appendices:

The Appendices supply a variety of detailed information, as follows:

[Appendix A: Using Apogee PDF RIP with a Macintosh Computer](#)

[Appendix B: Using Apogee PDF RIP with Windows 95/98 and Windows NT](#)

[Appendix C: Using Apogee PDF RIP with UNIX Systems](#)

[Appendix D: Apogee PDF RIP Fonts](#)

[Appendix E: Glossary of Terms](#)

# Related Documentation

## On-Line PDF Documents

The following documents are provided in printed copy and on the Apogee PDF RIP CD-ROM in PDF format. You can view the PDF files using the Adobe Acrobat Reader program which is included on the CD-ROM.

- Apogee PS Companion User's Guide
- Agfa RIP Pilot User's Guide
- Agfa RIP Raster Preview User's Guide
- Agfa Job Backup User's Guide
- Agfa Calibrator 4.0 User's Guide

## Other Documents

The following documents may also be referred to for further information.

- Apogee PS Companion User's Guide
- Agfa RIP Pilot User's Guide
- Agfa RIP Preview User's Guide
- Agfa Job Backup User's Guide
- Agfa Calibrator 4.0 User's Guide
- Agfa ColorTune 3.0 Pro User's Guide
- Microsoft Windows 95 or 98 User's Guide
- Microsoft Windows NT Server Installation Guide, version 4.0
- PostScript Language Reference, Third Edition ISBN 0-201-37922-8, 1999
- PostScript Language Reference Supplement for Version 3010 and 3011.

## Worldwide Web

The following website provides support for the Apogee PDF RIP product and other Agfa products.

- <http://support.agfa.com>

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# Chapter 1: Introduction



This chapter introduces the Apogee PDF RIP system, describes its main features and functions, and explains the various workflow options.

Click on a topic name to jump to the topic:

- ◆ [The Apogee PDF RIP System](#)
- ◆ [Apogee PDF RIP Features](#)
  - [What's New in Adobe PostScript 3?](#)
- ◆ [How Apogee PDF RIP Works](#)
  - [Job Input](#)
  - [Job Processing](#)
  - [Job Output Options](#)
  - [The Apogee PDF RIP Job Log Server](#)

# The Apogee PDF RIP System

The Apogee PDF RIP is a PC-based software raster image processor (RIP). This Apogee PDF RIP software enables you to use a PC as the control RIP server within your job processing environment.

Apogee PDF RIP interprets the PostScript and PDF job data generated from PostScript and PDF language software applications running on front end systems, and provides high quality output using the PostScript 3 Configurable PostScript Interpreter (CPSI), created by Adobe Systems Inc.

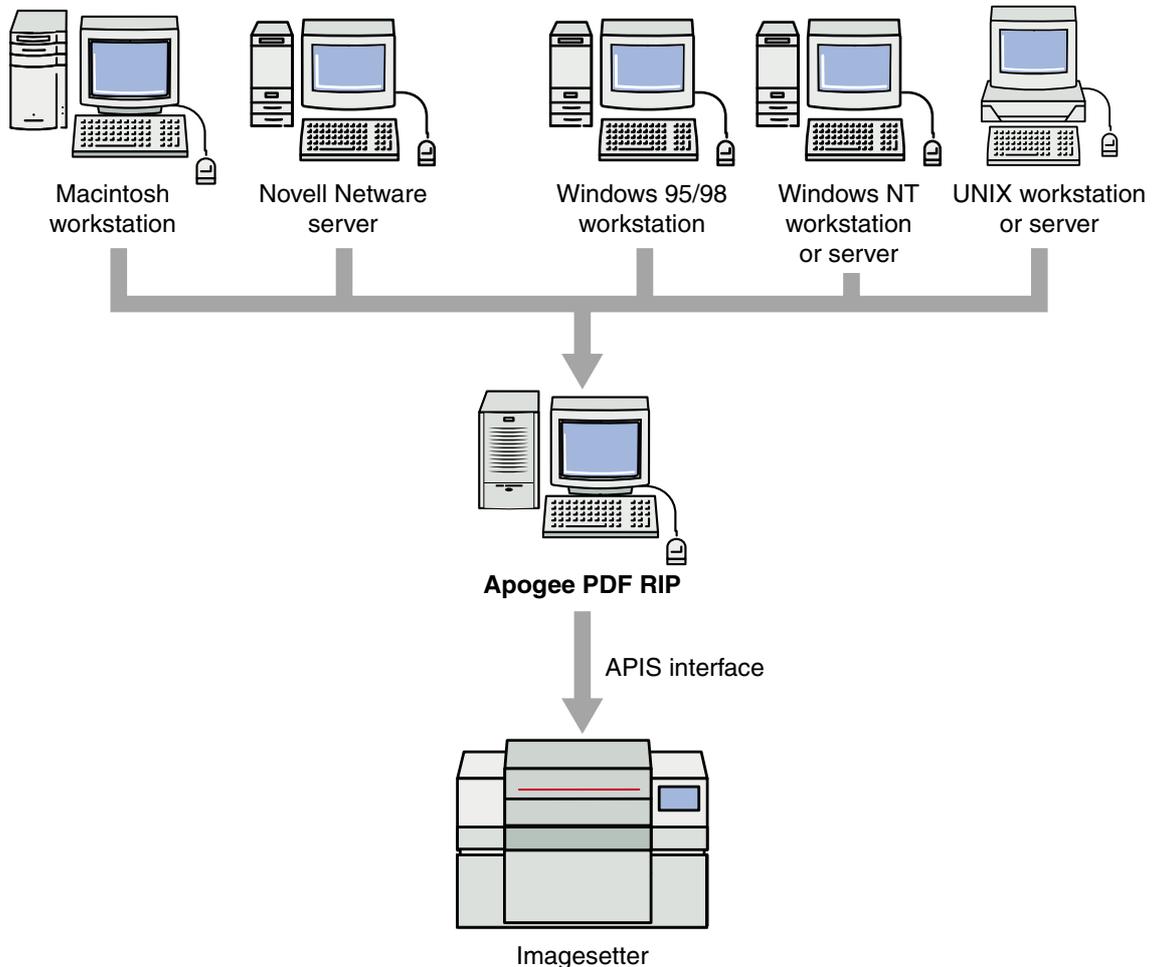


Figure 1: Apogee PDF RIP System Overview

Apogee PDF RIP is designed to remove the bottlenecks that can occur when printing PostScript files to a RIP in a multi-user environment. It does this by optimizing the availability of your front-end workstations, and maximizing the use that network users can make of the available imagesetter(s).

When launched, Apogee PDF RIP processes PostScript and PDF job data from PostScript language and PDF-based applications running on the front-end systems. The resulting bitmap data is used to drive the imagesetter, and represents jobs which may contain text, graphics, halftones, and color separations.

From the front-end workstation, Apogee PDF RIP appears simply as a network printer. You prepare your print job, choose the PostScript printer driver, and send your job to the RIP using the selected printer driver.

The Apogee PDF RIP, with all the features and functionality described in this manual, may be configured with the Agfa AccuSet, the Agfa SelectSet, the Agfa SelectSet Avantra, and the Agfa Phoenix series of imagesetters and with the Apogee PrintDrive for advanced Print Image File management.

Apogee PDF RIP runs under Microsoft Windows NT, version 4.0 with Service Pack 3 or later.

## Apogee PDF RIP Features

The main features of Apogee PDF RIP are as follows:

- **Compatibility with your front-end system:** Apogee PDF RIP provides network compatibility to allow connection with Apple Macintosh, UNIX, and PC front-end workstations.
- **Flexible configuration:** The performance of the Apogee PDF RIP's open-system environment is user-configurable and adaptable to user workflow, thereby minimizing training requirements.
- **Interactive RIP Pilot:** Apogee PDF RIP includes a remote graphical user interface, referred to as the "RIP Pilot". The RIP Pilot allows you to monitor and control the RIP, and offers status display, job control, and RIP control features. The status display includes imagesetter status and job settings, and a comprehensive log records job data in a database-ready format. The RIP Pilot runs locally on the Apogee PDF RIP server, but can also be installed and run "remotely" on any of the front-end Macintosh or PC systems. For more information on the RIP Pilot, refer to the "Agfa RIP Pilot User's Guide".
- **Imagesetter support:** Apogee PDF RIP supports all of the imagesetters within the AccuSet, SelectSet, SelectSet Avantra, and Phoenix imagesetter families. Apogee PDF RIP output can also be directed to an Apogee PrintDrive advanced Print Image File management system.
- **PostScript 3:** Apogee PDF RIP offers full PostScript 3 language support. The PostScript 3 system advances the PostScript standard by providing the following benefits:
  - New print management and printer driver features that improve performance when printing Adobe Acrobat PDF (Portable Document Format) documents, especially over networks. PDF files can now be sent directly to the RIP for processing.
  - High-end PostScript graphic applications can now produce concise, efficient and higher quality printer output.
  - In-RIP color separation.
  - In-RIP Trapping (optional)
  - Smooth Shading which improves gradient output quality using 4096 gray levels
  - PostScript Level 2 resources. (Both AgfaSet and Agfa Mainstream resource management work with Apogee PDF RIP).
  - ❖ Note: The PostScript 3 environment continues to support existing PostScript Level 1 and 2 applications.
  - For more information, refer to "[What's New in Adobe PostScript 3?](#)", below.

- **Agfa's PostScript Environment:** Apogee PDF RIP is delivered together with Agfa's PostScript Environment (PSE), which is pre-installed on your RIP, and is also included on the Apogee PDF RIP CD. PSE is Agfa software which allows you to customize your output settings according to your particular requirements, and to modify these settings on a job-by-job basis.

Collectively, Apogee PDF RIP and PSE allow you to make use of Agfa-specific resources, tools, and technologies, such as Agfa Balanced Screening and Agfa CristalRaster. These technologies have been designed to produce the highest quality output from Agfa imagesetters and related output engines. PSE also includes AgfaSet, the PostScript tool for controlling the RIP. For more information, refer to the "Apogee PS Companion User's Guide".

- **Halftone screening technologies:** Apogee PDF RIP includes Adobe Standard screening, Adobe Accurate Screening, and Agfa Balanced Screening.

Agfa CristalRaster screening and the Agfa Balanced Screening Options Kit (containing special screens for flexo printing, gravure printing and other applications) are available as options.

- **Hot folders:** A series of "hot folders" can be created. Each folder can be individually customized with its own unique setup file which is prepended to every job which is sent to the folder. You can then save PostScript or PDF files directly to your hot folders, from where the Apogee PDF RIP will automatically retrieve and process the files. This mechanism can be used by any front-end workstation that can access the Apogee PDF RIP folder, quickly releasing the workstation for more productive work.

- **Backup facility:** The Backup facility allows an Apogee PDF RIP user to save a copy of his raster data (ripped PostScript or PDF jobs) onto disk. This backup takes place after the data has been ripped, but before it has been sent to an imagesetter. Backup allows Apogee PDF RIP users to write a job to disk, rather than directly to an imagesetter. This "saved" data can subsequently be previewed, sent to an imagesetter, or deleted. This feature is very useful for fast re-runs of jobs, or delayed imaging, since the job need only be ripped once. For further information, refer to the "Agfa Job Backup User's Guide".

- **Preview facility:** The Raster Preview Server allows an Apogee PDF RIP user to view raster data from remote Macintosh or Windows workstations. The user can then approve or delete the job before committing it to output. The Raster Preview Pilot is a “read only” application: Tools are provided for zooming and panning the image, and for displaying various types of image information. However, no alterations can be made to the raster data. For further information, refer to the “Agfa RIP Preview User’s Guide”.
- ❖ **Note:** If you do not have the full version of Apogee PDF RIP, you cannot view the high-resolution raster data of your ripped jobs. Only a low-resolution continuous-tone image will be viewable. The high-resolution Raster Preview can be obtained as an option to your Apogee PDF RIP.
- **Job logging:** The integrated Apogee PDF RIP Job Log provides realtime updating of job log information, and extensive logging capabilities. For further information, refer to the “Agfa RIP Pilot User’s Guide”.
- **Font capabilities:** Apogee PDF RIP is delivered with 138 standard fonts (see Appendix E), but can also process all properly constructed PostScript and TrueType fonts, as long as they can be installed on the workstation. Apogee PDF RIP is compatible with composite OCF (Original Composite Font) and **CID** (Character IDentification) fonts.
- **Input channel availability:** All input modes, or “channels”, are available simultaneously.
- **"True" Adobe™ PostScript interpreter:** Apogee PDF RIP uses the genuine PostScript 3 interpreter, as supplied by Adobe Systems Inc.

## What’s New in Adobe PostScript 3?

PostScript 3 provides a range of new features including PDF printing, smooth shading, idiom recognition, enhanced color handling, and so on. These new features are highlighted below. Additional information can be found in [Chapter 4: Using Apogee PDF RIP with PSE](#).

### PDF Printing

PDF is a page-independent document description language that has gained acceptance in the marketplace both as an on-line viewing medium and as a storage medium for documents that are to be printed later. To date, applications such as Adobe Acrobat printed PDF files by first converting them into the PostScript language, and then routing them to a PostScript printing system. However, PostScript 3 printing systems remove this step by offering a native PDF printing capability.

### Hot Folder PDF File Input

When input via a hot folder, PDF files can use the hot folder’s setup file. In this case, the page size is read automatically from the PDF file’s MediaBox entry.

When printing color PDF files, you need to make sure that the RIP is set to produce in-RIP separations. This setting should be defined either in the EDF, or in the setup file which is attached to the Hot Folder. For more information on working with EDF files and AgfaSet, and for creating printer setup files, refer to the “Apogee PS Companion User’s Guide”.

## Smooth Shading

Smooth shading in the PostScript 3 language concisely describes gradient fills (blends) such as those introduced by Adobe Illustrator 5.0 for on-screen viewing. Smooth shading produces PostScript files that are significantly smaller than their PostScript Level 2 equivalents, print faster and more reliably, and produce higher quality output on high-resolution printing systems.

## Masked Images

A popular use of Adobe Photoshop is to take an image and mask out the background, leaving only a person or an object visible in the foreground. This person or object may then be placed over another background using a page layout application such as Adobe InDesign.

In order to print such combinations, current applications must draw a clipping path between the pixels of the source image since these applications do not have the raster manipulation routines of Photoshop. Such paths, in order to be as accurate as possible, may need thousands of line segments and may generate a limitcheck error on desktop printers. To address this problem, PostScript 3 introduces a "Masked image" feature, which allows users to clip or cut holes in images from within their front-end PostScript graphics application.

## Idiom Recognition

Consider the sentence, "He is in the act of going away from where he is now." This sentence could be more simply expressed as, "He goes now." While both sentences convey the same meaning, the first is awkward and inefficient and the second is concise and direct.

A typical PostScript file may also contain expressions that, while they manage to produce the desired result, do so in an awkward and inefficient manner. However, some applications are notorious for producing awkward constructions in a "predictable way". These predictable constructions are known as "idioms".

The goal of idiom recognition is to identify idioms, and to substitute them with more efficient expressions. Using idiom recognition, complex PostScript Level 1 or Level 2 constructs can be replaced by very concise PostScript 3 expressions using new PostScript 3 operators.

## Faster Printing of “Office” Documents

High-end graphics applications such as Adobe Illustrator produce their own PostScript code for printing. This is because the graphics models native to popular operating systems generally cannot produce PostScript output of sufficiently high quality.

Other applications, such as spreadsheets and word processors, do not require such sophisticated graphics models. Their printed output can be expressed with printer driver calls to the screen drawing-routines of the operating system.

Applications that require less sophisticated output are sometimes called “office” applications; a reference to the Microsoft Office suite of business productivity tools whose print files are known as office documents.

A major feature of the PostScript 3 system is its ability to print office documents on PostScript 3 printers faster than any competing printing system.

## Improved Color Capabilities

Enhancements to the Level 2 PostScript system for handling colors have been introduced in PostScript 3, specifically for high-end users. These enhancements match improvements in the technology of color rendering, such as the evolution of the CIE (Commission Internationale de L'éclairage) standards for color specification, which have been extended and generalized for multichrome color spaces.

## In-RIP Trapping

Automatic in-RIP trapping is a feature used mainly in high-end RIPs, and can now be implemented in PostScript 3 printing systems.

Trapping produces subtle overprinting along common edges of adjacent colors to compensate for misregistration in printing presses. It enables the user to specify regions on the page and a set of trapping parameters, then automatically calculate traps for each region.

❖ Note: In-RIP Trapping is supplied as a separate option for your Apogee PDF RIP.

# How Apogee PDF RIP Works

The Apogee PDF RIP acts as the job processing center between a network of multi-vendor job-input workstations and an imagesetter. The workflow is divided into three stages:

- Job input and control from a front-end workstation
- Job processing (rasterization) by the Apogee PDF RIP's PostScript Interpreter
- Job output to one or more of the following:
  - an imagesetter
  - an Apogee PrintDrive
  - the preview application
  - the backup application
  - a TIFF file

## Job Input

Jobs can be sent to the Apogee PDF RIP from a variety of front-end systems. When running, the Apogee PDF RIP accepts job input from any active port based on user-defined priorities. The Apogee PDF RIP accepts spooled or direct input from a group of "input channels", comprising TCP/IP, AppleTalk, Windows Named Pipe, LPR, and Hot Folder. The Apogee PDF RIP can also be accessed through the RIP Pilot via an Executive mode.

All of these input channels are available simultaneously.

## The Apogee PDF RIP PostScript Input Channels

The Apogee PDF RIP can process any files sent from anywhere on the network. Front-end users connected to the network select the Apogee PDF RIP as they would select a standard printer, and the RIP communicates with these users as a print server.

Each job that is sent to the Apogee PDF RIP is routed via one of the following input channels, or "services":

- **AppleTalk:** This is the standard input channel for Macintosh users. The AppleTalk channel communicates directly with the RIP, providing interactive communications from a Macintosh front-end.  
  
Refer to [Appendix A: Using Apogee PDF RIP with a Macintosh Computer](#) for more detailed information on recommended connections.
- **Named Pipe:** This is the standard input channel for Windows 95/98 and Windows NT users, and is the preferred channel for all users whose jobs are routed through the Windows NT spooler. This channel uses the Windows NT server in the most efficient way, allowing you to send jobs to the Windows NT spooler from either a Windows or a Macintosh front-end system.  
  
Using the Windows NT spooler, you quickly release your front-end workstation, so that you can carry on with more productive work.  
  
Refer to "[General Configuration Issues](#)" in Chapter 2: Installing Apogee PDF RIP for more detailed information on recommended connections.

- **Hot Folders:** Apogee PDF RIP supplies you by default with two “hot folders”, one for high priority and one for normal priority print jobs. You can save files to these hot folders directly from your front-end workstation, or jobs can be sent to the hot folders directly from an OPI server. Additional “hot folders” can be created and configured using the RIP Tuner.
- **TCP/IP:** This is a direct input channel for UNIX workstations and/or servers. This channel uses a special stream protocol based on TCP/IP. The RIP Pilot also uses the TCP/IP channel for sending PostScript files, and in Executive mode (see the “Agfa RIP Pilot User’s Guide”).
- **LPR:** This is a uni-directional direct input channel for UNIX workstations or servers, Windows NT workstations or servers and Macintosh workstations (using LaserWriter 8.6 or later). This channel uses the LPR protocol based on TCP/IP.

