



# **HP Ergosoft RIP Color Edition**

## **Reference Manual**

ErgoSoft AG  
Moosgrabenstr. 13  
CH-8595 Altnau, Switzerland

© 2018 ErgoSoft AG, All rights reserved.

The information contained in this manual is based on information available at the time of publication and is subject to change without notice. Accuracy and completeness are not warranted or guaranteed.

No part of this manual may be reproduced or transmitted in any form or by any means, including electronic medium or machine-readable form, without the expressed written permission of ErgoSoft AG.

Brand or product names are trademarks of their respective holders.

The description of available features in this document does not necessarily reflect the license details of your edition of the [HP Ergosoft RIP Color Edition](#). For information on the features included in your edition of the [HP Ergosoft RIP Color Edition](#) refer to the website [www.ergosoft.net/hp](http://www.ergosoft.net/hp)

Rev. 2.1

|   |    |
|---|----|
| Introduction .....                                | 5  |
| HP Ergosoft RIP Color Edition Installation .....  | 6  |
| Installation Procedure .....                      | 6  |
| Initial Configuration .....                       | 9  |
| First Print.....                                  | 13 |
| Initial Setup .....                               | 14 |
| Output Device Settings.....                       | 14 |
| Creating the Printer Port.....                    | 14 |
| Print Settings .....                              | 15 |
| Quality Tab .....                                 | 15 |
| Printing Ink Assignment Tab.....                  | 16 |
| Device Options Tab.....                           | 16 |
| Closing the Print Settings Dialog .....           | 16 |
| Printing with HP Ergosoft RIP Color Edition ..... | 17 |
| Basics of Printing.....                           | 17 |
| General Print Workflow.....                       | 18 |
| RIP Modules .....                                 | 19 |
| JobComposer .....                                 | 19 |
| JobCenter .....                                   | 19 |
| RIP Server .....                                  | 19 |
| Album .....                                       | 19 |
| Preview Server.....                               | 19 |
| Print and Cut Clients .....                       | 19 |
| User Interface.....                               | 20 |
| Application Appearance and Workspaces.....        | 20 |
| Workspaces.....                                   | 20 |
| Creating a New Workspace .....                    | 20 |
| Using a Predefined Workspace.....                 | 20 |
| Changing the Application Look.....                | 20 |
| Changing the Accent Color .....                   | 20 |
| Integrated Job Queue .....                        | 20 |
| Properties and Selection Windows .....            | 20 |
| Design Program Window.....                        | 21 |
| Toolbar .....                                     | 21 |
| Status Bar .....                                  | 22 |
| Activating the Status Bar .....                   | 22 |
| Rulers .....                                      | 22 |
| Activate the rulers.....                          | 22 |
| Job Zooming Functions .....                       | 22 |
| Zoom In.....                                      | 22 |
| Zoom Out.....                                     | 22 |
| Zoom to width.....                                | 22 |
| Zoom to height.....                               | 22 |
| Guide Lines .....                                 | 23 |
| Print Environment .....                           | 24 |
| Using and Creating Print Environments.....        | 24 |
| Using a Predefined Print Environment.....         | 24 |
| Importing a Print Environment.....                | 24 |
| Creating a New Print Environment .....            | 24 |

|  |    |
|--|----|
| Removing a Print Environment.....        | 24 |
| Saving a Print Environment .....         | 24 |
| Modifying a Print Environment .....      | 25 |
| Manage Write protection .....            | 25 |
| Tree Structure .....                     | 25 |
| Print Environment Settings.....          | 25 |
| The General Tab .....                    | 25 |
| The Quality Tab .....                    | 25 |
| The Output Device Tab .....              | 25 |
| The Extras Tab .....                     | 26 |
| Printing Ink Assignment Tab.....         | 26 |
| The Ink Control Tab .....                | 26 |
| Media Size Tab.....                      | 26 |
| Device Options Tab.....                  | 26 |
| Job .....                                | 27 |
| Job Handling .....                       | 27 |
| Creating a New job.....                  | 27 |
| Specifying the Job Size .....            | 27 |
| Opening an Existing Job .....            | 27 |
| Opening a Recent Job .....               | 27 |
| Multi Page Jobs .....                    | 27 |
| Saving a Job.....                        | 27 |
| Closing a Job .....                      | 27 |
| Closing All Jobs .....                   | 27 |
| Tabbed job view.....                     | 28 |
| Adding Image or Job Element to Job ..... | 28 |
| Importing Image.....                     | 28 |
| Adding Job Element.....                  | 28 |
| Editing Job .....                        | 29 |
| Arrangement of the Images .....          | 29 |
| Nesting .....                            | 29 |
| Selecting Images .....                   | 29 |
| Selecting One Image .....                | 29 |
| Selecting Several Images .....           | 29 |
| Selecting Successive Images.....         | 29 |
| Selecting All Images on the Job.....     | 30 |
| Positioning Images .....                 | 30 |
| Numerical Input.....                     | 30 |
| Simple Positioning.....                  | 30 |
| Positioning Adjoining another Image..... | 30 |
| Activating Overlay Mode .....            | 30 |
| Split overlaid images.....               | 30 |
| Alignment Functions .....                | 30 |
| Grouping Images .....                    | 30 |
| Moving an Image to another Job .....     | 30 |
| Cancel Moving .....                      | 30 |
| Rotating Images.....                     | 31 |
| Mirroring Images.....                    | 31 |
| Mirroring Images.....                    | 31 |

