Application Notes

Controlling PostScript Rasterization

ergosoft

rip solutions

Controlling PostScript Rasterization

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The **ErgoSoft RIP** is available in different editions. Therefore the description of available features in this document does not necessarily reflect the license details of your edition of the **ErgoSoft RIP.** For information on the features included in your edition of the **ErgoSoft RIPs** refer to the ErgoSoft homepage or contact your dealer.

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Introduction

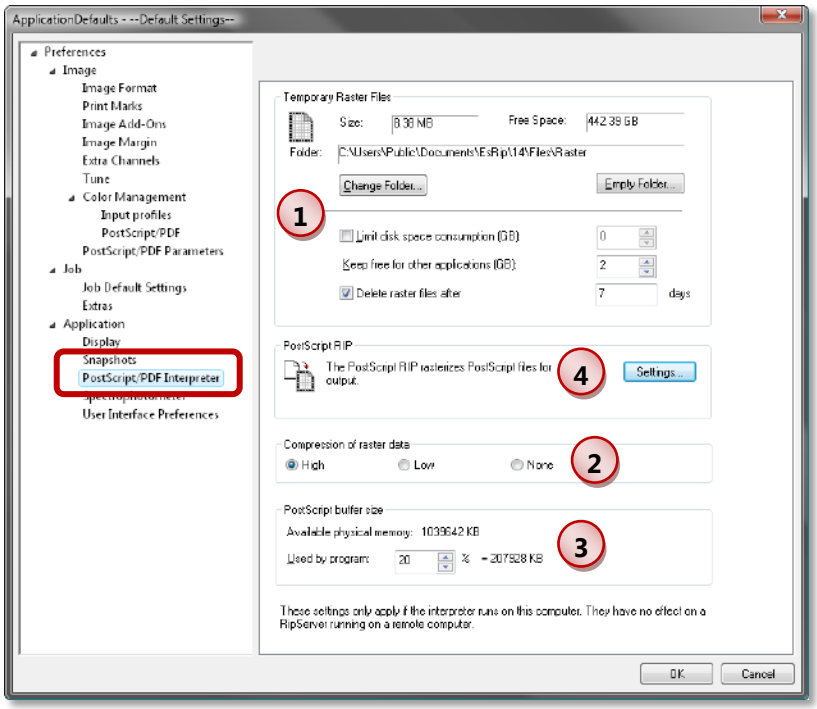
PostScript files are rasterized using a so-called PostScript interpreter which can be configured according to your needs. Some settings relate to the PostScript interpreter itself, some relate to the images. Thus, the configuration is done globally affecting all images imported after the settings are specified. In addition, some settings can be changed for each image.

Global PostScript Interpreter Settings

The global PostScript interpreter settings concern settings about fonts, storage of temporary raster files, memory usage, etc.

To specify the global PostScript Interpreter settings

- In the ***JobComposer*** select menu *Tools* > *Options* > *Preferences* > *Application* > *PostScript/PDF Interpreter*
- In the ***Rip Server*** select menu *Tools* > *Options*
- Please note that the settings relate only the PostScript interpreter running on the computer on which the settings are done.



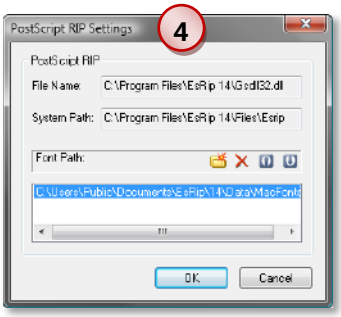
1 Raster files are saved in a folder so that the images must not be rasterized again when a job with (Encapsulated) PostScript files is reproduced. This function configures the raster file management.
You may

- set the folder in which raster files are to be saved **(Change Folder)**
- delete all saved raster files to get more available space on the disk **(Empty Folder)**
- limit the disk space that raster files may occupy
- set the disk space that must be kept free for other applications
- specify the number of days after which the raster files are to be removed automatically

2 Select the level of **Compression of raster data** suitable for your image files. The higher the compression level the less space is needed on the hard drive resulting in faster writing and reading the data but the more CPU time is needed to uncompress the data.

3 Enter the value of the **PostScript buffer size** in percentage of the available physical memory that may be used by the PostScript interpreter. The recommended value is 20% of the available physical memory. When the value is too low, the PostScript interpreter will be slower because too many too small blocks are needed for reading and rasterizing the file. When the value is too high, the PostScript interpreter will be slower because there is not enough memory left for other purposes. Please note that the available physical memory is less than the available memory for Windows because it only concerns the memory that is available to the PostScript interpreter.