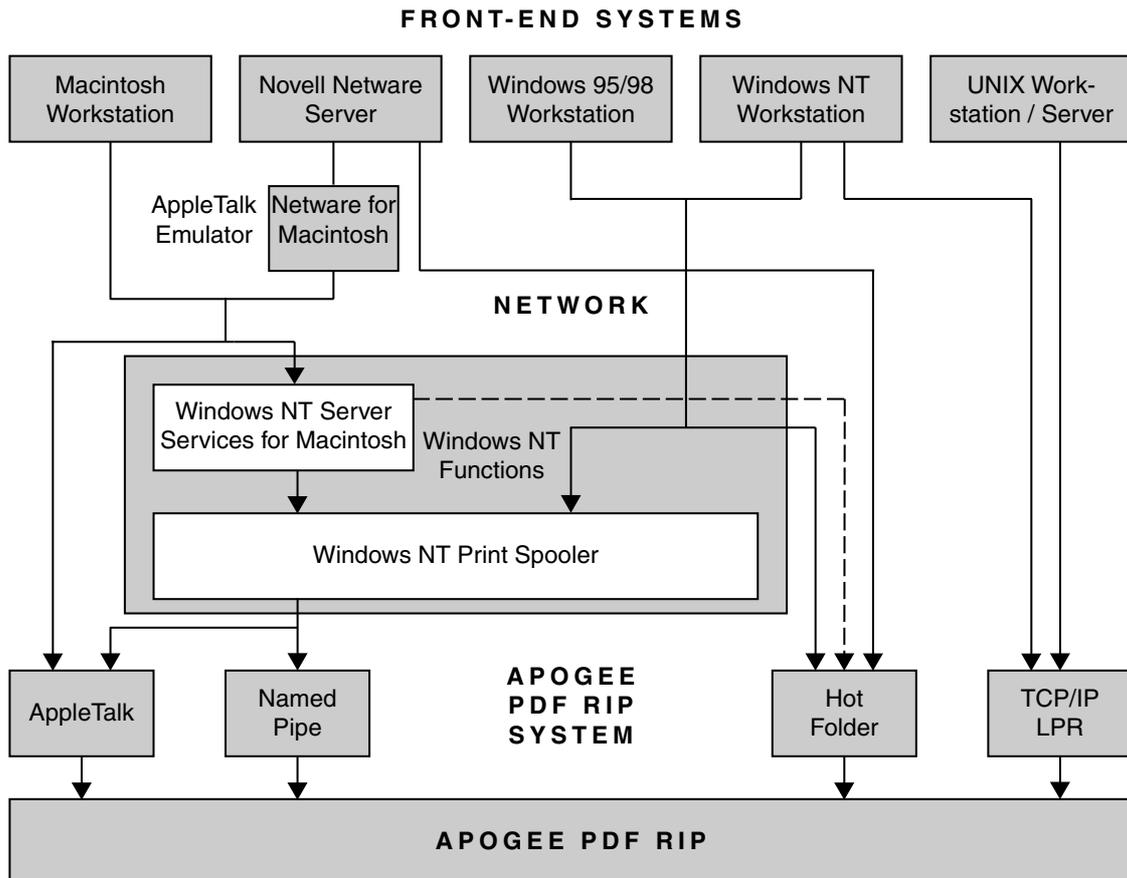


Figure 2: Apogee PDF RIP Job Input

- ❖ **Note:** The various ways in which front-end workstations can communicate with the Apogee PDF RIP are illustrated in Figure 2. This Figure illustrates the most common connections found in a typical configuration, but does not show all of the different configuration possibilities.

## Job Processing

All jobs received from the front-end interface are directed to the Apogee PDF RIP's interpreter. The Interpreter executes incoming PostScript and PDF, and delivers the rasterized data to the output system for imaging. The default setting of the PostScript interpreter may be overwritten by a user-defined boot file.

Apogee PDF RIP supports all of the halftone types built into the PostScript interpreter. In addition to this, if enabled, the Agfa Screen Filter will intercept halftone settings and substitute Agfa-proprietary screening, such as Agfa Balanced Screens and Agfa CristalRaster screening. Apogee PDF RIP works whether or not the screen filter is enabled (for more detailed information, refer to the "Apogee PS Companion User's Guide").

## Job Output Options

After your jobs have been processed by the Apogee PDF RIP's interpreter, they can be output in any of the following ways:

- Output directly to output device. Jobs are output directly to your output device via the APIS (Agfa Printer Interface Standard) interface card. The default output device is an imagesetter, but this can also be set to other output devices as such devices become available. Currently, the following alternate output devices can be selected:
  - File Device: The ripped data is written to disk, in TIFF 6.0 format. This data remains on disk until it is manually deleted.
  - Null Device: The ripped data is deleted immediately, and is not output to a physical device (only used for test purposes).
  - Apogee PrintDrive (optional): The ripped data is sent to the Apogee PrintDrive as Print Image Files for output to imagesetters, platesetters and/or proofers.

The APIS output subsystem supports all AccuSet, SelectSet, SelectSet Avantra, and Phoenix imagesetters. Once processed by the imagesetter, the ripped job is no longer available.

- Output indirectly to output device (page buffering). Jobs are first ripped to disk, and are then immediately sent to the output device without any further user intervention. In this mode, the job is buffered onto disk and then output, page-by-page. This typically increases RIP system throughput, since the RIP and the output device do not have to wait until the other is ready and can both continuously process jobs at full speed.
- Output to Preview. The job is ripped to disk, with an "alias" in the Preview folder (see below). The job is not imaged until it has been approved in the Preview Pilot.
- Output to Backup. The job is ripped to disk, with an alias in the Backup folder. The job can be imaged by selecting 'Re-Image' from the Windows NT Explorer extension options.
- Output to Preview and Backup. The job is ripped to disk, with aliases in both the Preview and Backup folders.
- Output to Preview and imagesetter. The job is ripped to disk, with an "alias" in the Preview folder. The job is sent to an error folder if it is not processed correctly. The job is not imaged until it has been approved in the Preview Pilot.
- Output to Backup and imagesetter.

- Output to Preview, Backup, and imagesetter. Following preview the job is sent to the imagesetter, but remains available in the Backup folder. The job is not imaged until it has been approved in the Preview Pilot.
- ❖ Note: The default job output path can be changed using the Windows NT Explorer Extension and the Preview Pilot. For more information, refer to the “Agfa Job Backup User’s Guide”.

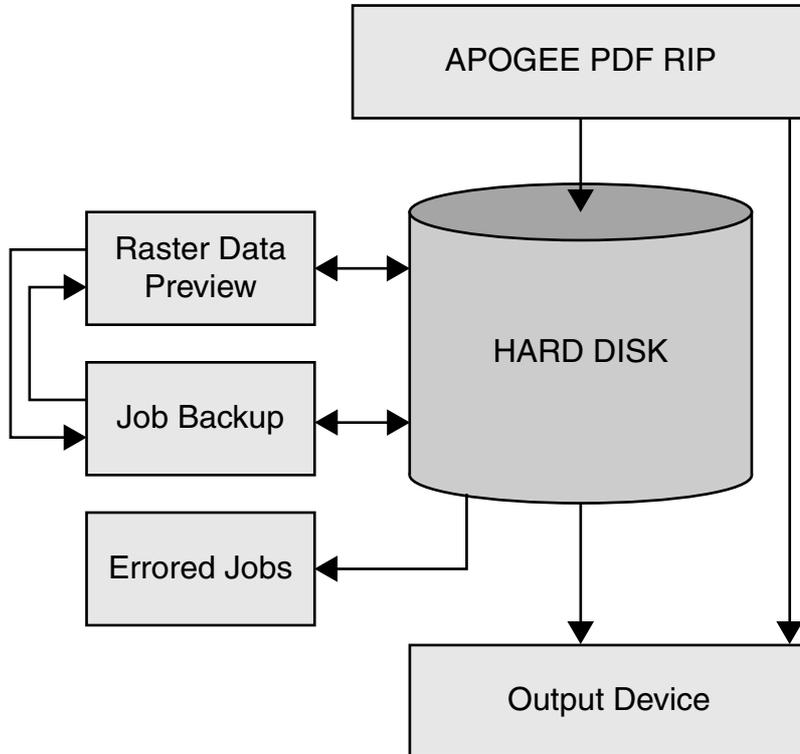


Figure 3: Apogee PDF RIP Job Output

## The Apogee PDF RIP Job Log Server

The Apogee PDF RIP Job Log Server is a Windows NT service which retrieves Job Log data from the Apogee PDF RIP, the RIP Preview Server, and the Backup utility. The Job Log data is updated in realtime, and can be accessed by the user via the job logging options available in the RIP Pilot. For more information on the Job Log, refer to the “Agfa RIP Pilot User’s Guide”.

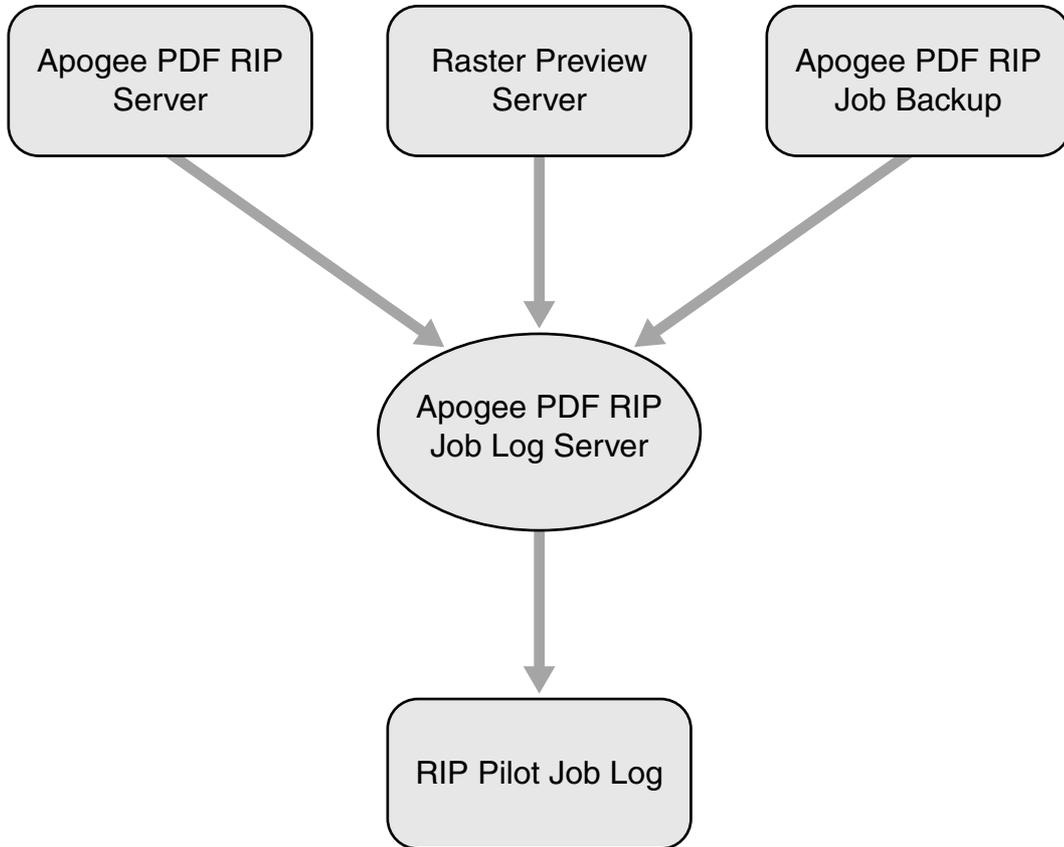


Figure 4: The Apogee PDF RIP Job Log Server

The Apogee PDF RIP Job Log Server is started automatically as a Windows NT service.

# Chapter 2: Installing Apogee PDF RIP



This chapter describes how to set up and configure the Apogee PDF RIP system.

Click on a topic name to jump to the topic:

- ◆ [Before You Begin](#)
- ◆ [System Requirements](#)
- ◆ [The Apogee PDF RIP System Package](#)
  - [Compact Disk Contents](#)
- ◆ [Installation Overview](#)
- ◆ [Windows NT Settings](#)
- ◆ [Installing the Apogee PDF RIP Dongle](#)
- ◆ [Installing the PCI APIS Interface Card](#)
- ◆ [Running the Apogee PDF RIP Setup Utility](#)
- ◆ [Installing the Pilots on Other PC Systems](#)
- ◆ [Installing the Pilots on Other Macintosh Systems](#)
- ◆ [General Configuration Issues](#)
  - [Saving Files to the Apogee PDF RIP Hot Folder](#)
  - [Changing the Named Pipe Name](#)
  - [Calibrating the Apogee PDF RIP](#)
  - [Printing with in-RIP Separation Enabled](#)
  - [Using the Imagesetter Control Panel](#)
  - [Setting up a Printer under Windows NT](#)

# Before You Begin

Before you begin the Apogee PDF RIP software installation, your Windows NT operating system software must be installed on your PC system, and your system must be connected to the network. Your imagesetter must also be installed (this may be performed by the Agfa service representative).

In addition, you will need to install the APIS interface card in your PC system before installing the Apogee PDF RIP software. The APIS card may be installed by the Agfa Service representative, or by a qualified representative.

## System Requirements

The recommended system requirements for installing and running Apogee PDF RIP are as follows (extensive use of the Apogee PDF RIP workstation for spooling, OPI processing, or any other function requires additional RAM memory, hard disks, and processors for optimal performance):

- An Intel-based PC workstation, equipped with two as fast as possible Pentium III-family or better processors.
- ❖ Note: Non-Intel processors are not supported and can only be used at your own risk.
- RAM Memory: Depending on the type of imagesetter or platesetter and the amount of PostScript data per imaged page.
  - 128 MB RAM for 2-up imagesetters like the AccuSet family of imagesetters, the SelectSet 5000, and the SelectSet Avantra 20. More memory is required if PostScript jobs regularly contain more than 100 MB of PostScript data per imaged page.
  - 256 MB RAM for 4-up imagesetters like the SelectSet 7000, the SelectSet Avantra 25 and 30 Series, and the Phoenix family of imagesetters. More memory is required if PostScript jobs regularly contain more than 200 MB of PostScript data per imaged page.
  - 512 MB RAM for 8-up imagesetters and platesetters like the SelectSet Avantra 36 and 44 Series, and the Galileo family of platesetters. More memory is required if PostScript jobs regularly contain more than 400 MB of PostScript data per imaged page.
- Disk Space: Depending on your workflow requirements. The recommendations below are minimum recommended disk configurations. More and larger disks may be required for your particular workflow requirements.
  - One 9GB U2W-SCSI 10000 rpm hard disk when no print spooling, no hot folders and no local Raster Data storage (for page buffering, Preview or Backup) is needed.
  - Two 9GB U2W-SCSI 10000 rpm hard disks when print spooling or hot folders, but no local Raster Data storage (for page buffering, Preview or Backup) is needed (or vice versa).
  - Three 9GB U2W-SCSI 10000 rpm disks when print spooling or hot folders and local Raster Data storage (for page buffering, Preview or Backup) is needed.
- ❖ Note: Using a single RAID array or disk stripe set is not recommended because of disk seek overhead. Using separate disks, disk stripe sets or separate RAID arrays for data input, RIP processing (scratch directory) and Raster Data storage is recommended.

- One free full-length PCI-bus slot for the APIS interface card.
- A CD-ROM drive.
- A 3.5" high-density diskette drive (updates or patches may be released on diskette).
- A 100 Mbit/s or faster Ethernet network interface.
- Microsoft Windows NT Workstation, version 4.0 with Service Pack 3 or later (print spooling from the Macintosh, and Macintosh file sharing functions, require Windows NT Server, version 4.0 with Service Pack 3 or later).

# The Apogee PDF RIP System Package

Your Apogee PDF RIP system comprises the following hardware and software items.

- A compact disk containing the Apogee PDF RIP and Apogee PS Companion software.
- A printed copy of the "Apogee PDF RIP User's Guide", in English.
- A printed copy of the "Agfa RIP Pilot User's Guide", in English.
- A printed copy of the "Apogee PS Companion User's Guide", in English.
- A printed copy of the "Agfa Calibrator User's Guide", in English.
- A hardware security key, or "dongle".
- Your software registration form.
- A Readme sheet.
- Optionally, an APIS imagesetter interface card, which is packaged separately.
- Optionally, a printed copy of the "Agfa Job Backup User's Guide", in English.
- Optionally, a printed copy of the "Agfa RIP Preview User's Guide", in English.

## Compact Disk Contents

The Apogee PDF RIP compact disk contains a Setup program that must be used to install the following software:

- The Apogee PDF RIP software, comprising:
  - The Apogee PDF RIP
  - The RIP Job Log Server
  - The RIP Preview Server
  - Apogee PDF RIP Backup
- The RIP Pilot.
- The Preview Pilot.
- The RIP Tuner.
- The AgfaSet utility.
- The Agfa Calibrator utility.
- The Apogee PDF RIP fonts (see [Appendix D: Apogee PDF RIP Fonts](#)).
- Agfa's PostScript Environment (PSE)
- Agfa Balanced Screening halftones.
- Adobe Standard Screening halftones.
- Adobe Accurate Screening halftones.
- An electronic version of the user documentation, in Adobe Acrobat PDF (Portable Document Format) format. The Adobe Acrobat Reader software can also be installed on your system using the Setup program.

# Installation Overview

To successfully install Apogee PDF RIP, you must install and configure your environment in the following sequence:

- 1 Check that the Windows NT operating system software has already been installed and configured.
- 2 Install the Apogee PDF RIP dongle.
- 3 Install the APIS interface card.
- 4 Run the Apogee PDF RIP Setup utility.
- 5 Run the PDF RIP Tuner, and customize your configuration.
- 6 Start the Apogee PDF RIP.
- 7 Start the RIP Pilot.

## Windows NT Settings

The setup and installation of the Windows NT workstation is not part of the Apogee PDF RIP installation. Before installing Apogee PDF RIP, the workstation should be correctly set up, with all necessary hardware and software, as specified (you should be using Service Pack 3 or later).

Installation of the network hardware and software is also not part of the Apogee PDF RIP installation. The proper installation of the workstation within the network should be completed before beginning the Apogee PDF RIP installation.

## Installing the Apogee PDF RIP Dongle

To ensure that the Apogee PDF RIP software is only used on authorized workstations, a unique hardware ID is associated with your Apogee PDF RIP system. This ID is established and controlled by means of a hardware security key, or "dongle".

Your Apogee PDF RIP system is delivered with a single parallel printer port dongle. You must install the dongle in order to access your Apogee PDF RIP application.

- 1 Disconnect the printer cable, and any other dongles in use.
  - 2 Plug the dongle into the parallel printer port of your Apogee PDF RIP workstation.
  - 3 Reconnect the printer cable, and any other dongles in use.
- ❖ Note: If you are using your system with other dongles, the Apogee PDF RIP dongle must be the first in the chain of dongles connected to the parallel printer port.

On multi-processor systems which are equipped with other dongles, it may be necessary to connect the Apogee PDF RIP dongle to a second parallel port (which must be added to the system).

# Installing the PCI APIS Interface Card

To install the APIS interface card, proceed as follows:

- 1 Shut down your system.
- 2 Install the APIS interface card into a free bus mastering PCI 2.1-compliant expansion slot in your PC.
- 3 Switch off your Agfa imagesetter.
- 4 Connect the PC to your Agfa imagesetter by plugging the imagesetter cable connector into the APIS interface card socket.