|                                     |    |
|-------------------------------------|----|
| Duplicating Images.....             | 31 |
| Duplicating Images.....             | 31 |
| Image Layout.....                   | 32 |
| Scaling Images .....                | 32 |
| Numerical Scaling .....             | 32 |
| Manual Scaling .....                | 32 |
| Cropping Image .....                | 32 |
| Numerical Cropping .....            | 32 |
| Manual Cropping .....               | 32 |
| Tiling Images.....                  | 32 |
| Manual Tiling.....                  | 32 |
| Disconnect Parts .....              | 33 |
| More Image Layout Functions .....   | 33 |
| Print Marks .....                   | 33 |
| Undo/Redo .....                     | 33 |
| Center.....                         | 33 |
| Group .....                         | 33 |
| Export.....                         | 33 |
| Edit.....                           | 33 |
| View.....                           | 33 |
| Printing a Job .....                | 34 |
| Composite Presets .....             | 34 |
| Default Presets .....               | 34 |
| Image Color Control.....            | 34 |
| Color Management.....               | 34 |
| Components of Color Management..... | 34 |
| Color Replacement.....              | 35 |
| Color Replacement Presets .....     | 35 |
| Tune.....                           | 35 |
| Pure Colors.....                    | 35 |
| Color Tools .....                   | 36 |
| Swatch Book .....                   | 36 |
| Add New Colors.....                 | 36 |
| Print Similar Colors .....          | 36 |
| Named Colors .....                  | 36 |
| Add New Colors.....                 | 36 |
| Print Similar Colors .....          | 36 |
| Measure Colors.....                 | 37 |
| Configuration .....                 | 38 |
| Application Defaults .....          | 38 |
| Preferences .....                   | 38 |
| Image .....                         | 38 |
| Color Management.....               | 38 |
| PostScript/PDF Parameters.....      | 38 |
| Mask Image.....                     | 38 |
| Job .....                           | 39 |
| Application .....                   | 39 |
| Spectrophotometer.....              | 39 |
| User Interface Preferences .....    | 39 |

|  |    |
|--|----|
| Special features .....                               | 40 |
| Step and Repeat.....                                 | 40 |
| Cutting Job.....                                     | 40 |
| Linearization and Profile Tools .....                | 41 |
| Density Linearization.....                           | 41 |
| Density Relinearization .....                        | 41 |
| Other Tools .....                                    | 42 |
| Scan and Twain Source .....                          | 42 |
| Maintenance Tool .....                               | 42 |
| Configuration .....                                  | 42 |
| Select User Interface language.....                  | 42 |
| Set User data path .....                             | 42 |
| Automatically Start Program .....                    | 42 |
| Activate Windows Explorer Job Previews .....         | 42 |
| Deactivate Windows Explorer Job Previews.....        | 42 |
| Manage User Levels .....                             | 42 |
| Show License Info .....                              | 42 |
| Troubleshooting .....                                | 43 |
| Create Support Data ZIP File .....                   | 43 |
| Register COM Interfaces.....                         | 43 |
| Empty Snapshot Folder List.....                      | 43 |
| Delete all temporary raster files .....              | 43 |
| Reset Current Print Environment.....                 | 43 |
| Reset Current Cut Environment.....                   | 43 |
| Shut down all RIP components .....                   | 43 |
| Reset current JobComposer workspace.....             | 43 |
| Documentation .....                                  | 44 |
| About .....  | 44 |
| HP Color Tool Guides .....                           | 45 |
| HP Easy Profiling.....                               | 45 |
| Step 1: Creating a new Substrate on the Printer..... | 45 |
| Step 2: Connecting the RIP to the Printer .....      | 47 |
| Step 3: Select Media and Print Mode.....             | 47 |
| Step 4: Profile Name.....                            | 48 |
| Step 5: Measuring .....                              | 49 |
| Step 6: Generating the Profile .....                 | 50 |
| Print Pantone Emulation Swatchbook.....              | 51 |
| Accessing the Feature .....                          | 51 |
| Selecting the Swatchbook.....                        | 51 |
| Generating and Printing the Swatchbook Job .....     | 52 |
| HP Professional Pantone Emulation .....              | 53 |
| Accessing the Feature .....                          | 53 |
| The Color List.....                                  | 53 |
| Color Details.....                                   | 54 |
| Advanced Settings (Further Color Adjustment).....    | 55 |
| Saving your Changes .....                            | 55 |

## Introduction

The purpose of this document is to give you a complete overview of the functions and features of the [HP Ergosoft RIP Color Edition](#).

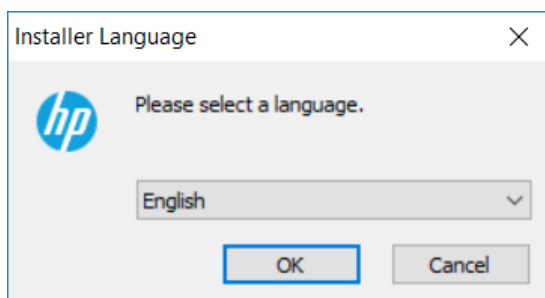
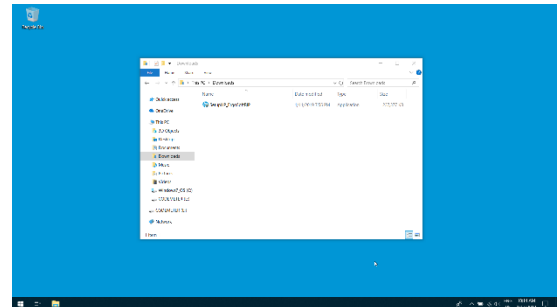
# HP Ergosoft RIP Color Edition Installation

## Installation Procedure

To begin with the Installation, navigate to the folder you downloaded the HP Ergosoft RIP Color Edition to. Many browsers will default to downloading files to «Downloads» under Windows, but it might be somewhere else if you chose a custom save location.

Double-click on the setup file and wait for the installer to prepare the installation.

On modern Windows systems, you might need to confirm a firewall message to allow access for the installer.

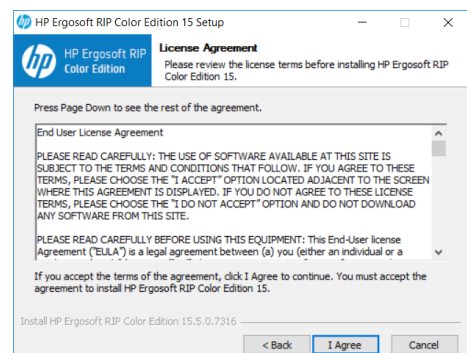
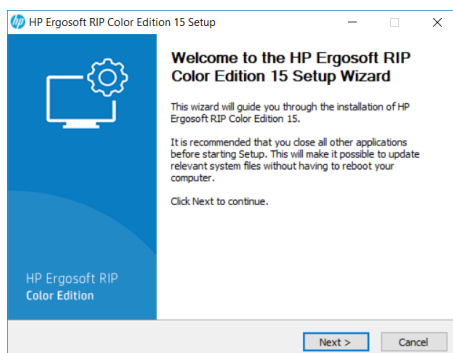


Select the user interface language for the software. The installation and user interface of the RIP will then be displayed in this language.