4 Since the PostScript interpreter will always load all available fonts, the **ErgoSoft RIP** manages its fonts independently from Windows. Thus, each font that is installed in Windows that will be used with the **ErgoSoft RIP** must also be installed in the **ErgoSoft RIP.**



This section allows for the specification of the paths where the **ErgoSoft RIP** should look for fonts.

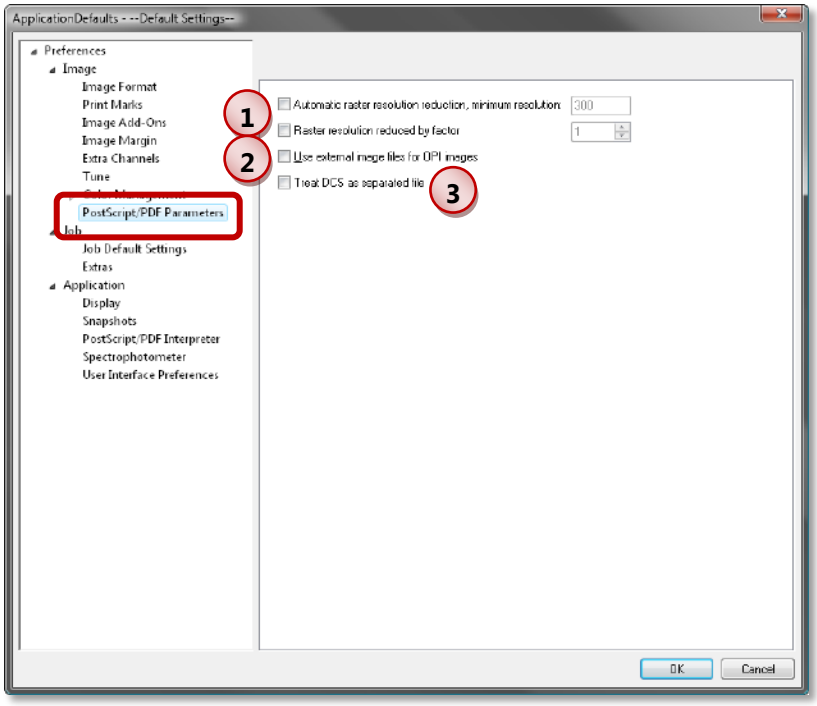
List **Font Path** allows all paths in which the PostScript interpreter will look for fonts to be entered.

Clicking on the icons allows adding a new path, removing the marked path from the list, and setting the order of the paths.

Global PostScript Image Settings

The global PostScript image settings concern settings about raster resolution, OPI files, DCS files, etc.

To specify the global PostScript image settings select menu *Tools* > *Options* > *Preferences* > *Image* > *PostScript/PDF Parameters*.



1 Sometimes, it is wise or even necessary not to rasterize the PostScript or PDF file for the output resolution because e.g. the output dimensions are too big. Then, you can either specify a minimum resolution for automatic raster resolution reduction or a factor. Additional scaling is done that may result in a small loss of quality in fonts and straight lines.

2 Importing OPI files requires **Use external image files for OPI images** being checked in order to use the external image. Deselecting this field is necessary whenever importing the file results in a "searching for missing linked file" error (e.g. for FreeHand 5 PostScript files).

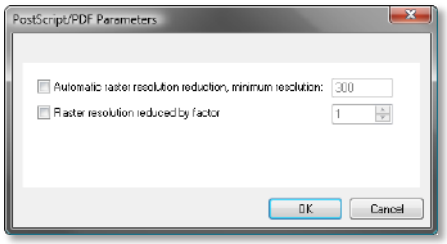
3 By default, DCS files are treated as CMYK files with additional color channels, if any. Checking **Treat DCS as separated file** treats DCS files as multi-channel files without the possibility of assigning an input profile or using any color corrections.

Individual PostScript Image Settings

Since the raster resolution reduction might be necessary for just some image, this setting can be specified for each image individually – in addition to the global setting affecting all images imported afterwards.

To specify the PostScript settings for the current image select **Edit Parameters** from the *Image context* menu.

The settings are already described in the chapter above.



Limits of the PostScript Interpreter

Size of File to be Rasterized

The physical size of the PostScript or PDF file does not matter as long as the operating system can handle it. Important is the output dimension: The maximum size in lines or characters per line the PostScript interpreter can handle is about 524600. Printing 720 dpi this is about 18.5 m. When needing to print larger output, you have to use the functionality for reducing the raster resolution (see above).

Amount of Raster Data in PDF Files

The sum of all raster data in a PDF file must not exceed 2 GB for the uncompressed size. When the sum is more, you have to include raster files with lower resolution in the PDF file.