You should use the interface cable that came with your imagesetter. This cable must not exceed 10 meters, and you should not use a T-switch box.

- 5 Reboot your system for the changes to take effect.

# Running the Apogee PDF RIP Setup Utility

To install the Apogee PDF RIP software on your PC, proceed as follows:

- 1 Log in as an administrator.
- 2 Insert the Apogee PDF RIP compact disk into your CD-ROM drive.
- 3 If auto-launching was not disabled on your PC, then the Apogee PDF RIP Installer will automatically start. Otherwise start the installation by double-clicking on the SETUP.EXE file from the CD root directory.

The Apogee PDF RIP Installer window is displayed. The installer will guide you through the installation process by asking you to select your installation preferences.

- 4 Select a language.  
You can choose from English, French, German, Italian, Japanese and Spanish.
- 5 Click on the Next> button, and follow the installation instructions.
- 6 Specify the type of installation you would like:
  - Compact: Apogee PDF RIP will be installed with the minimum required components (basic RIP without Preview and Backup).
  - Typical: Apogee PDF RIP will be installed with the most common options (basic RIP plus Preview and Backup).
  - Custom: You can specify which components and sub-components will be installed.
  - Pilots: This will install AgfaSet, the RIP Pilot, and Raster Preview Pilot.
- 7 Select the volumes for storing the raster data files and select the hot folder directories.  
The raster data and hot folder directories should not be located on the volume where the Apogee PDF RIP software will be installed.
- 8 You can select to start the Apogee PDF RIP Server and Raster Preview Server as Stand-alone Applications (recommended), as Auto-start Services or as Manual Services.

- 9 Finally, before installation, you are given the opportunity to verify your selected installation setup. To proceed, click on the Next> button.

The installer copies the files to your system.

When installation is complete, the necessary services and drivers will be launched.

- 10 Remove the Apogee PDF RIP CD from the drive and log in to your account if necessary.

## Installing the Pilots on Other PC Systems

To install the RIP Pilot and/or the Raster Preview Pilot on additional PC workstations, proceed as follows:

- 1 Install the TCP/IP protocol.
- 2 Correctly configure the TCP/IP protocol.
- 3 RIP Pilot: Run the Apogee PDF RIP Installer, select 'Custom' as Setup Type, and select only the 'RIP Pilot' as the component to install.
- 4 Preview Pilot: Run the Apogee PDF RIP Installer, select 'Custom' as Setup Type, and select only the 'Raster Preview Pilot' as the component to install.

## Installing the Pilots on Other Macintosh Systems

To install the RIP Pilot and/or Raster Preview Pilot on additional Macintosh workstations, proceed as follows:

- 1 Install Open Transport 1.1.1 or higher, including TCP/IP.
- 2 Correctly configure the TCP/IP protocol.
- 3 RIP Pilot: Copy the RIP Pilot and the RIP Pilot Guide from the Apogee PDF RIP CD to the Macintosh.
- 4 Preview Pilot: Copy the Preview Pilot and the Preview Pilot Guide from the Apogee PDF RIP CD to the Macintosh.

# General Configuration Issues

This section provides supplementary information on the following subjects:

- Saving Files to the Apogee PDF RIP Hot Folder
- Changing the Named Pipe Name
- Calibrating the Apogee PDF RIP
- Printing with in-RIP Separation Enabled
- Using the Imagesetter Control Panel
- Setting up a Printer under Windows NT

## Saving Files to the Apogee PDF RIP Hot Folder

Apogee PDF RIP's Hot Folder is particularly useful for printing files from applications which save their output to a PostScript or PDF file, such as trapping or imposition programs. The Apogee PDF RIP hot folder may reside on the Apogee PDF RIP system, or on another file server on the network. However, you must ensure that the hot folder is configured on the Apogee PDF RIP system, and that this system has write-access to it. You can then simply save your PostScript or PDF files to the hot folder, which sends them sequentially to the PDF RIP Server for processing.

❖ Note: On some UNIX systems, you can send files to the hot folder using FTP.

## Changing the Named Pipe Name

By default, the Named Pipe is called "PDFRip". You have to specify this name in the Print Manager when you create an Apogee PDF RIP printer queue using a local port ("\\.\pipe\PDFRip"). You can change the Named Pipe name using the RIP Tuner by selecting the "Named Pipe" category from the Input panel, and then entering the name of your choice in the "Name" field (see "[Named Pipe Channel](#)" in Chapter 5).

## Calibrating the Apogee PDF RIP

You can calibrate your Apogee PDF RIP system using Agfa Calibrator. Agfa Calibrator allows you to compensate your output against dot gain. Refer to the "Agfa Calibrator User's Guide" for further information.

## Printing with in-RIP Separation Enabled

In-RIP Separation needs to be enabled in the Apogee PDF RIP if you are sending composite color PostScript or PDF jobs to the RIP and if you want the RIP to generate the process and spot color separations. When you print documents with in-RIP separation enabled, any blank separations (i.e., separations without any marks) will not be printed. Refer to the "Apogee PS Companion User's Guide" for further information.

## Using the Imagesetter Control Panel

Generally speaking, any settings entered from the Control Panel of the imagesetter are overruled by the RIP when a job is imaged.

Following settings can not be set at the imagesetter Control Panel.

- Negative printing
- Mirrored printing
- Punching
- Auto-centering
- Interpage gap
- Plate imaging mode
- ❖ Note: Auto-centering mode can not be activated when ganging is enabled.

Following settings must always be set at the imagesetter:

- Density
- Media type
- Media width
- Media thickness
- Amount of media remaining in the supply cassette
- Cassette ID number
- Distance from punch to image
- Cut and feed amount
- Media low and Cassette full alarms
- Units of measurement
- Presence of an online processor
- Processor Timeout
- ❖ Note: The Processor Timeout is controlled by the Flush Timeout setting in the RIP Tuner and by the imagesetter's Last Image Delay setting. Whichever Timeout that expires first will be honored.

## Setting up a Printer under Windows NT

To set up a Windows NT printer queue for the Apogee PDF RIP, you need to use the printer's OEMPRINT.INF file, the printer's PPD file and the PSCRIPTUI.DLL and PSCRIPT.DLL files from your Windows NT CD. The OEMPRINT.INF file and the PPD file must be generated using the PPD Generator tool in AgfaSet (See [“PostScript Printer Description \(PPD\) File Generation”](#) in Chapter 4).

The PSCRIPTUI.DLL and PSCRIPT.DLL files are located on the Windows NT CD (e.g. D:\i386).

The procedure is described in “Creating a Windows NT Spool Queue to the Named Pipe Input Channel” in appendices A and B.

- ❖ Note: Each time you install a driver (e.g. the pscript.dll PostScript driver) from the Windows NT CD, the Windows NT Service Pack needs to be re-installed.

# Chapter 3: Starting and Stopping Apogee PDF RIP

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This chapter explains how to start and stop the Apogee PDF RIP server.

Click on a topic name to jump to the topic:

- ◆ [Introduction](#)
- ◆ [Starting the Apogee PDF RIP](#)
  - [Automatic Startup](#)
  - [Manual Startup](#)
- ◆ [Stopping the Apogee PDF RIP](#)

# Introduction

You can start and operate the Apogee PDF RIP software using the following programs:

- **Apogee PDF RIP:** This is the RIP software which runs on the Intel-based NT Server.
- **Agfa RIP Pilot:** This is the front-end controlling application for the Apogee PDF RIP, which can run on:
  - One or more Macintosh workstations.
  - One or more Windows 95/98 workstations.
  - One or more Windows NT workstations.

The RIP Pilot displays an assortment of dynamic parameters, and allows you to control the RIP, and control and manage the RIP log. For information on using the RIP Pilot, refer to the “Agfa RIP Pilot User’s Guide”.

## Starting the Apogee PDF RIP

At installation time, you are asked how you want to run the Apogee PDF RIP RIP: as an auto-start service, as a manual service, or as a stand-alone application.

- If you chose to run the RIP as an auto-start service or manual service, start and stop the RIP via the Windows NT Services Control Panel.
- If you chose to run the RIP as a stand-alone application, there are 2 ways of starting the RIP:
  - Automatic startup: Select the necessary shortcuts for your Startup menu during the installation of the RIP.
  - Manual startup

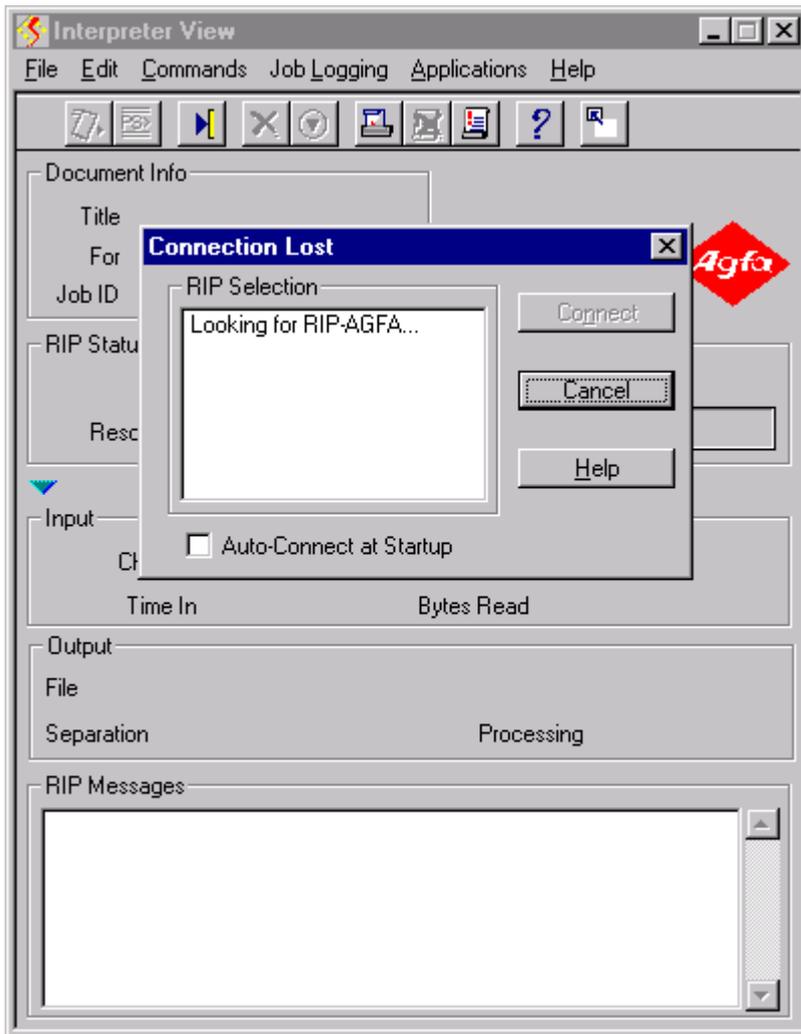
### Automatic Startup

In this mode the Apogee PDF RIP Server is automatically started after you log on. The RIP Pilot, Raster Preview Server and Raster Preview Pilot can also be configured to start in the same way, and the RIP Pilot can automatically connect to the local Apogee PDF RIP Server.

Before you begin, you should first make sure that the connected imagesetter has booted successfully and is on-line. Check with your imagesetter’s user manual if you are not sure that the imagesetter is on-line.

- 1 Switch on the Apogee PDF RIP system.
- 2 Wait until the Apogee PDF RIP system asks you to press CTRL+ALT+DEL for the Log on sequence.
- 3 Press CTRL+ALT+DEL.
- 4 Enter your Username and Password in the Welcome dialog.

- 5 Let the system automatically launch the Apogee PDF RIP and RIP Pilot. The Raster Preview Server and Raster Preview Pilot may also be launched automatically.



Your Apogee PDF RIP system is now ready to accept jobs.

For complete information on using the Agfa RIP Pilot to send and manage jobs, refer to the "Agfa RIP Pilot User's Guide".

## De-activating Automatic Startup

You can de-activate the automatic startup of one or any of the Apogee PDF RIP applications using the following procedure:

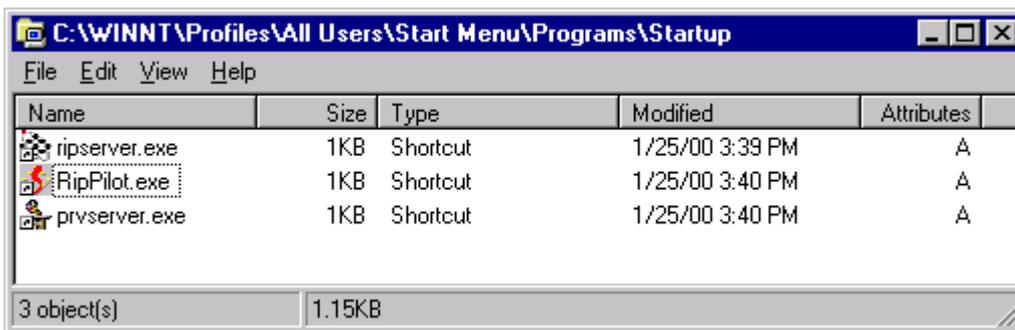
- 1 Click the right mouse button on the Start button:



The programs which start automatically on system startup are included in the All Users Startup group.

- 2 Select Open All Users.
- 3 Open the Programs item.
- 4 Open the Startup item.

The following dialog is displayed:



- 5 Delete the shortcut of the application(s) that you want to de-activate on system startup.

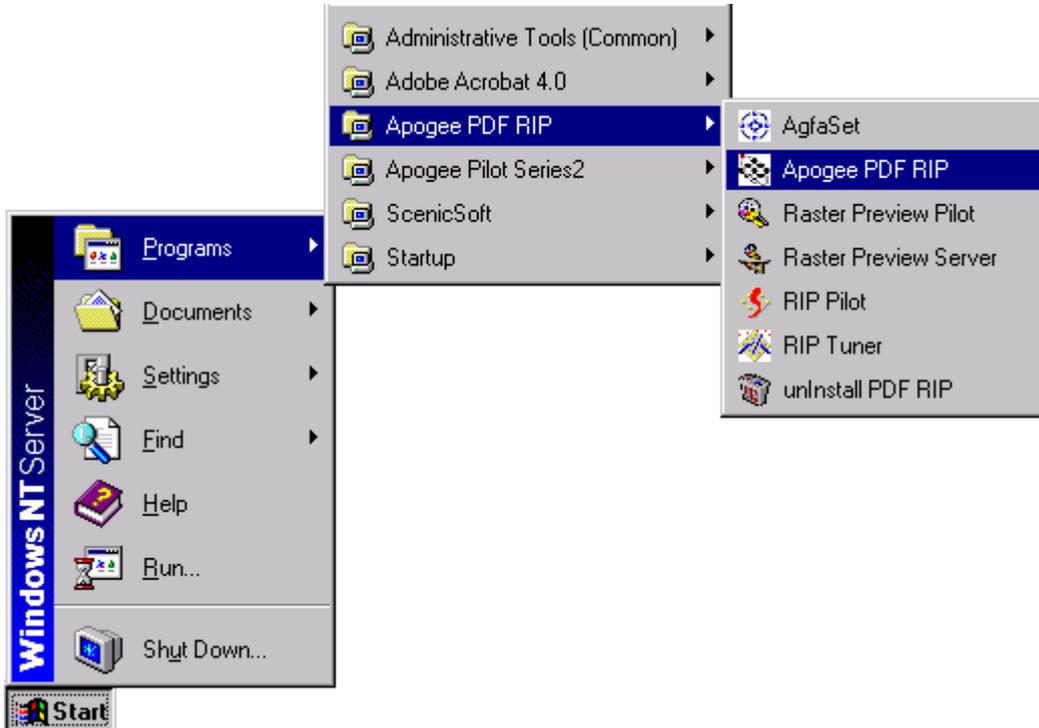
To re-activate automatic startup, follow the same procedure but instead add a shortcut for the relevant application(s).

## Manual Startup

To manually start the Apogee PDF RIP, proceed as follows:

- 1 From the Start menu, select the Programs/Apogee PDF RIP group.

You will see the following list of Apogee PDF RIP programs:



The Apogee PDF RIP programs are as follows:

- **AgfaSet:** AgfaSet is your PostScript output device management application. AgfaSet allows you to download to your RIP each of the specific PostScript resources (such as fonts, halftones, etc.) that you require for your particular application and to control your RIP's default settings using Engine Description Files (EDFs). See the "Apogee PS Companion User's Guide" for more information.
- **Apogee PDF RIP:** This icon is used to start the actual Apogee PDF RIP. The Apogee PDF RIP remains transparent to the user. All user interaction is performed through the RIP Pilot.
- **Raster Preview Pilot:** The Preview Pilot is your user interface to the RIP Preview Server. The Preview Pilot allows you to examine raster data in detail before sending it to an output device.
- **Raster Preview Server:** This icon is used to launch the Preview Server. All user interaction with the Preview Server is performed through the Preview Pilot.
- **RIP Pilot:** The RIP Pilot is your user interface to the Apogee PDF RIP software. The RIP Pilot allows you to monitor an assortment of dynamic parameters, and allows you to control the RIP and the RIP log. The Apogee PDF RIP runs independently of the RIP Pilot.

- ❑ **RIP Tuner:** The PDF RIP Tuner allows you to optimize your Apogee PDF RIP environment by configuring specific aspects of the Apogee PDF RIP input, processing, and output modules.
- ❑ **Uninstall PDF RIP:** Allows you to remove all files installed by the Apogee PDF RIP Installer.

2 To start the RIP, select the Apogee PDF RIP item.

## Stopping the Apogee PDF RIP

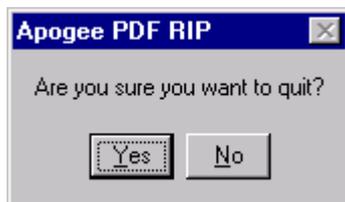
All of the Apogee PDF RIP programs are stopped when you shutdown your system. However, if you want to stop the Apogee PDF RIP while the system is still running, you should use the following procedure:

1 Click the right mouse button on the Apogee PDF RIP entry in the taskbar.



2 Select Close from the popup menu.

The following confirmation dialog is displayed:



3 Click on Yes to confirm that you wish to stop the RIP.

This will stop the Apogee PDF RIP server and all the RIP modules which are currently running. In addition, all other remote RIP Pilots will lose their connection to this RIP.

# Chapter 4: Using Apogee PDF RIP with PSE

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This chapter describes how Apogee PDF RIP works with Agfa's PostScript Environment (PSE).

Click on a topic name to jump to the topic:

- ◆ [Agfa's PostScript Environment \(PSE\)](#)
  - [Smooth Shading](#)
  - [16-bit Agfa Balanced Screening \(ABS\)](#)
  - [Idiom Recognition](#)
  - [Composite Printing and ICC Profile Selection](#)
  - [PostScript Printer Description \(PPD\) File Generation](#)
- ◆ [Composite Printing and Color Matching](#)
  - [Matching Colors with Agfa Color Management](#)
  - [ICC Color Profiles](#)
  - [Creating a New Output Profile](#)
  - [Downloading a New ICC Profile to the RIP](#)
  - [Setting a Default or Permanent Output Profile](#)
  - [Setting a Default or Permanent Proofer Profile](#)
  - [RGB Images](#)

# Agfa's PostScript Environment (PSE)

The following subsections are provided as an introduction to the information supplied in the PSE documentation. For detailed information on PSE, you should refer to the "Apogee PS Companion User's Guide".