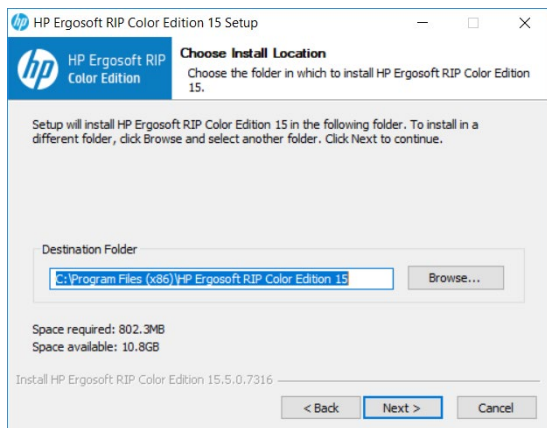
This setting can easily be changed after the installation should you wish to use the software in a different language later on.

After a moment, the welcome screen will appear. Simply click next to proceed with the installation.

Read and confirm the Software License Agreement using the / Agree button. If you do not wish to accept the software license agreement, click Cancel to quit the installation.





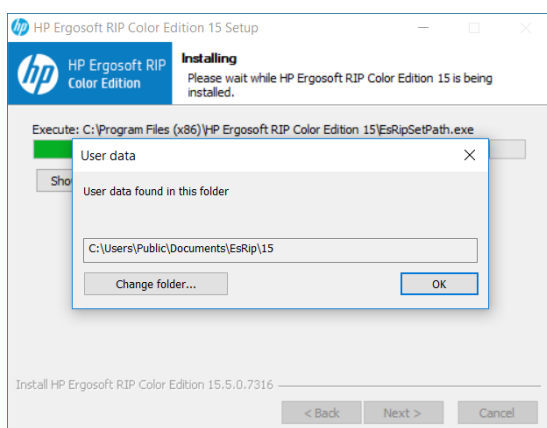
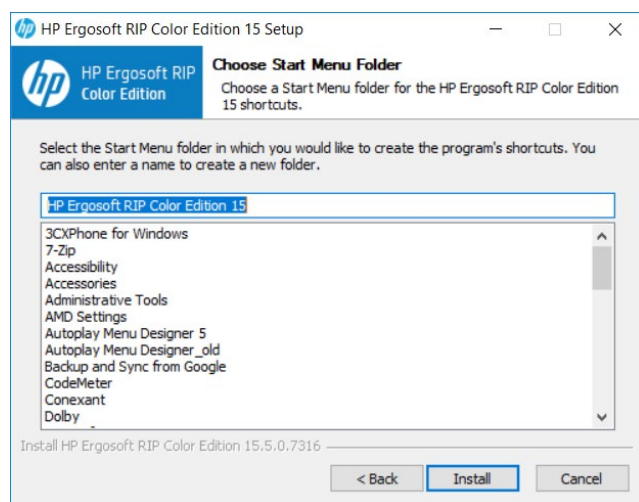


Select the installation directory for the main HP Ergosoft RIP Color Edition program. This is where the software itself will be installed to.

By default the suggested path will be in the Windows program directory but you may install the program to a custom location. To do so, click *Browse* and select the folder you wish to install the software to.

Select the *Start Menu Folder*, this is the folder the RIP will appear in when you access the Windows *Start* button.

When you are satisfied with your choice, click *Install* and wait for the installer to finish copying files.



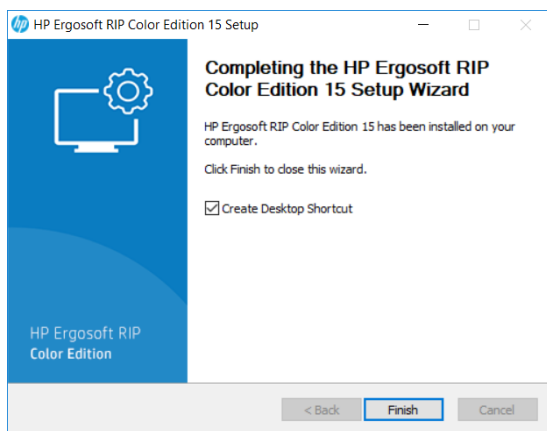
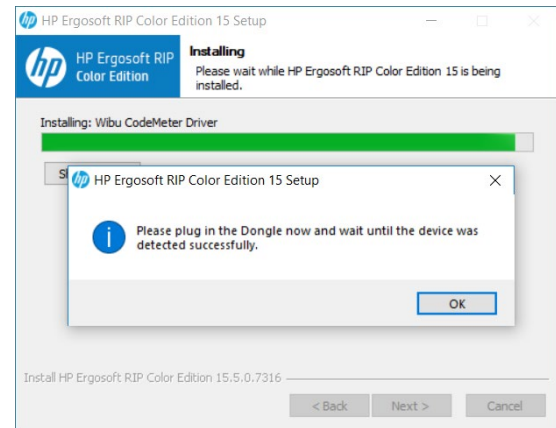
Towards the end of the installation, a prompt will appear, asking you to select a *User Data* folder. This is the folder where your user specific data such as software configuration, profiles, etc. will be stored.

Generally we recommend using the default path to ensure Windows gives the program full access to the folder, but you may of course select a custom path by clicking the *Change Folder...* button.

When you are satisfied, confirm with *Ok* to continue.

After a moment, another prompt will appear asking to plug in the dongle.

Make sure the silver USB Dongle you received with your HP Ergosoft RIP Color Edition is currently plugged into the system, then confirm with *Ok*.



Wait for the file copy process to finish, then press *Next*. Another dialog will appear with a checkbox that lets you set if a shortcut to the HP Ergosoft RIP Color Edition should be created.

Click *Finish* to complete the installation.

Congratulations! You have successfully installed the HP Ergosoft RIP Color Edition!

## Initial Configuration

When first starting the HP Ergosoft RIP Color Edition, you will be prompted to do some initial configurations.

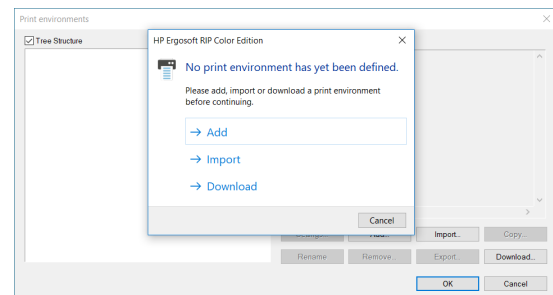
Start the software by double-clicking the Desktop Shortcut. After a moment, the Print Environment dialog will appear with a prompt stating that «No Print Environment has been defined».

You have 3 options to add a new Print Environment:


**Add:** Lets you select your printer model and create a new, empty Print Environment without density linearisation or profile.

**Import:** Lets you import an existing Print Environment from a .PrEnv or PrEnvPck file.

**Download:** Connects to the HP Ergosoft RIP Servers and allows you to download from a selection of pre-configured Print Environments containing Density Linearization and Profile.



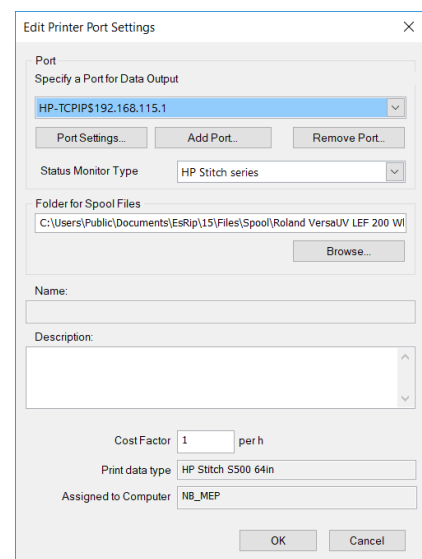
## Configuring a Print Environment with Add

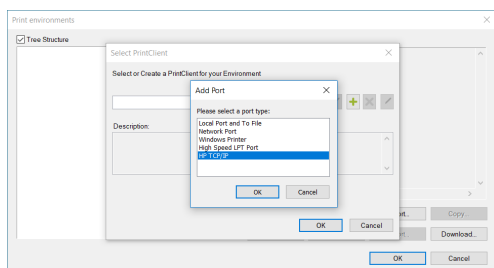
If you selected Add, the software will automatically start the PrintClient configuration for you. In the *Select PrintClient* Window, click the  Icon to add a new PrintClient and configure your port. The HP Ergosoft RIP Color Edition will then display a list of the available printers. Select your model.

The next dialog sets up the PrintClient, a waiting queue to manage print jobs.

By default, the folder for temporary spool files will be created in the *User Data* folder, but you may of course customize the folder, though it is recommended to make sure there is enough harddisk space available at the selected location for the spool files, as they may reach several GB for large print jobs.

Since at this point we don't have any predefined port to select for the PrintClient, click *Add Port*.





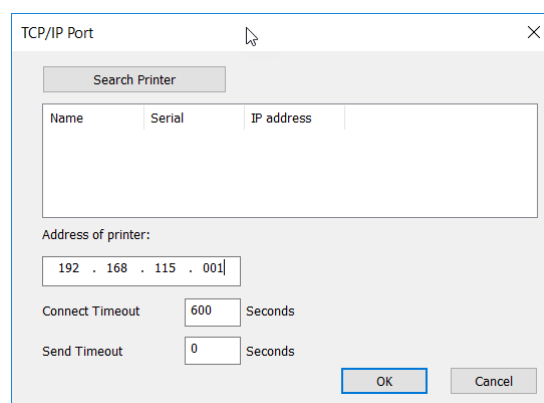
In *Add Port*, select the port type HP TCP/IP and confirm with Ok to continue with the port configuration.

There are now two options to add the port. You may either:

Click on *Search Printer* to auto-detect the printer in the network, then select the appropriate one from the list.

Or

Enter the IP address into the respective field at the bottom.



Connect and Send timeout can be left at their default values in most cases.

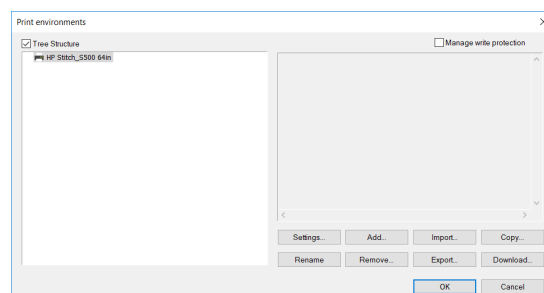
When you are done, click *Ok* to confirm and get back to the PrintClient configuration window. In *Port*, you'll find the printer port we just created already preselected.

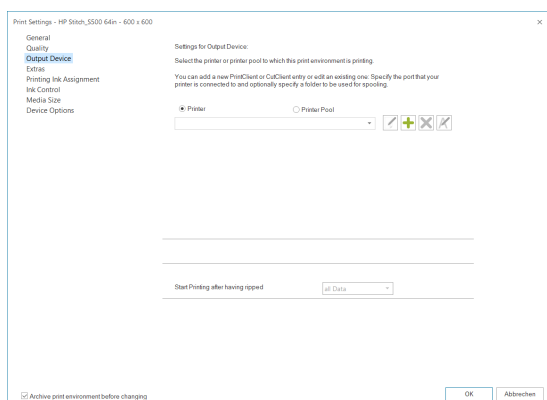
Confirm with *Ok* and specify a name for your PrintClient, confirm the selection, and finally enter a name for your newly created Print Environment to complete the initial configuration.


## Configuring Print Environment with *Import & Download*

After you have imported or downloaded your initial Print Environment through the respective button, we will need to configure the printer port so we can send data to the printer.

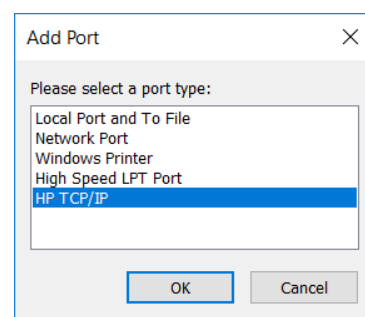
To do this, select the Print Environment you added in the *Print Environments* dialog and click the *Settings* button.