## Smooth Shading

PostScript 3 contains a new operator (**shfill**) that is used to describe blends. The shfill operator enables the use of 16-bit screens allowing for up to 4096 levels of gray, instead of the 8-bit screens used in PostScript Level 2 (which provide only 256 levels of gray).

When used together with the Agfa Balanced 16-bit screening technology, this feature results in very smooth blends, and avoids the "banding" that shows on PostScript Level 2 devices.

Using this new operator also provides a performance benefit, since the RIP needs to process fewer individual objects.

## 16-bit Agfa Balanced Screening (ABS)

All Agfa screening technologies (Agfa Balanced Screening, Agfa CristalRaster, Agfa Balanced Screening Options) are now available in 16-bit versions allowing for up to 4096 levels of gray. Adobe Rational Tangent (Standard RulingMap) and Accurate Screens (Accurate RulingMap) do not support 16-bit screening and PostScript 3 smooth shading.

Apogee PDF RIP is delivered with 16-bit ABS screens pre-installed. Refer to the "Apogee PS Companion User's Guide" for more information on installing additional halftones.

## Idiom Recognition

In order to use the new PostScript 3 features, such as smooth shading gradient fills, applications must be able to generate PostScript 3 files. This can be achieved in two ways:

- The application uses a PostScript 3 printer driver (such as AdobePS 8.6 for the Macintosh, AdobePS 4.3 for Windows 95 or Windows 98 or Adobe PS 5.1 for Windows NT 4.0). The printer driver will then generate the proper PostScript 3 output.
- Many applications generate their own PostScript, but are not yet capable of generating PostScript 3 files. In these cases, Idiom Recognition is used to allow these applications to use the new PostScript 3 features.

Apogee PDF RIP is pre-installed with 5 IdiomSet resources for smooth shading gradient fills:

- AIGradients for Adobe Illustrator 5.0, 5.5, 6.0 and 7.0.
- CorelFFills for CorelDraw! 5, 6, 7, 8 and 9.
- QuarkXPressBlends and AgfaExtraQXPBlends for the QuarkXPress Cool Blends XTension.
- FreeHand7IdiomSet for FreeHand 7.0 (only composite color PostScript).

These resources invoke the smooth shading operator **shfill** for each of the specified applications.

## Composite Printing and ICC Profile Selection

When using In-RIP separation with earlier Agfa PostScript Level 2 RIPs, the user installs and selects an appropriate ColorRendering Dictionary (CRD) Resource (see “Apogee PS Companion User’s Guide”).

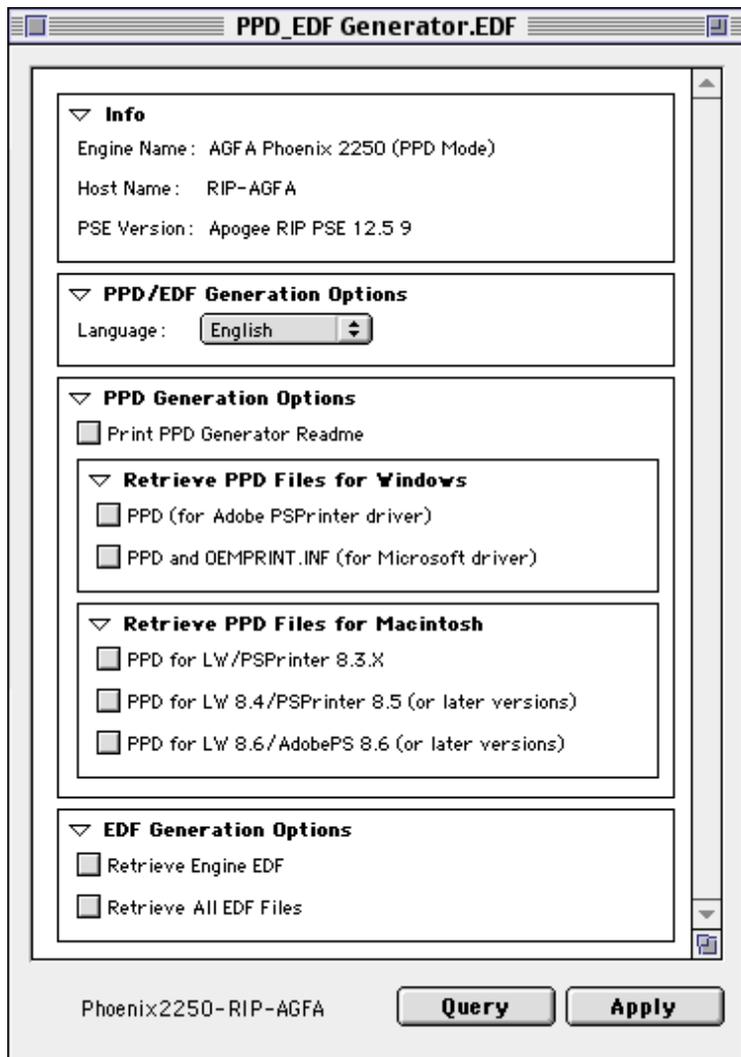
With Apogee PDF RIP, ICC Profiles are used instead of ColorRendering dictionaries. For this purpose, Apogee PDF RIP contains a new resource category called OutputProfile. Using this category, new ICC profiles can be downloaded to the RIP. The RIP then uses these profiles to automatically create the appropriate CRD. Downloading and installing resources is described in your “Apogee PS Companion User’s Guide”. With Apogee PDF RIP, you must use only the latest version of AgfaSet 4.2 as available on the Apogee PDF RIP CD.

More information on this topic can be found in the “Agfa ColorTune 3.0 Pro User’s Guide” and in the [“Composite Printing and Color Matching”](#) section, below.

## PostScript Printer Description (PPD) File Generation

Apogee PDF RIP has the ability to automatically generate the appropriate PPD file for different engine/RIP configurations. This is done via the “PPD Generator”. This PPD Generator uses the most recent Engine/RIP information at the time the PPD is generated, providing the latest features and resources that are available.

The user therefore no longer needs to search for the correct PPD. Using the PPD\_EDF Generator.EDF in AgfaSet, the user simply selects the language and the printer driver he is using, and the correct PPD is retrieved.



Additionally, when a PPD file is generated, the different resource categories (Fonts, Halftones, RulingMaps, OutputProfiles, ProoferProfiles, Trapping Resources, etc.) are automatically reflected in the PPD. PPD adaptations are no longer required for each individual resource category.

Besides generating PPD files, the PPD Generator is also capable of generating Engine Description Files (EDFs), which are used by AgfaSet to control default settings of Engine and RIP/PSE features. This allows users to retrieve the latest set of up-to-date EDF files from the RIP.

For more information on the PPD Generator, refer to the "Apogee PS Companion User's Guide".

# Composite Printing and Color Matching

Apogee PDF RIP can perform color matching when using the Composite Printing output mode. This process is performed using Agfa's Color Management System, which is built into the RIP.

The following subsections explain how to download your own ICC color profiles to the RIP.

## Matching Colors with Agfa Color Management

Proofing devices and printing presses vary widely in color rendering (i.e. the way they visualize colors). Since the color behavior of a proofer is not the same as your press, you needed - in the past - to make different color corrections for your digital proofs and for the offset press.

However, using the Agfa Color Management tools that are built into your Apogee PDF RIP, you can send jobs to the RIP as you would send them to your normal target output system. The RIP then automatically makes the conversion between the color space of the output device for which the separations were originally created (described in the selected OutputProfile resource) and the device color space of the target output system (described in the selected ProoferProfile resource). This conversion is performed using information found in the ICC color profiles present inside your Apogee PDF RIP.

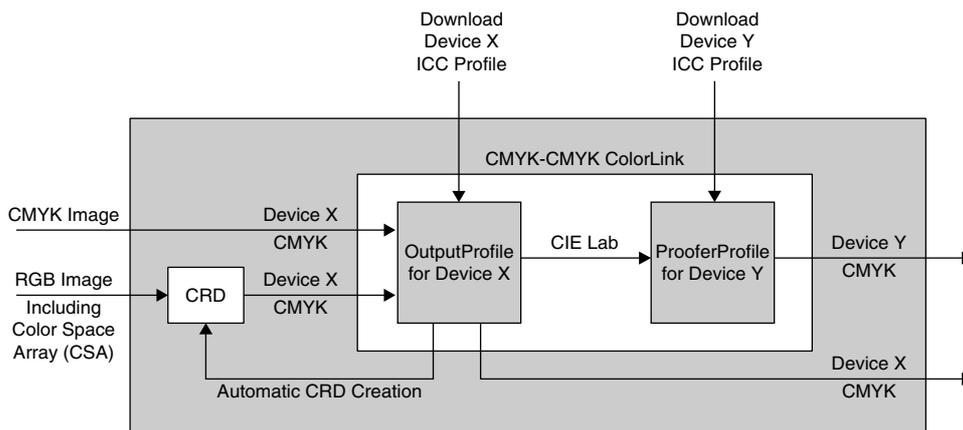


Figure 5: Color Matching

## ICC Color Profiles

Color profiles are electronic files that contain the information needed by the color management system to convert color data between native device color spaces and device-independent color spaces. These files are stored on the RIP's hard disk.

Each profile type contains a series of algorithmic models which are used to perform the transformation between color spaces.

- ❖ Note: All image objects, apart from objects which are set in overprint, are processed via the Agfa Color Management system. Overprinted image objects cannot be color-matched, since the system cannot determine what the underlying color is (objects which are not overprinted will always "knock out" the underlying colors).

## Creating a New Output Profile

Agfa supplies a large number of generic output profiles. Using Agfa ColorTune Pro and some additional hardware, you can yourself create specific output profiles for your output devices.

You can characterize an output device by printing an IT8.7/3 reference file. The IT8.7/3 file contains 928 color patches. These printout results can be accurately read using a spectrophotometer or a colorimeter. ColorTune Pro then uses the measured values, relates them to the values in the IT8.7/3 reference file, and creates a unique color profile for your output device.

A range of color profiles may be made for a device that uses different sets of ink and paper types. Varying levels of dot gain on ink-based systems can also be profiled.

Apogee PDF RIP is pre-installed with the following OutputProfiles:

- StandardEURO
- StandardSWOP
- Offset-TOYO-Coated

No ProoferProfiles are installed.

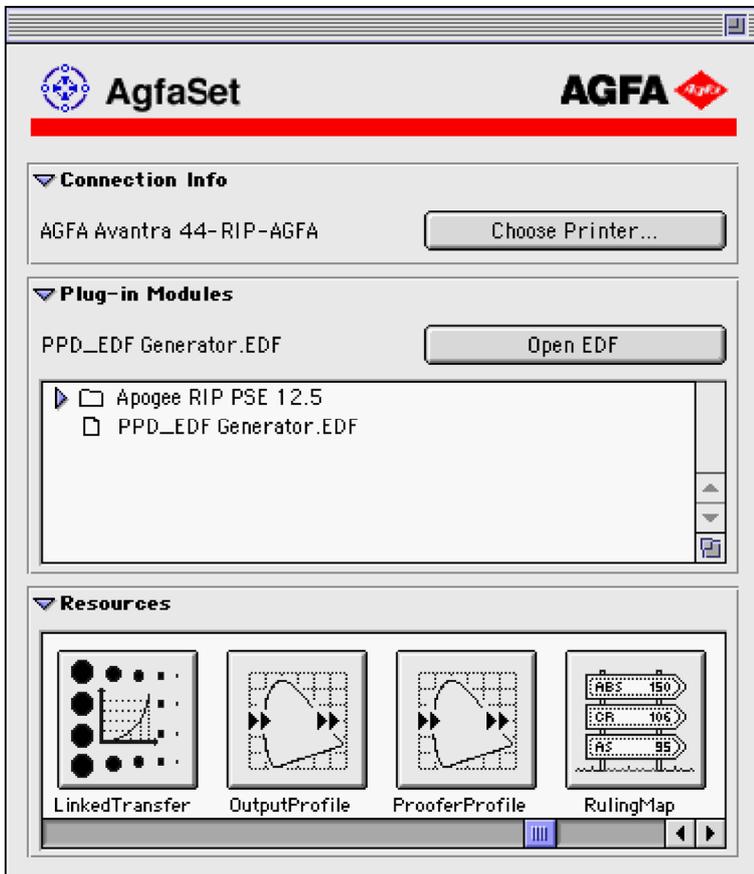
These profiles provide a good default behaviour for EuroStandard, SWOP, and TOYO ink sets. But for best quality, you need to create and install your own ICC profiles.

- ❖ Note: Refer to your "Agfa ColorTune 3.0 User's Guide" for more information on creating your own ICC profiles.

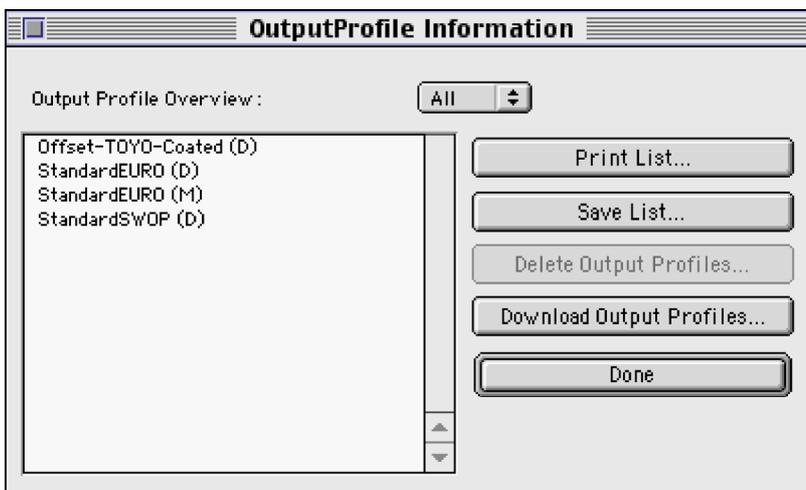
## Downloading a New ICC Profile to the RIP

The procedure for downloading a new ICC output profile to your Apogee PDF RIP is as follows:

- 1 Start AgfaSet and select your Apogee PDF RIP.
- 2 Go to the Resources panel and select OutputProfile or ProoferProfile.



If the ICC Profile describes the color space for which the images were created, then select OutputProfile. If the ICC Profile describes the color space of the target device for which Apogee PDF RIP is going to produce output, then select ProoferProfile.



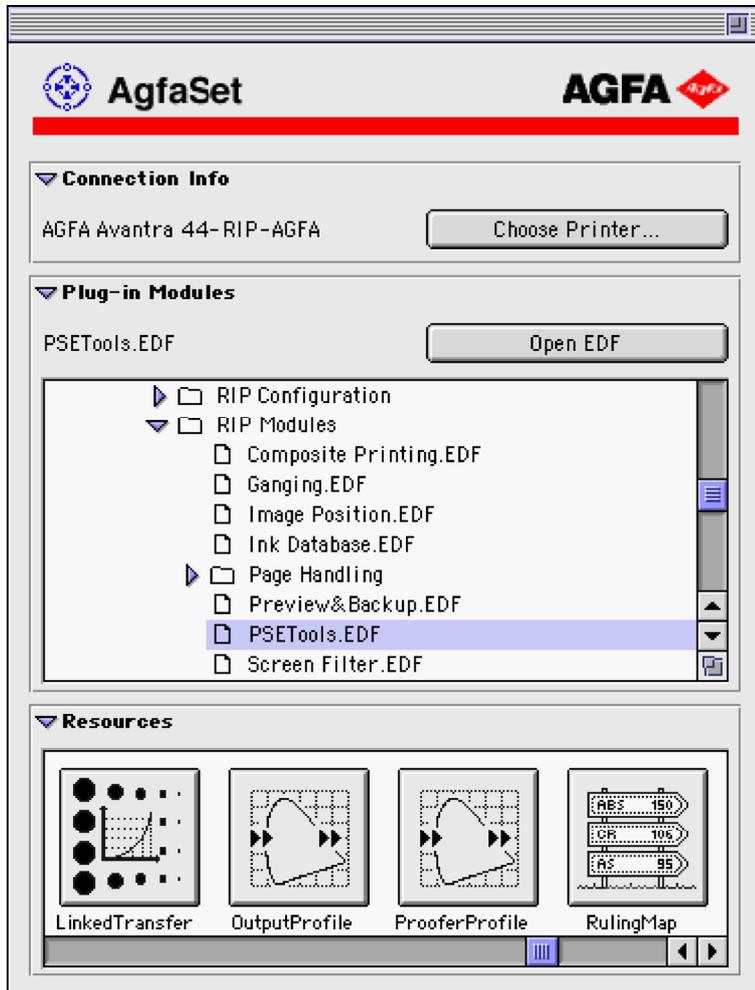
- 3** Click on the "Download Output Profiles..." or "Download Proofer Profiles..." button respectively.
- 4** Select the ICC profile you want to download to the RIP's disk.  
Before downloading, AgfaSet will prompt you to specify a name for this profile.
- 5** Specify a profile name, and click on the OK button.

After downloading, you may choose to make this profile the default profile or to add this profile to your PPD (see below).

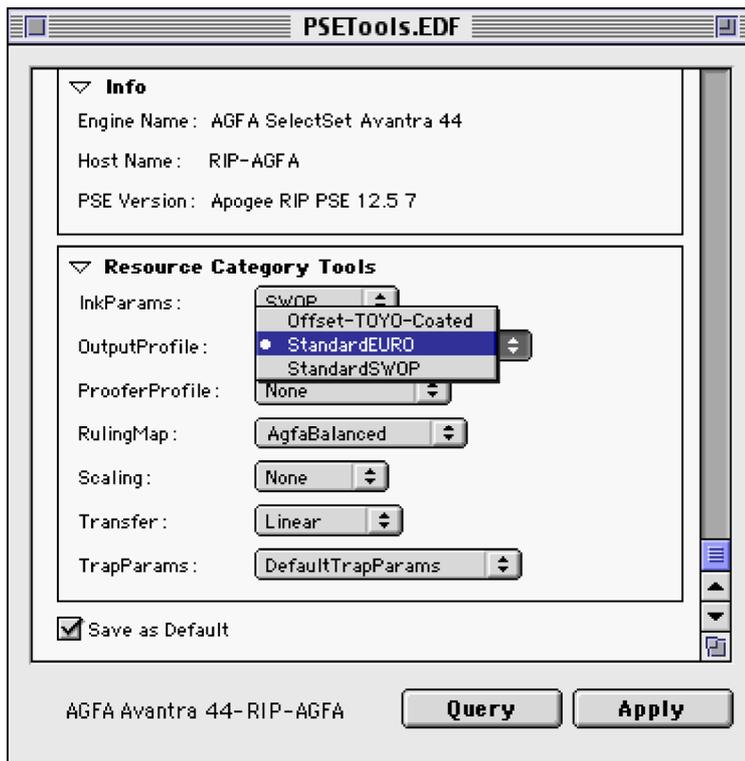
## Setting a Default or Permanent Output Profile

The procedure for setting either a default or a permanent OutputProfile is as follows:

- 1 Start AgfaSet and select your Apogee PDF RIP.



- 2 Launch the PSETools.EDF from the Plug-in Modules panel.