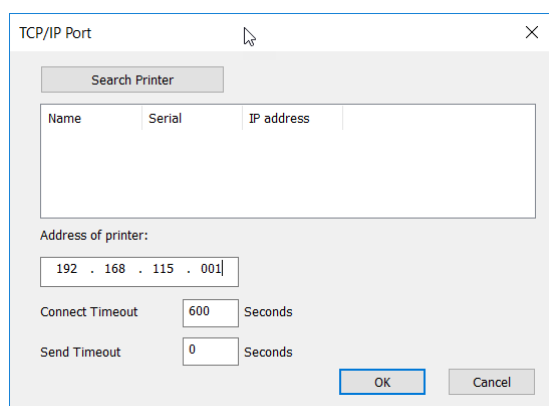


Navigate to *Output Device*. As we have not yet defined a port, the dropdown list of PrintClients will be empty. Click on the  icon to add a PrintClient and define the printer port.

In *Add Port*, select the port type HP TCP/IP and confirm with *Ok* to continue with the port configuration.



There are now two options to add the port. You may either:



Click on *Search Printer* to auto-detect the printer in the network, then select the appropriate one from the list.

**Or**

Enter the IP address into the respective field at the bottom.

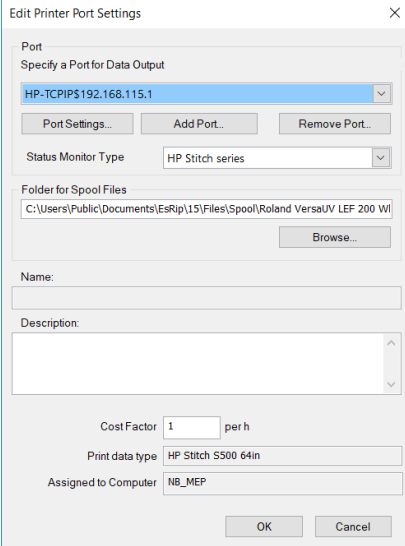
Connect and Send timeout can be left at their default values in most cases.

When you are done, click *Ok* to continue.

The next dialog sets up the PrintClient, a waiting queue to manage print jobs.

By default, the folder for temporary spool files will be created in the User Data folder, but you may of course customize the folder, though it is recommended to make sure there is enough harddisk space available at the selected location for the spool files, as they may reach several GB for large print jobs.

When you are happy with the configuration, confirm with *Ok*. Then confirm the Print Environment settings dialog with *Ok*.




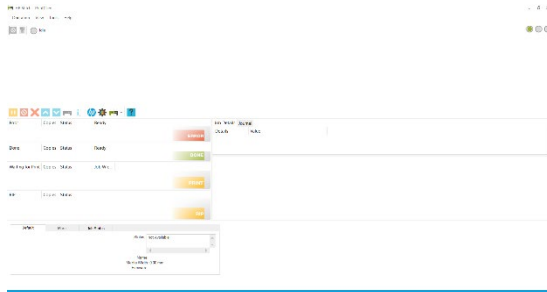
The screenshot shows the 'Edit Printer Port Settings' dialog box. It has a title bar with a close button. The main area is divided into several sections: 'Port' with a dropdown menu showing 'HP-TCP/IP\$192.168.115.1' and buttons for 'Port Settings...', 'Add Port...', and 'Remove Port...'; 'Status Monitor Type' with a dropdown showing 'HP Stitch series'; 'Folder for Spool Files' with a text field containing a long path and a 'Browse...' button; 'Name:' with an empty text field; 'Description:' with a large empty text area; 'Cost Factor' with a value of '1' and 'per h'; 'Print data type' with a dropdown showing 'HP Stitch S500 64in'; and 'Assigned to Computer' with a dropdown showing 'NB\_MEP'. At the bottom are 'OK' and 'Cancel' buttons.

This completes the Print Environment and port setup and brings you to the main RIP interface, called the JobComposer.

At first launch, the JobComposer will show the *Awareness Screen*, highlighting the HP Color Tools features. When you are ready, close the dialog by confirming with *Ok*.

## First Print


To print your first job, first open the PrintClient we configured earlier by clicking on the PrintClient Icon in the toolbar. Note that clicking the PrintClient icon  will always open the PrintClient set in the currently selected Print Environment.



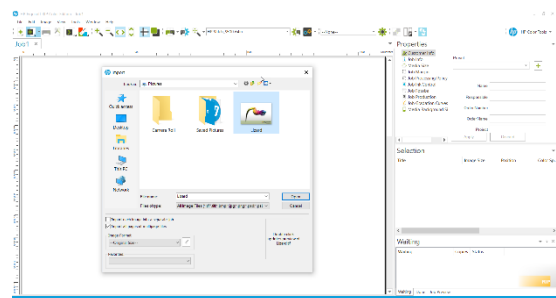
When the PrintClient opens, set it to Online by clicking on the first of the 3 dots at the top right so it turns green.

When set to Online, the PrintClient will automatically send all data to the printer as soon as it is ready.

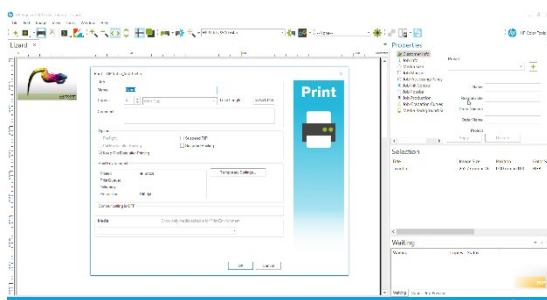
When set to Offline, it will not send any data to the printer, but instead prepare the raster data and place it in the waiting queue until the PrintClient is set to Online.


Go back to the JobComposer and import an image file by clicking the Import button .

Then navigate to your image file, select it and click Open.



Once the image is imported, you can make further adjustments to it in the properties bar to the right like scaling, rotating etc.



When you are satisfied, make sure the printer is ready, then click the *Print* Icon . Double check the copies and settings in the Print Dialog, then confirm with Ok to send your job to the printer.

You can now follow the progress of your Job in the PrintClient window as well as see Job Details, manage your Job queue, change priorities, abort jobs, etc.

## Initial Setup

For a detailed description of a first setup of the [HP Ergosoft RIP Color Edition](http://www.Ergosoft.net/hp), please refer to the website [www.Ergosoft.net/hp](http://www.Ergosoft.net/hp).

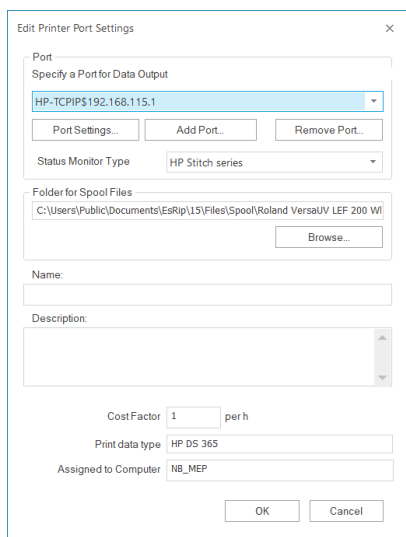
### Output Device Settings

The **Output Device** settings allow you to set up a printer or printer/cutter configuration which determines how the data is sent to a specific printer or printer/cutter. Once created, this configuration file can be selected whenever you create a new print environment for this printer or printer/cutter.

#### Creating the Printer Port

In this dialog you can specify the required information, such as the printer port to be used and the spool folder, create a new printer configuration by clicking the **Add Port** button. Select the required port in the Add Port dialog. In the displayed **Edit Printer Port Settings** dialog, you create the printer configuration. Set your desired connection method and Spool Folder. When closing the dialog with **OK**, you are prompted to enter a name for the new Print Client.

Once you have created an **Output Device**, you can edit, delete or rename it using the respective buttons.



#### Specify Printer

The displayed dialog **Edit Printer Settings** allows you to specify the above-mentioned settings.

#### Specify Folder for Spool Files

In order to specify the spool folder, click on **Browse** in the **Folder for Spool Files** section. Select or create a spool folder in the “Browse for folder” dialog.



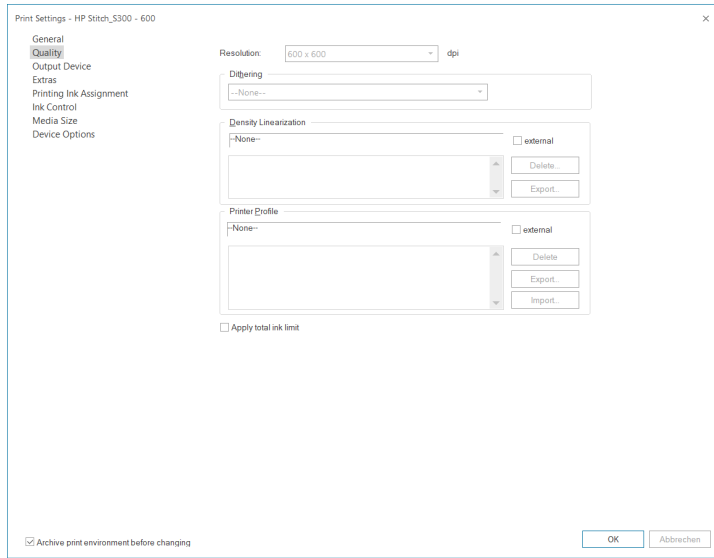
## Print Settings

The **Print Settings** dialog for the new print environment should now open.

Please read on for a brief description of the available and required settings.

### Quality Tab

1) First, specify the **Resolution** to be used.



2) **HP Ergosoft RIP Color Edition** “Digital Printing Applications” is selected in the Print Environment settings as dithering for digital printing applications and offers greater speed and smoother, more accurate dot placement. This dithering method is also internally referred to as Stochastic 3sf.

Thus, when selecting the **Dithering** Method, *Digital Printing Application* is usually the best choice because it is a good compromise between speed and quality. For more options to choose from, you can check “Show all”. This will show all Dithering methods which are available in the **HP Ergosoft RIP Color Edition**.

## Printing Ink Assignment Tab

The **Printing Ink Assignment** tab gives you control of the ink's positions in the printer, as well as light ink blending settings. If you are not sure which slot an ink is located in, simply select *Print Ink Assignment Chart* from menu *Tools > Linearization & Profile Tools* which will automatically print out each color along with a number which indicates the corresponding slot.

## Device Options Tab

In this tab you can choose the device specific options you want to use. Among these settings are – depending on your printer – print direction, number of passes, dot size, dry time, etc.

If you use a predefined print environment, please keep in mind that these settings have influence on the quality of the final printout.

## Closing the Print Settings Dialog

After having completed the settings, close the dialog **Print Settings** by clicking the **OK** button.

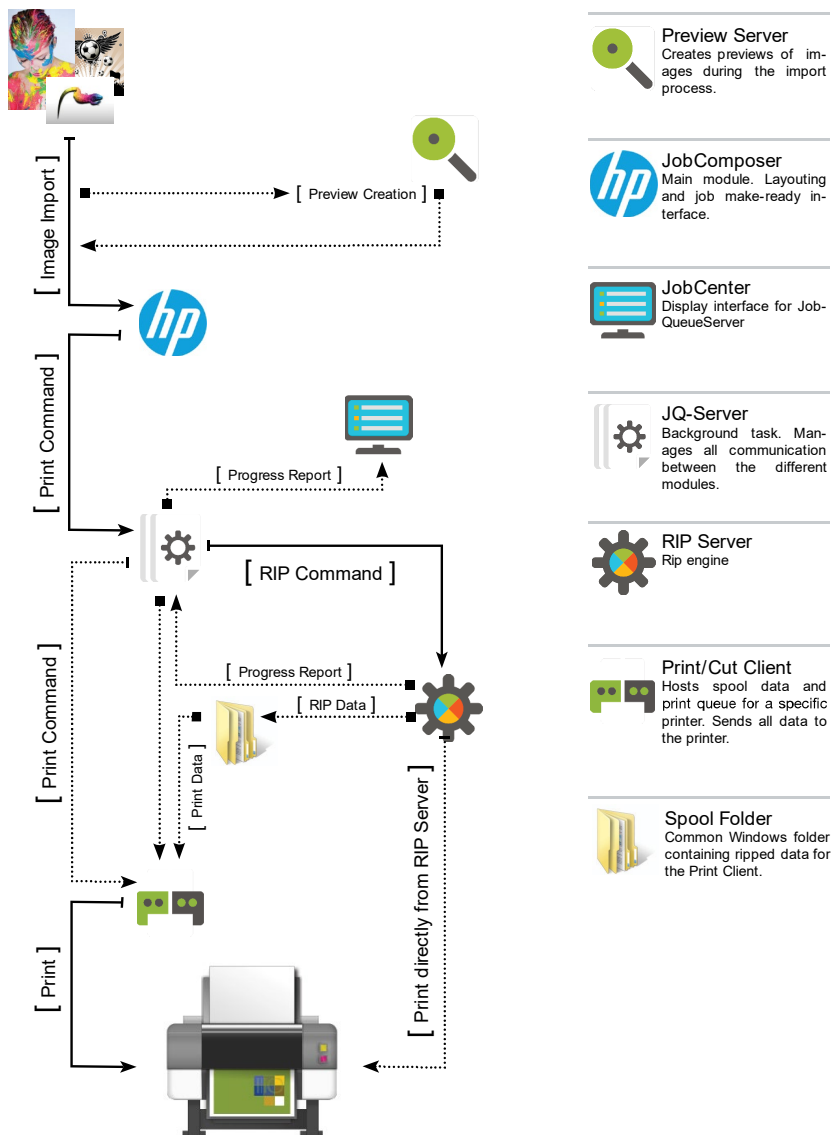
For best results, you should also complete the following steps:

1. Create a Density Linearization
2. Find and set the maximum amount of applied ink
3. Create a printer profile.

For more information about the print environment configuration please refer to the according application note.

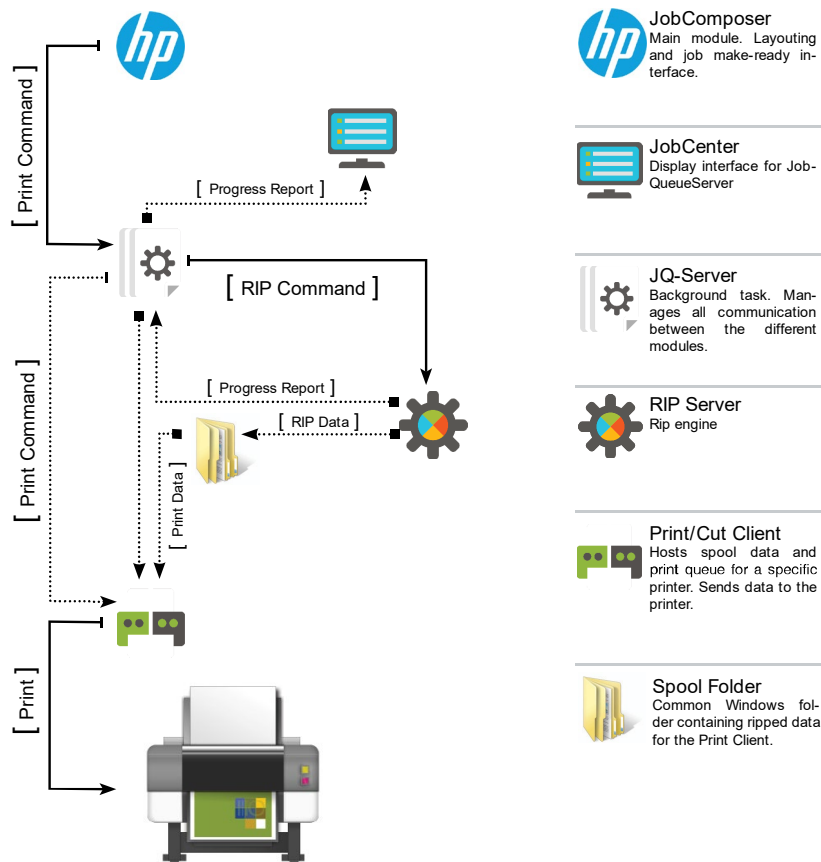
# Printing with HP Ergosoft RIP Color Edition

## Basics of Printing

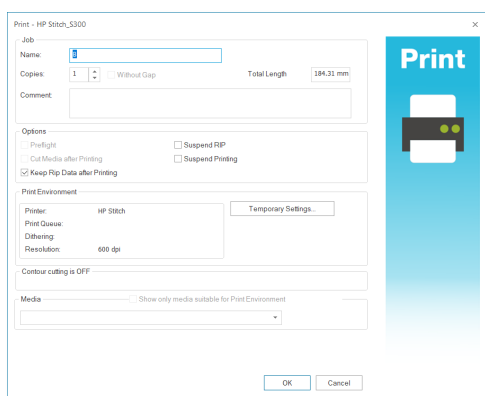


Basically, the data flow when having launched the **Print** command is the same for all possibilities: The **JobComposer** (main program you are working with to create your jobs) forwards the print command including all necessary data and information to the **JobQueueServer** which shows its processes in the **JobCenter** parts of which are displayed in the **JobComposer** windows *Waiting*, *Done*, *Preview*, *Details*, and *Journal*. The **JobQueueServer** controls data ripping in the **RIP Server** and forwards the ripped data either directly to the printer or into a **Print Client** that controls the printer.

## General Print Workflow



When having launched the print command, the **JobQueueServer** sends the job data to the **RIP Server** for ripping. The **RIP Server** returns the ripped data to the **JobQueueServer** that sends the ripped data to the **Print Client** that sends the ripped data to the printer.



## RIP Modules

### JobComposer

The **JobComposer** is the heart of the **HP Ergosoft RIP Color Edition**. It is used to create, layout and print all your jobs. The Application Look as well as the Accent Color can be selected under menu *View*.

### JobCenter

The **JobCenter** allows specifying global rules for deleting and archiving done jobs; it manages and gives information about printed jobs.

### RIP Server

The **RIP Server** is used to track the rasterization and ripping process as well as to configure the PostScript interpreter.

### Album

The **Album** allows managing the previews of the images that are displayed in the job.

### Preview Server

The **Preview Server** updates previews and creates snapshots. Snapshots are automatically created and used for the display in the job and image editing functions instead of the large, high-resolution original image file.

### Print and Cut Clients

The **Print Client** controls the data transfer of ripped files from a certain folder to a certain printer; the **Cut Client** controls the data transfer to a cutter. Further the print client gives information about the ripping progress, the files which are waiting for print, the printed files as well as the errors occurred. It allows you to see the costs for your printing as well as the ink consumption.

The details, the journal and the preview are displayed on the right side of the print client and allow you some additional information.

*Note: During the printing process you still have the possibility to change the number of copies.*

## Setting up and Using a Print or Cut Client

 icon in the toolbar or *Tools > Print/Cut Clients > Setup or Printer and Port* tab respectively *Cutter Device* tab in print environment or cut environment settings.