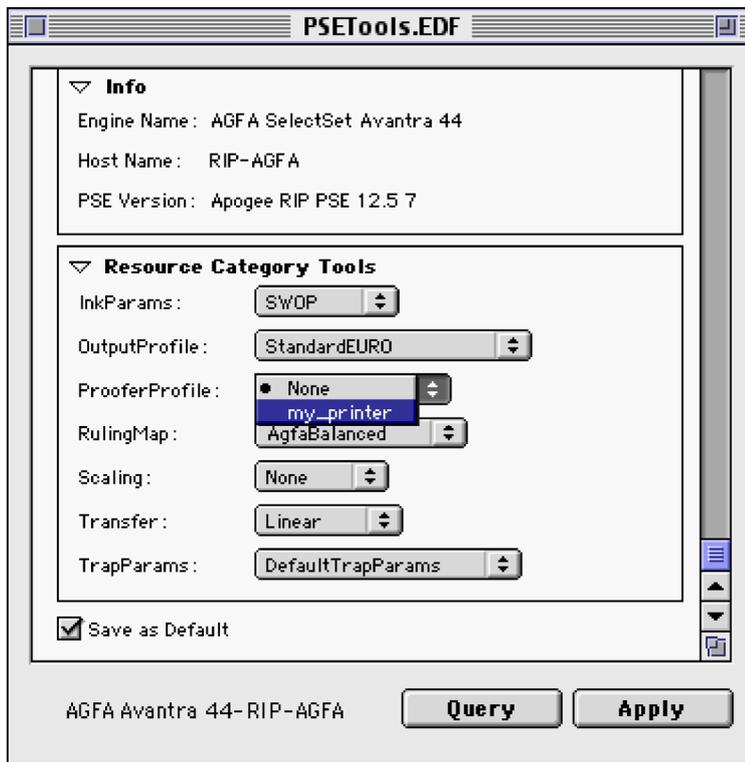
- 3 Select the OutputProfile that you want to be the default OutputProfile from the OutputProfile list in the Resource Category Tools panel.
- 4 Click Apply to make the selected OutputProfile the default OutputProfile until the RIP is rebooted. Select also the "Save as Default" checkbox to make the selected OutputProfile the permanent default OutputProfile for your RIP.

## Setting a Default or Permanent Proofer Profile

You can create a customized profile which describes the target output device for which you will be outputting films or plates. You should then download that customized profile to your Apogee PDF RIP as a ProoferProfile.

The procedure for setting either a default or permanent ProoferProfile is as follows:

- 1 Start AgfaSet and select your Apogee PDF RIP.
- 2 Launch the PSETools.EDF from the Plug-in Modules panel. (see above)
- 3 Select the ProoferProfile that you want to be the default ProoferProfile from the ProoferProfile list in the Resource Category Tools panel.



- 4 Click Apply to make the selected ProoferProfile the default ProoferProfile until the RIP is rebooted. Select also the "Save as Default" checkbox to make the selected ProoferProfile the permanent default ProoferProfile for your RIP.

## RGB Images

If your output documents contain RGB images with embedded ICC input profiles, then they will be printed using the current color management settings.

# Chapter 5: Tuning Apogee PDF RIP



This chapter describes how to start the RIP Tuner, and how to use it to customize and optimize your configuration.

Click on a topic name to jump to the topic:

- ◆ [Introduction](#)
- ◆ [Starting the PDF RIP Tuner](#)
- ◆ [Tuning Your Apogee PDF RIP Configuration](#)
  - [Input](#)
  - [RIP](#)
  - [Server](#)
  - [Job Log](#)
  - [Preview](#)
  - [Device](#)
- ◆ [Configuration Overview](#)
  - [RIP Directories](#)
  - [Ports](#)
  - [Memory Usage](#)

# Introduction

The main function of the RIP Tuner is to allow you to optimize your Apogee PDF RIP environment by configuring specific aspects of the Apogee PDF RIP input, processing, and output modules. You should bear in mind that your Apogee PDF RIP system has been tuned for output to Agfa imagesetters before delivery.

## Starting the PDF RIP Tuner

To start the RIP Tuner, proceed as follows:

- 1 From the Windows Start menu, select Programs/ Apogee PDF RIP/ RIP Tuner.

The RIP Tuner main window is displayed. This window contains a series of tabs which allow you to configure specific features of your Apogee PDF RIP. Each of these tabs is described in detail in the following pages.



- ❖ Note: Within the RIP Tuner application, you can position your mouse pointer over any item to find out more information about that item.

# Tuning Your Apogee PDF RIP Configuration

The main areas in which you can tune your Apogee PDF RIP configuration are as follows:

- Input
- RIP
- Server
- Job Log
- Preview
- Device
- ❖ Note: Any changes you make to any of the settings are saved when you click OK, and will come into effect the next time you reboot the RIP.

Each of these areas is described in the following pages.

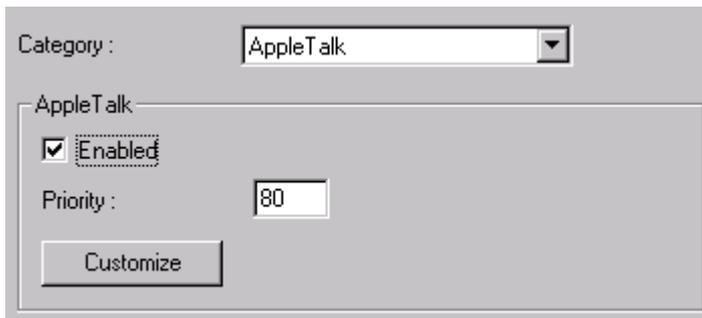
## Input

This option allows you to set attributes for each of the input channels through which your jobs will be sent to the RIP. Your options basically consist of enabling or disabling a channel. Five input channels are available:

- AppleTalk Channel
  - Hot Folder Channels
  - LPR Channel
  - Named Pipe Channel
  - TCP/IP Channel
- ❖ Note: All of these input channels are enabled by default, although you can disable one or more of the channels if you do not intend to use them.

### AppleTalk Channel

This is the standard input channel for Macintosh users. The AppleTalk channel communicates directly with the RIP, providing interactive communications from a Macintosh front-end.



The configuration options are as follows:

- Enabled: Enable/disable this channel for PostScript files (enabled by default).
- Priority: Specify the priority level of this channel for job scheduling  
1 = highest, 99 = lowest (refer to “[IO Scheduling](#)”, below).
- Customize: Clicking this button allows you to configure when and where the Apogee PDF RIP will save the PostScript jobs that are sent through the AppleTalk input channel (default is Save never).

Refer to [Appendix A: Using Apogee PDF RIP with a Macintosh Computer](#) for more detailed information on recommended connections.

## Hot Folder Channels

By default, Apogee PDF RIP supplies you with two “hot folders”, for high priority and normal priority print jobs. You can save files to these hot folders directly from your front-end workstation, or jobs can be sent to the hot folders directly from an OPI server.

The screenshot shows a configuration dialog for a Hot Folder channel. At the top, the 'Category' is set to 'Hot Folder'. Below that, the 'Name' is set to 'HighPriority'. The 'Enabled' checkbox is checked. The 'Directory' field contains the path 'F:\RIPHotFolders\Urgent'. The 'Setup File' field is empty. The 'Priority' field contains the value '20'. At the bottom, there are three buttons: 'New...', 'Delete', and 'Customize'.

The configuration options for these channels are as follows:

- Hot Folder HighPriority
  - Enable/disable this channel for PostScript files (enabled by default).
  - Directory: Specify the directory name. Unless you also include a specific pathname, the directory will be created as a subdirectory of the RIP Hot Folders directory. By default, the name is “Urgent”.
  - Setup File: Specify the path and filename of the PostScript file which will be prepended to every job.
  - ❖ Note: The setup file can be created using AgfaSet (refer to your “Apogee PS Companion User’s Guide”).
  - Priority: Specify the priority level of this channel for job scheduling 1 = highest, 99 = lowest (refer to “[IO Scheduling](#)”, below).
- Hot Folder Normal Priority
  - Enable/disable this channel for PostScript files (enabled by default).
  - Directory: Specify the directory name. Unless you also include a specific pathname, the directory will be created as a subdirectory of the RIP Hot Folders directory. By default, the name is “Normal”.
  - Setup File: Specify the path and filename of the PostScript file which will be prepended to every job.
  - Priority: Specify the priority level of this channel for job scheduling 1 = highest, 99 = lowest (refer to “[IO Scheduling](#)”, below).

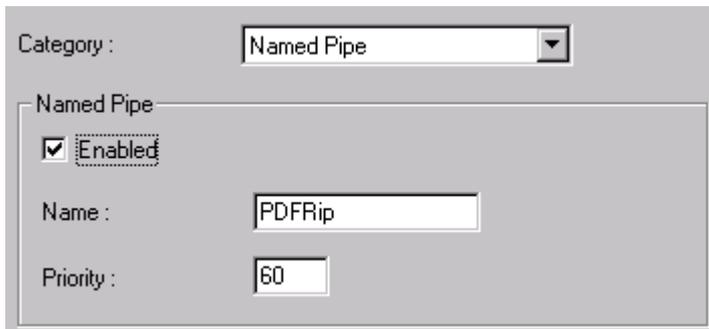
- **New...:** Clicking this button allows you to create additional hot folders and specify a name for the hot folder. The new hot folder has the same configuration options as the two default hot folders which are described above.
- **Delete:** Existing hot folders can be deleted by selecting the hot folder from the Name list and by clicking the Delete button.
- **Customize:** Each hot folder can be further customized by selecting the hot folder from the Name list and by clicking the Customize button. A dialog will appear where you can specify when the Apogee PDF RIP will save the PostScript jobs that are sent through this hot folder input channel (default is Save only when error). Additionally, it can be specified if the job's filename must be used as the job title instead of the embedded title within the PostScript job. The job title is used throughout the RIP for logging purposes, raster data filenames, etc.

## LPR Channel

This is a generic input channel which may be used from a variety of different front-end systems using either the Windows NT spooler or printing directly to the Apogee PDF RIP's LPR input channel. The default LPR printer name is "PDFRip".

## Named Pipe Channel

This is the standard input channel for Windows 95/98 and Windows NT users, and is the preferred channel for all users whose jobs are routed through the Windows NT spooler. This channel uses the Windows NT Server in the most efficient way, allowing you to send jobs to the Windows NT spooler from either a Windows or a Macintosh front-end system. Using the Windows NT spooler, you quickly release your front-end workstation, so that you can carry on with more productive work.



The image shows a configuration dialog box for a Named Pipe channel. At the top, the 'Category' is set to 'Named Pipe'. Below this, there is a section titled 'Named Pipe' containing three settings: a checked checkbox labeled 'Enabled', a text field for 'Name' containing 'PDFRip', and a text field for 'Priority' containing '60'.

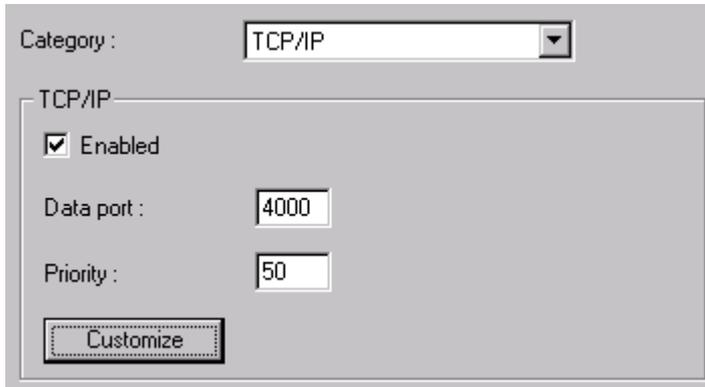
The configuration options are as follows:

- Enabled: Enable/disable this channel for PostScript files (enabled by default).
- Name: Specify the name of the Named Pipe. By default, the name is "PDFRip".
- Priority: Specify the priority level of this channel for job scheduling 1 = highest, 99 = lowest (refer to "[IO Scheduling](#)", below).

Refer to "[General Configuration Issues](#)" in Chapter 2 for more detailed information on recommended connections.

## TCP/IP Channel

TCP/IP is a direct input channel for UNIX workstations and/or servers, such as the Agfa Mainstream or Helios Ethershare server. This channel uses the TCP/IP “streaming” communications protocol.



The screenshot shows a configuration window for the TCP/IP channel. At the top, there is a 'Category' dropdown menu set to 'TCP/IP'. Below this, the 'TCP/IP' section contains a checked 'Enabled' checkbox. Underneath, there are two input fields: 'Data port' with the value '4000' and 'Priority' with the value '50'. At the bottom of the configuration area is a 'Customize' button.

The TCP/IP input channel configuration options are as follows:

- **Enabled:** Enable/disable this channel (enabled by default).
- **Data port:** You should not change this value unless there is a conflict with other TCP/IP software. If there is a conflict, you are advised to select a port ID in the range 4000-4999. Make sure that your TCP/IP print software is also set to the same port ID. By default, the data port number is set to 4000.
- **Priority:** Specify the priority level of this channel for job scheduling 1 = highest, 99 = lowest (refer to “[IO Scheduling](#)”, below).
- **Customize:** Clicking this button allows you to configure when and where the Apogee PDF RIP will save the PostScript jobs that are sent through the TCP/IP input channel (default is Save never).

## RIP

This option allows you to optimize the speed with which Apogee PDF RIP outputs jobs, as well as the amount of memory reserved for the exclusive use of Apogee PDF RIP.



## Input

This panel allows you to define the Apogee PDF RIP input settings.



- **Input Buffer Size (Mbytes)**

You can optimize the handling of the PostScript input data by adjusting the size of the "look-ahead" input buffer that is available to the job input process.

If you have sufficient RAM memory, you can configure the input buffer size so that it is large enough to hold a complete job (this size will depend very much on your particular working environment). The input buffer memory will be subtracted from the memory available to the other components of the RIP. A larger input buffer size will speed up the job input process, but can slow down the actual job processing.

- **IO Scheduling**

This option defines the priority scheme used for handling input channels:

- ❑ Round Robin: All channels are checked in sequence for incoming jobs. The assigned channel priorities determine the order in which the channels are checked. After a job has been processed from one channel, the input channel with the next highest priority is checked (see Figure 6). This type of scheduling ensures an evenly-balanced cyclical processing of the jobs in all of the input channels..
- ❑ Fixed: Channels are checked for incoming jobs according to their specified priority levels, beginning with the highest priority channel. When all jobs in the highest priority channel have been processed, the input channel with the next highest priority is checked (see Figure 7). This type of scheduling ensures that priority is always given to jobs in the highest priority channel.

The priority range is 1-99, where 1 is the highest priority, and 99 is the lowest. You can fine-tune the priority of each channel, giving the highest scheduling priority to the most active channels.

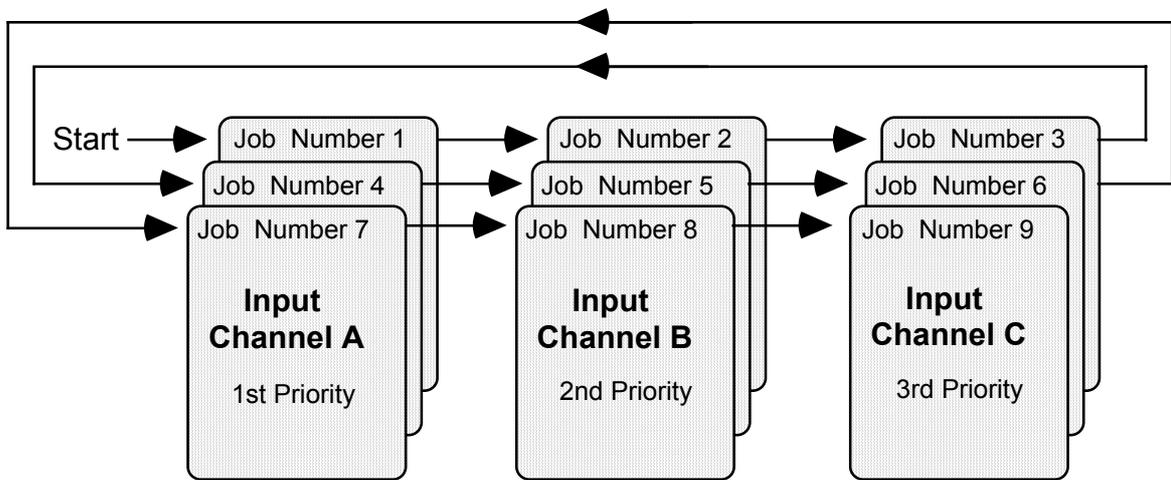


Figure 6: Round Robin Job Scheduling

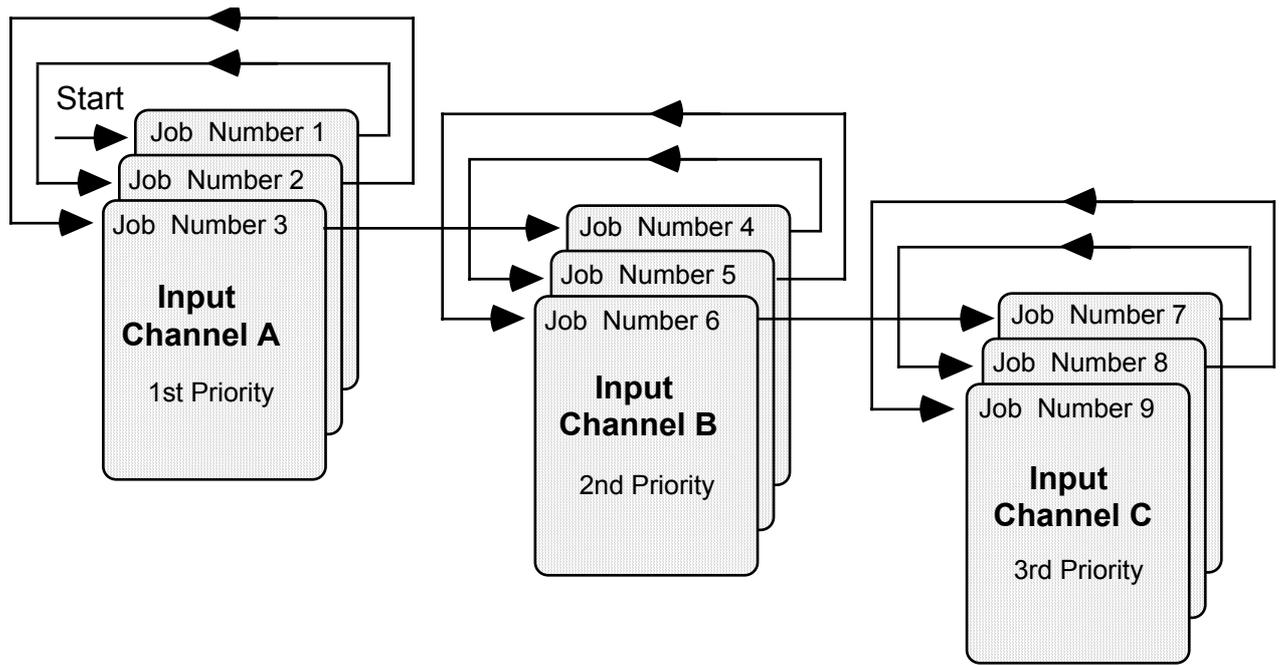
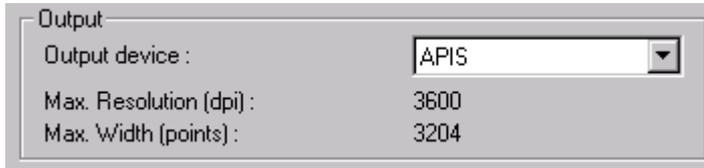


Figure 7: Fixed Channel Job Scheduling

## Output

This panel allows you to define the Apogee PDF RIP output settings.



- **Output Device**

This option determines the current output mode, which may be any of the following:

- APIS: Output to imagesetter, via the APIS interface card.
- File: Output to TIFF file.
- Null: Output is discarded. For testing purposes only.
- PrintDrive (optional): Output to Apogee PrintDrive.
- By default, the output mode is set to APIS.

- **Max. Resolution (dpi)**

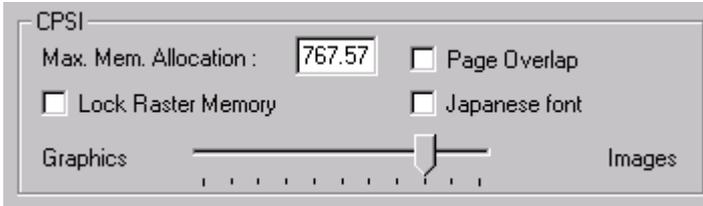
Displays the maximum resolution of the output device, in dpi.

- **Max. Width (points)**

Displays the maximum width of the output device, in points  
(72 points = 1 inch = 2.54 centimeters)

## CPSI

CPSI stands for “Configurable PostScript Interpreter”. This is the core software used in all Agfa software RIPs. The CPSI panel allows you to configure and optimize your memory configuration for the Apogee PDF RIP.



- Max. Mem. Allocation

Specifies the maximum amount of memory that can be allocated to the RIP during processing (in Mbytes). This may be set to any value between 32 Mbytes and approximately two-thirds of the available system RAM. The default setting is approximately two-thirds of the available system RAM.

- Lock Raster Memory

If this option is enabled, the raster buffer memory will be locked, and will not be swapped out to disk if Windows NT needs additional memory. By default, this option is disabled.

- Page Overlap

If this option is enabled, Apogee PDF RIP can simultaneously interpret one page of a job while rendering another page of the same job. This option is disabled by default.

- ❖ Note: Enabling Page Overlap usually does not improve the RIP's performance. It is recommended to leave this option disabled.

- Japanese Font

You must check this option if Japanese (Kanji) fonts are installed.

- Graphics - Images Sliderbar

Using the Graphics - Images sliderbar, the RIP can be fine-tuned to optimize performance according to the ratio of graphics (vector-based artwork and text) to images contained in the jobs. The sliderbar is set to 80 by default which is appropriate for most jobs. “80” means that 80 percent of the RIP data buffers are allocated for image data and 20 percent are allocated for graphics.

## Optimize Memory Usage

When you have specified all of your RIP options, click on the 'Optimize Memory Usage' button to automatically optimize your system's memory and performance. The Tuner does this by using the supplied data to calculate the optimal buffer and cache sizes for the RIP.

- ❖ Note: Any changes you make to the RIP's memory configuration will only take effect when you restart the RIP.

You can view the result of optimizing memory usage by selecting the 'Memory Usage...' option from the View menu. For more information, refer to "[Memory Usage](#)", below.

- ❖ Note: The settings in the Memory Usage dialog should not be modified manually except by advanced users. Any changes you may make here will be overwritten the next time you click on the 'Optimize Memory Usage' button.

## Server

This panel allows you to view the names of the various server alias folders which are used by Apogee PDF RIP.



- ❖ Note: With the exception of the Raster data folder name and Raster data volumes fields, all of the fields in the Server panel display fixed values which cannot be edited.
- Backup alias folder: Shows the name of the Backup alias folder. This is a subdirectory within the RasterJobs directory within the main RIP directory. By default, the name is “Backed-up”.
- Fast image alias folder: Shows the name of the High Priority Imaging alias folder. This is a subdirectory within the RasterJobs directory within the main RIP directory, and is used for imaging jobs from Backup or page buffering. By default, the name is “To be imaged urgently”. Image alias folder: Shows the name of the Normal Priority Imaging alias folder. This is a subdirectory within the RasterJobs directory within the main RIP directory, and is used for imaging jobs from Preview. By default, the name is “To be imaged”.
- Error alias sub folder: Shows the name for the subdirectories where jobs which fail during re-imaging are stored. Error alias sub folders are created as subdirectories of both the Image and Fast Image alias folders. By default, these sub folders are called “Error”.
- Preview alias folder: Shows the name of the Preview alias folder. This is a subdirectory within the RasterJobs directory within the main RIP directory. By default, the name is “To be previewed”.
- Raster data folder: Defines the name of the directory where TIFF files are stored on the raster data volumes. By default, the name is “Raster Data”.

- Raster data volumes: Specifies the drive volumes where TIFF files will be stored. These drive volumes must be formatted with the NTFS file system.

## Job Log

This panel allows you to define how the Job Log server behaves at startup.

## Job Log Server

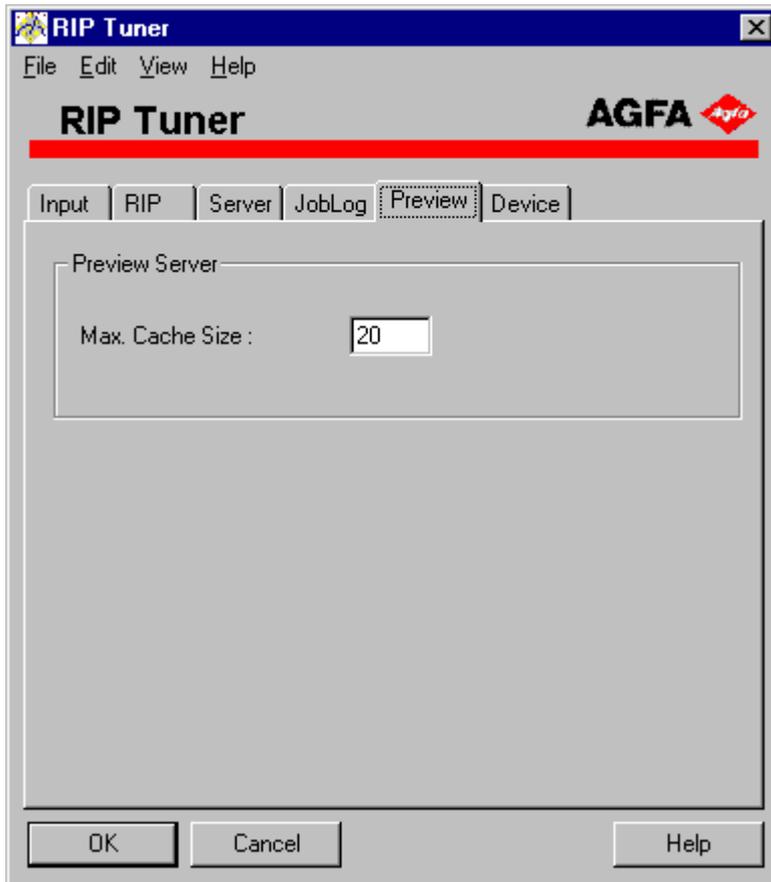


- Start New Log at startup

This option allows you to create a new Job Log file every time the Job Log server is started (disabled by default). The Job Log Server can be stopped and started in the Windows NT Services Control Panel or by restarting the NT system.

## Preview

This option allows you to set the Preview memory cache size.



- Preview Server - Max. Cache Size

Specifies the maximum amount of memory (in Mbytes) which can be used by the Raster Preview Server for caching image data. The default is 20 Mbytes.

## Device

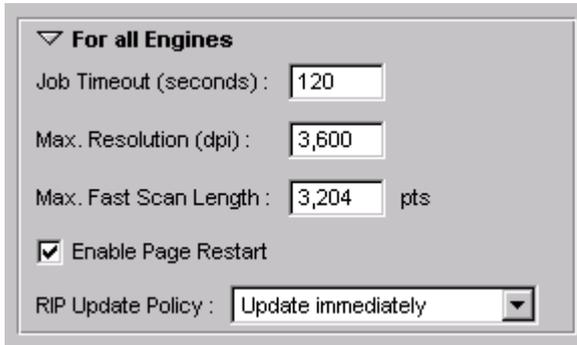
This option allows you to set individual output device options for output to a physical output device (APIS), to a TIFF file, to a “null” device (for testing), or to an Apogee PrintDrive (optional). Refer to your “Apogee PrintDrive User’s Guide” for more information on the RIP Tuner settings for Apogee PrintDrive.

- ❖ Note: For information on selecting an output device, refer to the “[Output](#)” section in the description of the RIP panel, above.



## APIS Parameters

### ■ For all Engines

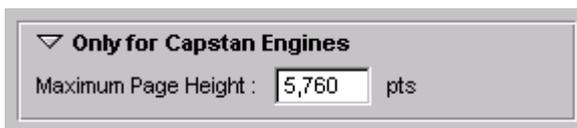


The screenshot shows a dialog box titled "For all Engines" with a downward-pointing triangle icon. It contains the following settings:

- Job Timeout (seconds): 120
- Max. Resolution (dpi): 3,600
- Max. Fast Scan Length: 3,204 pts
- Enable Page Restart
- RIP Update Policy: Update immediately (dropdown menu)

- Job Timeout: Defines the job timeout period, in seconds. This can be set anywhere in the range 60-600 seconds. The default is 120 seconds.
- Max. Resolution: Defines the maximum resolution of the connected imagesetter in dots per inch (dpi).
- Max. Fast Scan Length: Defines the maximum fast scan length of the connected imagesetter (by default in points). The fast scan direction is the direction in which the imagesetter's laser beam is rotating (i.e. perpendicular to the media feed direction in capstan imagesetters and parallel to the media feed direction in drum imagesetters).
- ❖ Note: You can switch the units of measurement between points, inches, and millimeters by repeatedly clicking on the displayed unit of measurement (by clicking on "pts" in the above example).
- Enable Page Restart: If this option is enabled, then in the event of an error or imagesetter failure, the APIS device will automatically re-image the last plane. This option is enabled by default.
- RIP Update Policy: Defines when to update the engine parameters in the RIP after the engine was offline (Default : Update immediately).

### ■ Only for Capstan Engines

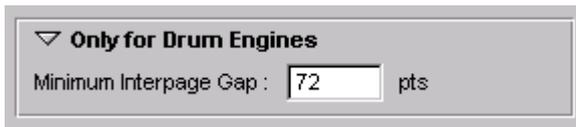


The screenshot shows a dialog box titled "Only for Capstan Engines" with a downward-pointing triangle icon. It contains the following setting:

- Maximum Page Height: 5,760 pts

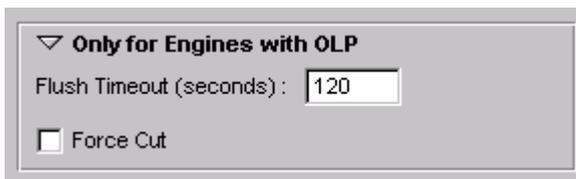
- Maximum Page Height: Defines the maximum page height for capstan imagesetters, such as Agfa AccuSet. The maximum page height can be set anywhere in the range 80-1000 inches. The default is 80 inches.

■ Only for Drum Engines



- Minimum Interpage Gap: The drum imagesetter's Interpage Gap setting is controlled by the values entered in the Image Position.EDF (for more details see your "Apogee PS Companion User's Guide"). This lower limit (Minimum Interpage Gap) is added as a "safety" margin to prevent the imagesetter from cutting through the imaged area when an Online Processor is used (Default : 72 points = 1 inch = 25.4 mm).
- ❖ Note: The Minimum Interpage Gap may only be set to 0 when using a drum imagesetter without an OLP (Online Processor).
- ❖ Note: The distance from punch to image as specified on the imagesetter is always added to the total Interpage Gap when punching is enabled.
- ❖ Note: Global Job Borders as specified in the Image Position EDF are not applied when Across Job Ganging is used.

■ Only for Engines with OLP



- Flush Timeout: When there is no next job within this timeout period the RIP will execute a media feed and cut, which starts development of the last imaged piece of media (Default: 120 seconds).
- ❖ Note: The Processor Timeout is controlled by the Flush Timeout setting in the RIP Tuner AND by the imagesetter's Last Image Delay setting. Whichever timeout that expires first will be honored.
- ❖ Note: The Flush Timeout setting is only controlled through the RIP Tuner. It is also displayed in the Imagesetter EDF file, but it can not be changed there.
- Force Cut: If this option is enabled, a media feed and cut will be executed after every imaged page (Default: disabled).

■ Only for Phoenix Engines

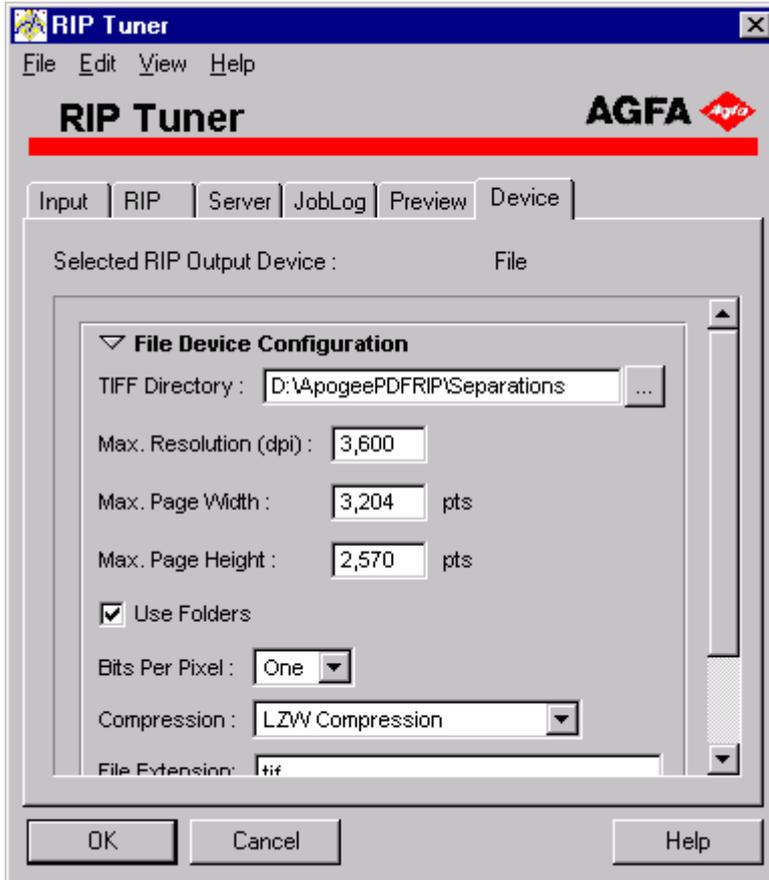


- Defines in which mode Phoenix runs:
  - PPD Mode (Default): This mode leaves control of the following Phoenix engine parameters to the Apogee PDF RIP. More information can be found in your "Apogee PS Companion User's Guide".
    - Auto Centering (PPD and EDF control)
    - Cut to Length (PPD and EDF control)

- Punch Profile (PPD and EDF control)
  - Cut to Length Distance (EDF control only)
  - Side Punch Image Distance (EDF control only)
  - Imaging Mode (EDF control only)
- Media Profiles: In this mode, the above and other Phoenix engine parameters are controlled through Media Profiles which are defined on the Phoenix imagesetter.

## TIFF Configuration

- **TIFF Directory:** By default, jobs printed to file are stored in a "Separations" subdirectory within the Apogee PDF RIP program directory. However, you can change this to the directory of your choice. To do this, you must specify the full pathname (e.g., D:\Administration\Apogee PDF RIP\Separations).
- ❖ **Note:** To access these jobs on another workstation, the specified directory must be shared.

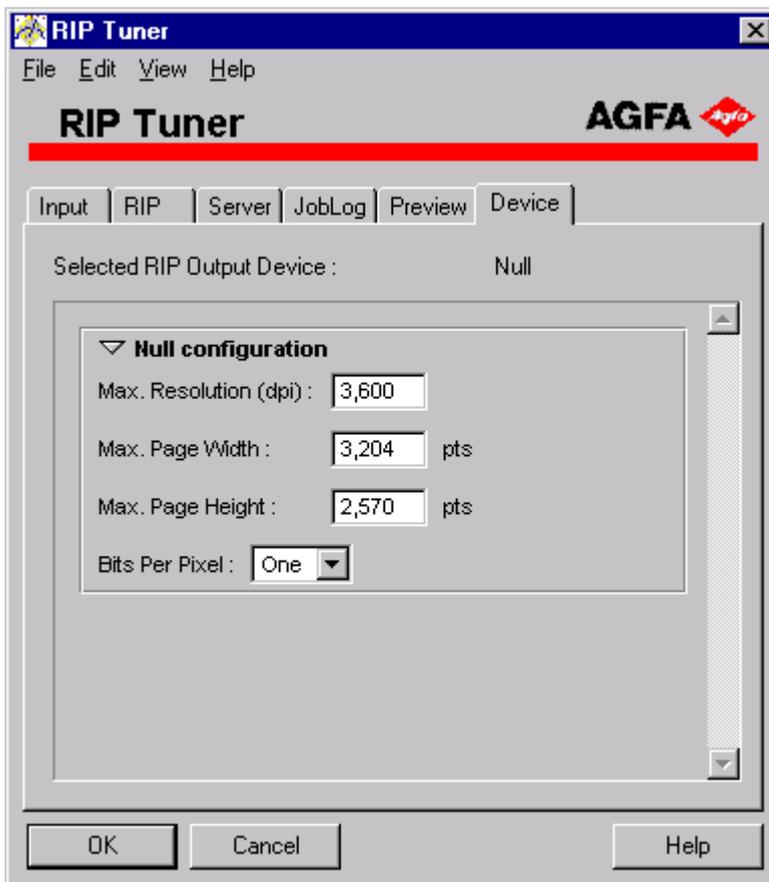


- **Max. Resolution (dpi):** Defines the maximum resolution of the TIFF file.
- **Max. Page Width:** Defines the maximum page width.
  - ❖ **Note:** You can switch the units of measurement between points, inches, and millimeters by repeatedly clicking on the displayed unit of measurement (by clicking on "pts" in the above example).
- **Max. Page Height:** Defines the maximum page height.
- **Use Folders:** Use the Job\Page\Separation folder structure for saving the TIFF files, instead of saving the TIFF files directly into the specified TIFF directory.
- **Bits Per Pixel:** Defines the number of bits per pixel which will be used, and can be set to 1, or 8 bits per pixel. The default is 1 bit per pixel.

- Compression: Defines the compression type used. The default is LZW Compression. The available options are:
  - No Compression
  - LZW Compression
  - CCITT mod. Huffman RLE
  - CCITT Group 3 fax encoding
  - CCITT Group 4 fax encoding
  - Macintosh Packbits RLE
- File Extension: Defines the file extension used for the generated TIFF files. The default is “tif”.
- Device ColorModel: Defines the color model of the generated TIFF files. The default is Monochrome. The options are Monochrome, or CMYK.

## Null Configuration

- Max. Resolution (dpi): Defines the maximum resolution.
- Max. Page Width: Defines the maximum page width.
- Max. Page Height: Defines the maximum page height.
- Bits Per Pixel: Defines the number of bits per pixel which will be used, and can be set to one, or eight bits per pixel. The default is one bit per pixel.



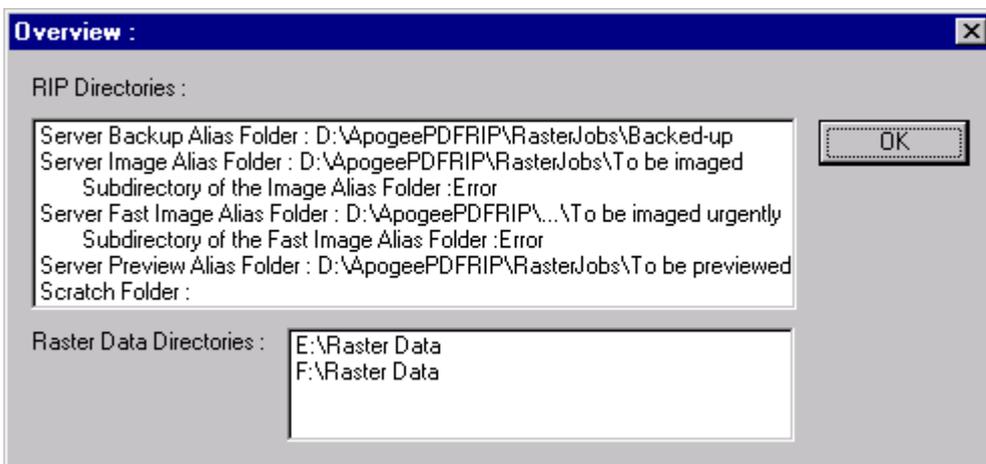
# Configuration Overview

You can quickly access an overview of all your configuration settings via the View menu in the menu bar. The View menu has three submenu options:

- Directories...
- Ports...
- Memory Usage...
- Each of these options is illustrated below.

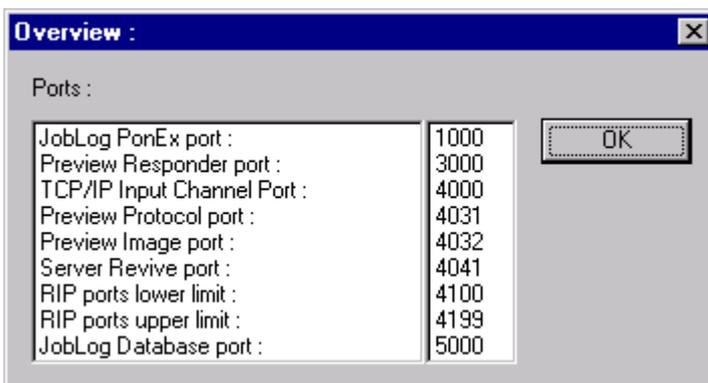
## RIP Directories

This option displays a scroll-down listing of your RIP directory names and paths. You will also see your raster data directory names.



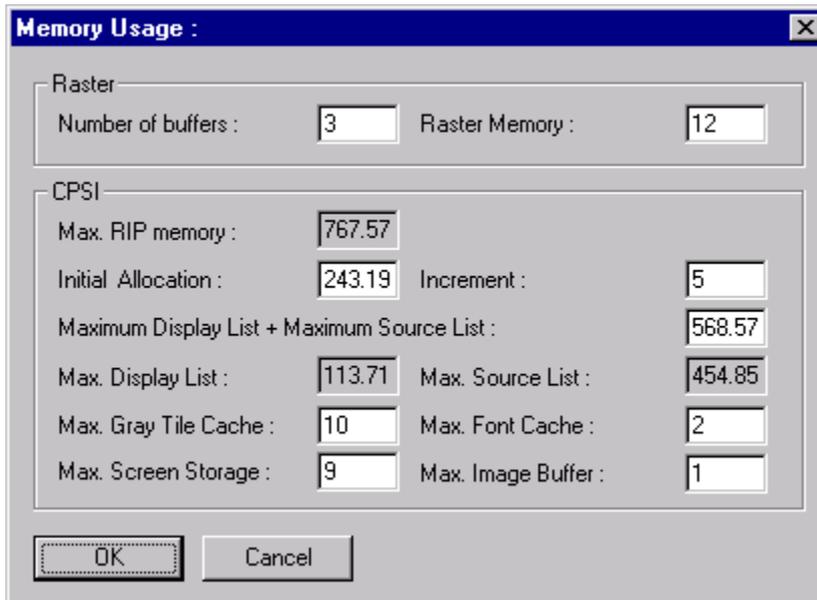
## Ports

This option provides an overview of your TCP/IP port settings.



## Memory Usage

This option provides an overview of your RIP's memory settings.



The screenshot shows a dialog box titled "Memory Usage" with a close button (X) in the top right corner. The dialog is divided into two sections: "Raster" and "CPSI".

**Raster Section:**

- Number of buffers :
- Raster Memory :

**CPSI Section:**

- Max. RIP memory :
- Initial Allocation :  Increment :
- Maximum Display List + Maximum Source List :
- Max. Display List :  Max. Source List :
- Max. Gray Tile Cache :  Max. Font Cache :
- Max. Screen Storage :  Max. Image Buffer :

At the bottom of the dialog are two buttons: "OK" and "Cancel".

- ❖ Note: These settings should not be modified manually except by advanced users. Any changes you may make here will be overwritten the next time you click on the 'Optimize Memory Usage' button.

# Appendix A: Using Apogee PDF RIP with a Macintosh Computer



This Appendix contains useful information for Apple Macintosh users.

Click on a topic name to jump to the topic:

- ◆ [Windows NT Server and Services for Macintosh](#)
- ◆ [Printing to Apogee PDF RIP from a Macintosh Computer](#)
  - [Creating a Spool Queue to the Named Pipe Input Channel](#)

# Windows NT Server and Services for Macintosh

If you are using Apogee PDF RIP without a separate print or OPI server, you are advised to use Services for Macintosh, which is part of the Windows NT Server operating system. Services for Macintosh allows you to use the Windows NT print spooler and file server functions from your Macintosh system (see Figure 2 in Chapter 1). If you do not use Services for Macintosh, you will only be able to print to your Apogee PDF RIP directly from your Macintosh, without the spooling capabilities of the Windows NT print spooler.

## Printing to Apogee PDF RIP from a Macintosh Computer

Apogee PDF RIP's AppleTalk input channel allows you to send print jobs to the Apogee PDF RIP in the same way that you send jobs to a LaserWriter printer. Once installed and configured, Apogee PDF RIP appears as an option in your Macintosh LaserWriter Chooser. When you select the Apogee PDF RIP as your printer, all LaserWriter connections are made directly to the Apogee PDF RIP. This is important if you want to use AgfaSet or other software which needs to communicate interactively with the PostScript interpreter.

If you want to send a series of PostScript jobs to the Apogee PDF RIP, it is more efficient to send them via the Windows NT spooler. Before you can do this, you must create a Windows NT Printer (printer spool queue) which is connected to the Named Pipe input channel on the Apogee PDF RIP system using the Windows NT Printers Control Panel. This printer must be shared on the network.

- ❖ **Note:** When using the Windows NT spooler, or any other spooling software such as an OPI server, you should disable background printing on your Macintosh. This is not necessary, since the spooler already copies your jobs quickly to an input buffer.

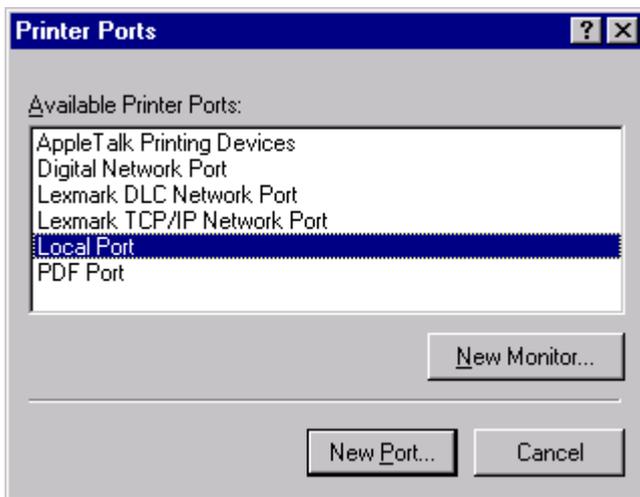
For more detailed information on printing from a Macintosh computer, refer to your "Apogee PS Companion User's Guide".

## Creating a Spool Queue to the Named Pipe Input Channel

All Windows NT spooler queues to the Apogee PDF RIP must print to the Named Pipe input channel. To create a spool queue to the Named Pipe, proceed as follows:

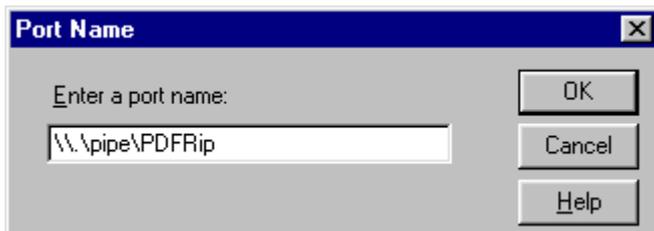
- 1 Open the Windows NT Control Panel.
- 2 Open the Printers item.
- 3 Double-click 'Add Printer'.
- 4 Select 'My Computer'.
- 5 Click 'Next >'
- 6 Click the 'Add Port...' button.

The Printer Ports dialog is displayed:



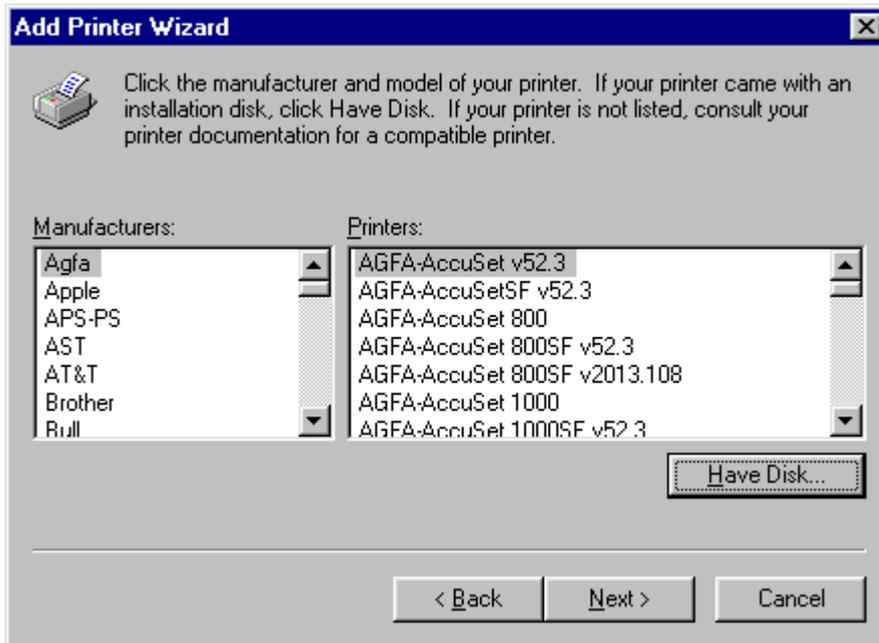
- 7 Select 'Local Port', and click on the 'New Port...' button.

The Port Name dialog is displayed.



- 8 Enter the Named Pipe name (See "Named Pipe Channel" in Chapter 5), preceded by \\.\pipe, and click the OK button.

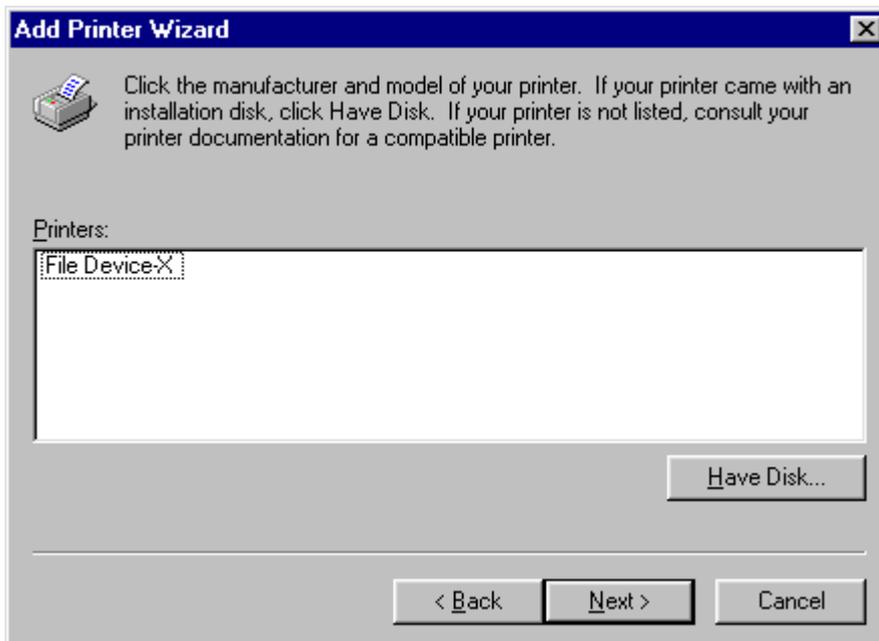
- 9 Click 'Next >'. The following dialog is displayed.



To select the printer manufacturer and printer model, you need to use the printer's OEMPRINT.INF file and the printer's PPD file. The OEMPRINT.INF file and the PPD file can be generated using the PPD Generator tool in AgfaSet (See ["PostScript Printer Description \(PPD\) File Generation"](#) in Chapter 4).

After generation, both files will be in a subdirectory of /ApogeePDFRIP/Pilots/Oemsetup.

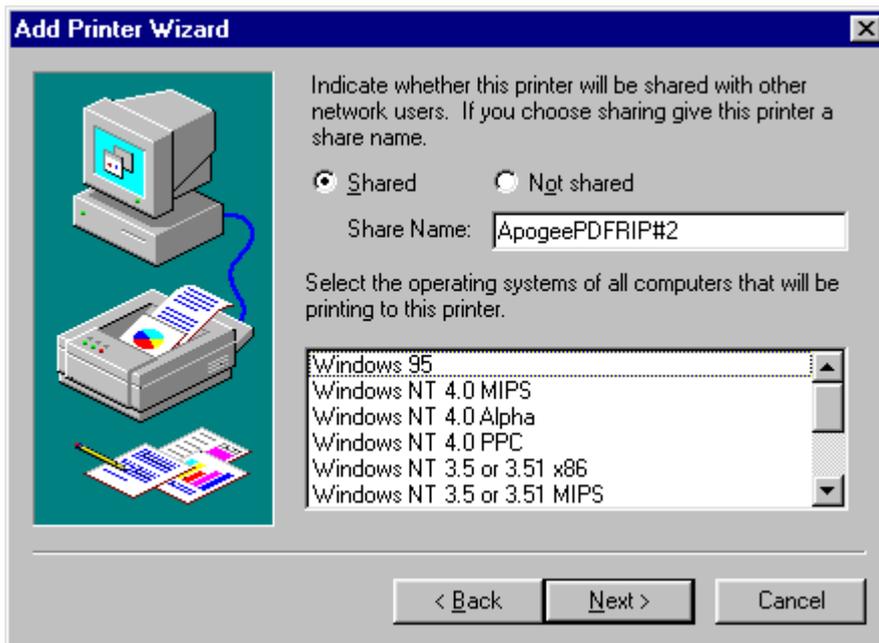
- 10 Click the 'Have Disk...' button and browse to the OEMPRINT.INF file in this subdirectory.
- 11 Click Open. The following dialog is displayed.



- 12 Select the Printer and click 'Next >'. The following dialog is displayed.



- 13 Enter a Printer name and click 'Next >'. The following dialog is displayed.



- 14 Select 'Shared' and enter the name of the shared printer. Click 'Next >'.

- ❖ Note: Sharing this Printer will make it available to all Windows NT 4.0 and Windows 98 workstations in the network. If Services for Macintosh are installed, then this Printer will also automatically be available to all Macintosh workstations in the network.

The following dialog is displayed.



- 15 Optionally select Yes to print a test page to verify if the Printer is set up properly.

Click 'Finish' to complete the Printer installation.

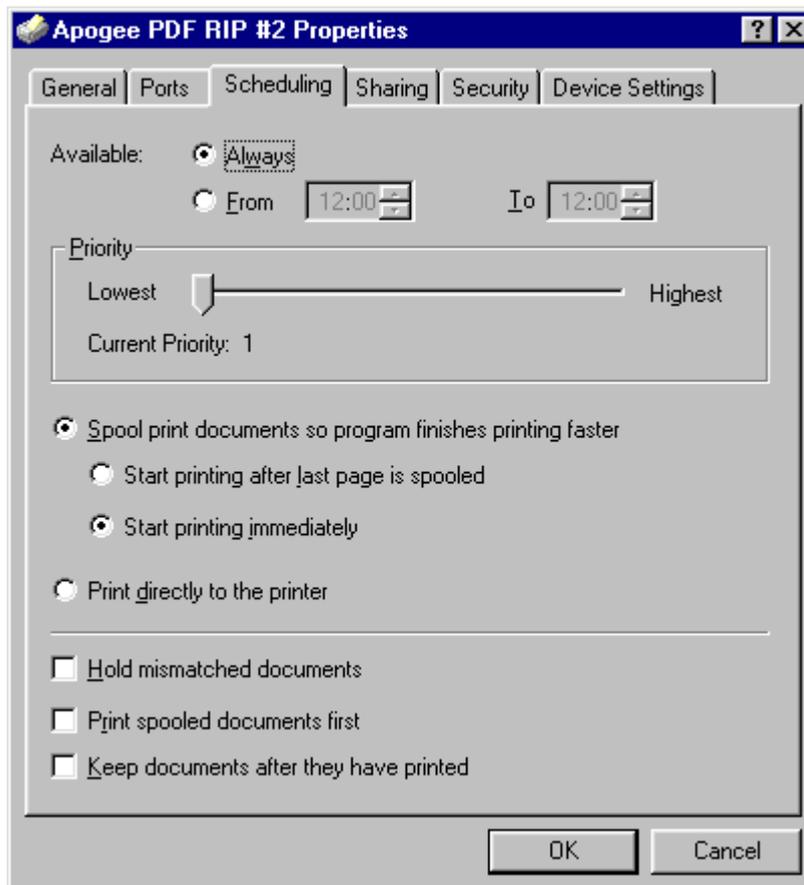
- ❖ **Note:** To create the Printer, Windows NT also needs the PSCRIPT.DLL, PSCRIPT.HLP and PSCRPTUI.DLL files. These files can be found on the Windows NT CD (e.g. in D:\i386). If you already installed a PostScript Printer on your Windows NT system, then these files can also be found in e.g. C:\WINNT\system32\spool\drivers\w32x86.
- ❖ **Note:** If you install the Printer using the PostScript driver files (PSCRIPT.DLL, PSCRIPT.HLP and PSCRPTUI.DLL) from the Windows NT CD, you should re-install the Windows NT Service Pack to complete the installation.
- ❖ **Note:** If the Services for Macintosh are installed, both the shared Windows NT Printer (spool queue) and the direct AppleTalk input channel of your Apogee PDF RIP will be available to the Macintosh workstations as LaserWriter Chooser devices.

You can significantly speed up the printing process by enabling the 'Start printing immediately' option in the 'Scheduling' tab of the Printer Properties dialog. Do the following to achieve this.

- 16 Right-click on the Printer you created in the Printers Control Panel and select Properties from the pop up menu.



- 17 Select the Scheduling tab from the Printer Properties dialog that appears.



- 18 Select 'Start printing immediately' and click 'OK'.

# Appendix B: Using Apogee PDF RIP with Windows 95/98 and Windows NT



This Appendix contains printing information for Windows 95/98 and Windows NT users.

Click on a topic name to jump to the topic:

- ◆ [Printing to Apogee PDF RIP from a Windows 95/98 or NT Computer](#)
  - [Creating a Spool Queue to the Named Pipe Input Channel](#)

## Printing to Apogee PDF RIP from a Windows 95/98 or NT Computer

If you want to send a series of PostScript jobs to the Apogee PDF RIP, it is more efficient to send them via the Windows NT spooler. Before you can do this, you must create a print queue to the Named Pipe input channel on the Apogee PDF RIP system using the Windows NT Printers Control Panel. This printer must be shared on the network.

### Creating a Spool Queue to the Named Pipe Input Channel

All Windows NT spooler queues to the Apogee PDF RIP must print to the Named Pipe input channel. To create a spool queue to the Named Pipe, refer to [“Creating a Spool Queue to the Named Pipe Input Channel”](#) in Appendix A.

# Appendix C: Using Apogee PDF RIP with UNIX Systems



This Appendix contains printing information for UNIX system users.

Click on a topic name to jump to the topic:

- ◆ [Printing to the Apogee PDF RIP from a UNIX System](#)

## Printing to the Apogee PDF RIP from a UNIX System

Depending on your UNIX system, you may have software which allows you to print to one of the Apogee PDF RIP input channels. In many cases, it will be necessary to install a separate printing application, which supports the TCP/IP “stream” printing protocol (as used in e.g. Helios Ethershare), LPR or another printing protocol, in order to print from a UNIX system.

Alternatively, use the Apogee PDF RIP’s Hot Folder input channel to send jobs to the Apogee PDF RIP from your UNIX system. The UNIX FTP protocol may be used to transfer PostScript or PDF files to the shared Hot Folder.

# Appendix D: Apogee PDF RIP Fonts



This Appendix lists the fonts that are coming with and are pre-installed on Apogee PDF RIP.

Click on a topic name to jump to the topic:

- ◆ [Apogee PDF RIP Standard Fonts](#)
- ◆ [Apogee PDF RIP Composite Fonts](#)

# Apogee PDF RIP Standard Fonts

Apogee PDF RIP is delivered with the following 138 standard fonts:

- AdobeSansMM
- AdobeSerifMM
- AlbertusMT
- AlbertusMT-Italic
- AlbertusMT-Light
- AntiqueOlive-Bold
- AntiqueOlive-Compact
- AntiqueOlive-Italic
- AntiqueOlive-Roman
- Apple-Chancery
- Arial-BoldItalicMT
- Arial-BoldMT
- Arial-ItalicMT
- ArialMT
- AvantGarde-Book
- AvantGarde-BookOblique
- AvantGarde-Demi
- AvantGarde-DemiOblique
- Bodoni
- Bodoni-Bold
- Bodoni-BoldItalic
- Bodoni-Italic
- Bodoni-Poster
- Bodoni-PosterCompressed
- Bookman-Demi
- Bookman-DemiItalic
- Bookman-Light
- Bookman-LightItalic
- Carta
- Chicago
- Clarendon
- Clarendon-Bold
- Clarendon-Light
- CooperBlack
- CooperBlack-Italic
- Copperplate-ThirtyThreeBC
- Copperplate-ThirtyTwoBC
- Coronet
- Courier
- Courier-Bold
- Courier-BoldOblique
- Courier-Oblique
- Eurostile
- Eurostile-Bold
- Eurostile-BoldExtendedTwo
- Eurostile-ExtendedTwo
- Geneva
- GillSans
- GillSans-Bold
- GillSans-BoldCondensed
- GillSans-BoldItalic
- GillSans-Condensed
- GillSans-ExtraBold
- GillSans-Italic
- GillSans-Light
- GillSans-LightItalic
- Goudy
- Goudy-Bold
- Goudy-BoldItalic
- Goudy-ExtraBold
- Goudy-Italic
- Helvetica
- Helvetica-Bold
- Helvetica-BoldOblique
- Helvetica-Condensed
- Helvetica-Condensed-Bold
- Helvetica-Condensed-BoldObli
- Helvetica-Condensed-Oblique
- Helvetica-Narrow
- Helvetica-Narrow-Bold

- Helvetica-Narrow-BoldOblique
- Helvetica-Narrow-Oblique
- Helvetica-Oblique
- HoeflerText-Black
- HoeflerText-BlackItalic
- HoeflerText-Italic
- HoeflerText-Ornaments
- HoeflerText-Regular
- JoannaMT
- JoannaMT-Bold
- JoannaMT-BoldItalic
- JoannaMT-Italic
- LetterGothic
- LetterGothic-Bold
- LetterGothic-BoldSlanted
- LetterGothic-Slanted
- LubalinGraph-Book
- LubalinGraph-BookOblique
- LubalinGraph-Demi
- LubalinGraph-DemiOblique
- Marigold
- MonaLisa-Recut
- Monaco
- NewCenturySchlbk-Bold
- NewCenturySchlbk-BoldItalic
- NewCenturySchlbk-Italic
- NewCenturySchlbk-Roman
- NewYork
- Optima
- Optima-Bold
- Optima-BoldItalic
- Optima-Italic
- Oxford
- Palatino-Bold
- Palatino-BoldItalic
- Palatino-Italic
- Palatino-Roman
- StempelGaramond-Bold
- StempelGaramond-BoldItalic
- StempelGaramond-Italic
- StempelGaramond-Roman
- Symbol
- Tekton
- Times-Bold
- Times-BoldItalic
- Times-Italic
- Times-Roman
- TimesNewRomanPS-BoldItalicMT
- TimesNewRomanPS-BoldMT
- TimesNewRomanPS-ItalicMT
- TimesNewRomanPSMT
- Univers
- Univers-Bold
- Univers-BoldExt
- Univers-BoldExtObl
- Univers-BoldOblique
- Univers-Condensed
- Univers-CondensedBold
- Univers-CondensedBoldOblique
- Univers-CondensedOblique
- Univers-Extended
- Univers-ExtendedObl
- Univers-Light
- Univers-LightOblique
- Univers-Oblique
- Wingdings-Regular
- ZapfChancery-MediumItalic
- ZapfDingbats

# Apogee PDF RIP Composite Fonts

Apogee PDF RIP is able to process all properly constructed PostScript composite fonts, as long as they can be installed on the workstation.

The Apogee PDF RIP/J version contains support for the following 12 Kanji composite fonts which are provided on the Apogee PDF RIP CD. These fonts can only be accessed when your dongle contains support for them.

- GothicBBB-Medium
- Ryumin-Light
- FutoGoB101-Bold
- FutoMinA101-Bold
- Jun101-Light
- MidashiGo-MB31
- MidashiMin-MA31
- ShinGo-Bold
- ShinGo-Light
- ShinGo-Medium
- ShinGo-Ultra
- ShinseiKai-CBSK1

# Appendix E: Glossary of Terms

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This glossary defines many of the terms used in this document with which the user may not be familiar.

## **2-up**

A description of the size of an imagesetter, platesetter, or printing press meaning that two Letter-size or A4-size pages including crop and registration marks can fit on the maximum imaging or printing area.

## **4-up**

A description of the size of an imagesetter, platesetter, or printing press meaning that four Letter-size or A4-size pages including crop and registration marks can fit on the maximum imaging or printing area.

## **8-up**

A description of the size of an imagesetter, platesetter, or printing press meaning that eight Letter-size or A4-size pages including crop and registration marks can fit on the maximum imaging or printing area.

## **application**

A computer software program that performs a specific task, such as page composition, word processing, illustration, or telecommunications.

## **button**

A pushbutton-like control in a dialog box that is clicked on to perform, confirm, or cancel an action.

## **checkbox**

A square-shaped control in a dialog box that is clicked on to enable or disable a function.

## **choose**

The user chooses a menu entry by clicking on its menu title, holding down the mouse button, dragging the arrow pointer over the entry to highlight it, and then releasing the mouse button. The user chooses a submenu entry by first highlighting the entry that displays the submenu, then moving the arrow pointer to the right and down to highlight an entry from the submenu.

## **CID**

The CID-keyed font file format was designed for large character set fonts for use with PostScript language printing software. It is the ideal format for Chinese, Japanese, or Korean fonts, and may also be used for Roman fonts with very large character sets. The characters contained in a CID-keyed font are in the standard PostScript Type 1 format that is the industry standard for high-

quality, cross-platform printing. "CID" refers to the Character ID numbers that are used to index and access the characters in the font. This method is more efficient for large fonts than the method of accessing by character name, as is used for Type 1 Roman fonts. As with OCF fonts, CID-keyed fonts also set up a composite font, but their much simpler structure means they use less memory, and the interpreter can retrieve and rasterize character outlines much faster. This font file format allows font developers to support a wide variety of character sets and encodings.

#### **click**

The user clicks with the mouse by pressing and then releasing the mouse button.

#### **CMYK**

Cyan, Magenta, Yellow, and Black - the standard ink colors used in four-color printing. CMYK is a color model based on the subtractive color theory, and is used by professional printers to reproduce color using offset lithography.

#### **CMYK image**

A four-color image containing a cyan, magenta, yellow, and black channel.

#### **color rendering dictionary**

A color rendering dictionary defines a composite color rendering function, as applied in the PostScript RIP, that transforms CIE-based color values to output device color values by applying gamut and color-mapping functions. Color rendering dictionaries actually define the transformation from a standard color space (CIE XYZ) to a specific output device color space. This color transformation is performed in the RIP.

#### **color separation**

In traditional pre-press, the separation of a color image into four layers corresponding to the four process colors (CMYK) used in process printing.

#### **composite**

A term used to refer to multi-color files (e.g. composite printing).

#### **composite Fonts**

See CID.

#### **CPSI**

Configurable PostScript Interpreter. This is the core software used in all Agfa software RIPs.

#### **crop marks**

Short vertical and horizontal lines, printed on an output medium which is larger than the page size of a document, to indicate the finished page area.

#### **DCS**

Desktop Color Separation. This is essentially an enhancement to the EPS definition for pictures that can hold the four-color separations of an image in one file or in 5 separate PostScript files.

**dialog box**

A box displayed on-screen in response to a command that involves making additional user input.

**double-click**

The user double-clicks with the mouse by pressing and releasing the mouse button twice in rapid succession without moving the mouse. Double-clicking generally opens a file or a front-end application.

**dpi**

Dots per inch: A commonly used measure for the addressability, or resolution, of scanners, monitors, printers, imagesetters, and color film recorders.

**drag**

The user drags with the mouse by selecting an object on-screen, holding down the mouse button while moving the cursor to another location, then releasing the mouse button. Dragging is used to perform operations such as creating items, moving items, and highlighting text.

**driver**

A program which is part of the operating system of a computer, and controls part of the hardware.

**EDF**

Engine Description File: This is a readable, machine-parsable text file, which provides a tool for viewing/setting the static parameters of RIPs, imagesetters, and user dialogs.

**engine**

The term Engine is used in this manual in two ways: Either to refer to a physical imagesetter or printer which writes raster data on a medium such as film or paper, or as an "EDF" (Engine Description File) which is a tool to set output-related settings.

**EPS**

Encapsulated PostScript: A standard format for a drawing, image, or complete page layout, allowing it to be placed into other documents. EPS files normally include a low resolution screen preview.

**font**

A set of letters, numbers, punctuation marks, and symbols that share a unified design. The design is called a typeface.

**FTP**

File Transfer Protocol. This is one of the standard protocols defined for use on a TCP/IP network.

**grayscale**

Shades of gray that range from black to white.

**grayscale image**

A single-channel image consisting of levels of gray (up to 256 levels of gray with 8 bits of data per pixel).

**halftone**

The reproduction of a continuous-tone image, which is made by using a screen that breaks the image into various size dots.

**halftone screen**

Traditionally, continuous-tone art (such as a photograph) is reproduced by photographing the original artwork through a crossline or contact screen. The resulting halftone image is composed of a matrix of dots, ellipses, squares, or lines of various sizes that can be reproduced via offset lithography.

**ICC color profiles**

Color profiles are electronic files that contain the information needed by the color management system to convert color data between native device color spaces and device-independent color spaces. Each profile type contains a series of algorithmic models which are used to perform the transformation between color spaces. The ICC is the International Color Consortium.

**imagesetter**

A high resolution printer used to prepare high-quality page art on paper or film (usually at resolutions between 1,000 and 5,000 dots per inch).

**job ticket**

A job ticket is a predefined set of PPD print options which has been saved for future use. Job tickets can be created using Agfa's Job Ticket Creator application, and are designed for use with multiple-file job input. Once a job ticket has been created, it can be selected and used by a user whenever he wants to input a job. However, the job settings are not saved with the document. The settings are related to the selected PPD file for a specific chooser device.

**lineart**

Refers to pictures that contain only black-and-white, with no shades of gray. Also known as bi-level images.

**menu**

A list of commands that is displayed when clicking and holding down the mouse button on a menu title in the menu bar.

**menu bar**

The horizontal strip, displayed at the top of the screen, that contains menu titles.

**menu entry**

An individual entry in a menu. Choosing a menu entry causes an action to be performed, displays a submenu, or opens a dialog box.

**menu title**

A word or phrase in the menu bar that identifies one menu. Clicking on a menu title displays its associated menu entries.

**network**

A cabling system which allows a number of devices such as workstations and printers to communicate with each other. Each device in the network can offer specific services, or be a user of services provided by other devices.

**OCF**

OCF (Original Composite Font) is a complex font structure designed to support the printing of multiple character sets from multiple operating systems. OCF uses intermediate “fonts” to select different sets of characters for printing from a Windows system than those used for a Macintosh system. While OCF format fonts offer high quality and will continue to be used by many users of existing font products, the format does not offer the flexibility and simplicity that are key benefits of the CID-keyed format.

**OPI**

Open Prepress Interface. A specification that describes how a document refers to external images (low or medium resolution) without actually including them in a document. At print time, an OPI server replaces these low or medium resolution images by their high resolution counterparts.

**Pantone Colors**

Premixed ink colors often specified by graphic designers for spot colors in multi-color print jobs.

**PDF**

Portable Document Format. A file format used to describe cross-platform documents which are created using Adobe Acrobat Exchange or Acrobat Distiller, and which can be viewed on-screen and printed, using Adobe Acrobat Reader.

**point**

A basic unit of typographic measurement. A point is approximately equal to 1/72 of an inch.

**PostScript**

PostScript is the name of a computer programming language developed originally by Adobe Systems Incorporated to communicate high-level graphic information to digital laser printers. It is a flexible, compact, and powerful language for expressing graphic objects, and for performing general programming tasks. As is true with many programming languages, the PostScript language has been designed for a specific purpose - to express complex digital graphics in a device-independent manner. Powerful typesetting features are built into the language for sophisticated handling of letterforms and graphics.

**PPD**

PostScript Printer Description: This is a readable, machine-parsable text file that provides a uniform approach to using the diverse special features of devices that contain PostScript interpreters. These features include different page sizes, different methods of paper and film handling, memory

size, font availability, and finishing features such as duplex printing and stapling. All devices do not have the same set of features, and even devices with the same features do not necessarily invoke those features in the same way. The information contained in PPD files serves as a list of available features, as basis for building a user interface, and as a mechanism for invoking the features on a particular device. The PPD file also contains the PostScript language code to invoke each feature.

### **printer font**

A bitmapped or outline font that is resident in the printer, or is downloaded to the printer during printing. Computer fonts have two components: a screen font for on-screen display and a printer font for printing.

### **process color**

Any color (except cyan, magenta, yellow, black, white, and certain PANTONE colors) can be specified as spot colors or process colors. When separations are printed, all process colors on a page are broken down into their cyan, magenta, yellow, and black components, each of which is printed on its own separation plate. When combined during offset printing, the process colors can reproduce full-color page art.

### **process color separation**

In order for a professional printer to reproduce full-color documents using offset lithography, color pages must be broken down into the four process separation colors - cyan, magenta, yellow, and black.

### **PSE**

Agfa's PostScript Environment (PSE) is RIP software which allows you to customize your output settings according to your particular requirements, and to modify these settings on a job-by-job basis. PSE can be regarded as an extremely flexible and powerful front-end to your existing PostScript configuration. Once installed, PSE will upgrade your generic PostScript RIP into an Agfa PostScript RIP. This will allow you to make use of Agfa-specific resources, tools, and technologies which have been designed to produce the highest quality output from Agfa proofers and related output engines. PSE uses AgfaSet as its front-end management interface for both Macintosh and PC systems.

### **registration marks**

Reference marks that appear on camera-ready art, generally for CMYK color separations, that help align the overlaying printing plates.

### **resolution**

A measure of the fineness of spatial detail that a device can record or produce. The higher the resolution, the finer the detail. Resolution is expressed in elements per unit length; for example, pixels per inch (ppi) for scanners and monitors. (refer also to dpi).

### **resources**

PostScript is designed with various features which are controlled by collections of objects. These object-collections are referred to as resources (with names such as Font or Halftone), and are stored centrally. Specific resources, which can be downloaded to the output RIP, include Font, Halftone, ColorRendering, ProcSet, Form, Pattern, ColorSpace, and Encoding.

**RGB**

Red, Green, Blue: Refers to the primary colors, namely Red, Green, Blue, in the additive color model. The RGB model is used in color televisions, monitors, scanners, and color film recorders.

**RIP**

Raster Image Processor: A module that converts a page description that it receives from the server into a matrix of dots, ready for output to a specific output device, such as an imagesetter, platemaker, proofer, or color printer. RIP software can run on a standard computer (commonly called a 'software RIP') or on dedicated hardware (commonly called a 'hardware RIP').

**screen angles**

The angles at which halftone screens are placed in relation to one another.

**screen font**

A bitmap representation of a font that is used to display the characters on-screen.

**screen frequency**

The density of dots on the halftone screen, commonly measured in lines per inch (also known as screen ruling).

**scroll bars**

Shaded bands at the right and bottom of a document window that allow the user to move horizontally and vertically through a document. A scroll bar includes a scroll box and scroll arrows at both ends. Some dialog boxes also contain scroll bars that allow the user to view the items in a list.

**shared volume**

A shared volume is an area of the server's hard disk which can be viewed and accessed as a series of normal desktop folders on the front-end workstation.

**spot color**

Any color (except cyan, magenta, yellow, black, white, and certain PANTONE colors) can be specified as spot colors or process colors. When separations are printed, each spot color on a page is printed onto its own separation plate. In contrast, process colors are broken down into their cyan, magenta, yellow, and black components, each of which is printed on its own separation plate.

**TCP/IP**

Transmission Control Protocol / Internet Protocol: This is a communications "language" which is used to enable two different computers to exchange data over a network, particularly over the Internet.

**TIFF**

Tagged Image File Format: This is a standard file format used for exchanging bitmapped images between applications or platforms.

**TRUMATCH colors**

TRUMATCH is a process color matching system for specifying predictable process colors. The TRUMATCH color system provides predictable four-color (CMYK) matching of more than 2,000 process colors.

**typeface**

A set of fonts that share a unified design. For example, the Futura typeface includes among other fonts the Futura Book, Futura Bold, Futura Italic, and Futura Bold Italic fonts.

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