## User Interface

### Application Appearance and Workspaces

Besides the user interface and software illustration, the application appearance as well as the accent color can be customized and selected under the *View* menu.

### Workspaces

The [HP Ergosoft RIP Color Edition](#) offers a variable workspace; the standard, edit or custom workspace. Depending on what you are doing you can adapt the workspace. The edit workspace enlarges for example the preview window given that you work on it for several manipulations. You can create your own workspace.

#### Creating a New Workspace

*View > Workspaces > Save as > New*

#### Using a Predefined Workspace

*View > Workspaces > Standard, Edit or Print and Cut*

#### Changing the Application Look

*View > Application Look*

#### Changing the Accent Color

*View > Accent Color*

### Integrated Job Queue

Integrated in the [JobComposer](#) window, the integrated job queue allows you to check the printing progress, the done jobs as well as their details and preview while you are editing a new job. This permits you to optimize your working time and organization.

### Properties and Selection Windows

You have the possibility to display, to hide, to separate and to resize all different windows. It is advisable to keep the *Properties* window always displayed since it offers the access to many functions. The *Selection* window offers also many options and it is recommended to keep it open while editing your job.

## Design Program Window

The different bars allow a quick access or information to all basic functions.

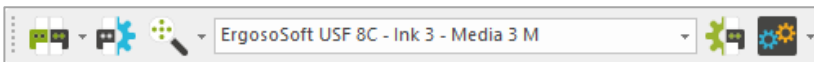
### Toolbar

This command shows or hides the toolbars - *View > Tools > Different Toolbars*

Toolbar **Standard** holds icons for job managing functions as well as for fast access to some often needed modules.



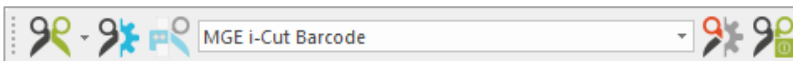
Toolbar **Print Environment** holds functions for fast print environment and configuration access as well as the filter icon which helps to sort existing print environments.



The toolbar **ImagePreset** holds the icon for fast image preset and configuration access



Toolbar **Cut Environment** holds functions for fast cut environment and cut configuration access.



Toolbar **Position** holds functions for fast image scaling and positioning.



Toolbar **View** holds icons for job zooming functions, also in *View*.




Toolbar **Image** holds functions for image editing and handling.



Toolbar **Tools** holds icons for color management functions.



*Note: You can move and replace all toolbars by holding the mouse on it until  appears. Slide the toolbar to the place you want and release the mouse button.*

## Status Bar

This command shows or hides the status bar. The status bar is located at the lower border of the **JobComposer** window. It is used to display information about the current program status, the selected image, messages, and short help texts to the selected menu item.

## Activating the Status Bar

*View > Status bar*

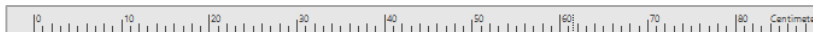


## Rulers

This command shows or hides the rulers in the job window. When necessary, both rulers can be shown at the upper and left border of the job window. These can help when designing the job.

## Activate the rulers

*View > Rulers*



## Job Zooming Functions

The job zooming functions allow zooming in, out, to width or to height.

### Zoom In

Magnify the output on the screen - *Zoom In* - **Ctrl++**

### Zoom Out

Reduce the output on the screen - *Zoom Out* – **Ctrl+-**

### Zoom to width

Zoom the view to the width of the job - *Zoom to Width* - **Ctrl+0**

### Zoom to height

Zoom the view to the height of the job - *Zoom to Height* - **Ctrl+1**



## Guide Lines

The guidelines in the [HP Ergosoft RIP Color Edition](#) job window are handled in the same way as in the current graphic programs by Adobe Inc. To insert guidelines, you need to activate the rulers. Drag down from the upper ruler to get a horizontal guideline; for a vertical guideline drag from the right guideline.

### Activate guide lines

*Edit > Guide Lines*

## Print Environment

### Using and Creating Print Environments

The **Print Environment** is the cornerstone of [HP Ergosoft RIP Color Edition](#). It allows you to define all the necessary information and settings to print on a particular printer/media/ink combination. It contains the printer driver, the dithering method, the linearization of the printer, the output profile, the total ink limit, the port used, and other device settings. Every printer needs different print environments related to the ink and the media to get the best printing result. You must create a specific profile for each medium.

Print Environments are saved as attributes of the Job. If switching between Jobs, the Job Composer will automatically load the Print Environment which was last used for the selected Job. Using this mode can help to reduce difficulties if working with several open jobs at the same time.

### Access to the Print Environment Dialog

 icon on the toolbar or *Tools > Print Environments...*

### Using a Predefined Print Environment

[HP Ergosoft RIP Color Edition](#) offer a number of predefined print environments available on the web. To download these print environments, click on **Download** to connect to the Print Environments Server. Select one which fits best to your actual combination of printer, ink, and media.

### Importing a Print Environment

If you want to import a print environment from another place, please click on **Import** and navigate to the target folder.

### Creating a New Print Environment

Press **Add** to create a new print environment and click on New. The list shown here contains all drivers supported by the [HP Ergosoft RIP Color Edition](#).

### Removing a Print Environment

Hit the **Remove** button. Be careful! A removed print environment is deleted if you did not save it somewhere else before.

### Saving a Print Environment

Click on **Export** and save it in a new folder.

## Modifying a Print Environment

It is advisable to copy an existing print environment for modifying the settings. Press **Copy** and change the name of the copied print environment. If you want to keep the same settings and only change the name of a print environment, click on **Rename**.

## Manage Write protection

If you only want to read a print environment, tick the **Manage write protection** case and select all print environments you want to protect. A lock next to the name indicates the protection. This option allows you to see all the settings but it is impossible to change them. This gives you a certain security protecting good profiles.

## Tree Structure

You can either show all of the already existing print environments in a list or group them by names. To get this grouped order, check the **Tree Structure** checkbox.

## Print Environment Settings

All print environment settings can be set and modified as long as no printer profile is activated. After the inclusion of the profile nothing should be changed anymore. The following tabs contain the print environment settings:

### The General Tab

Here you can change the name, give a general description, specify media (for cost calculation) and indicate the printer model. The Name as well as the Description of a Print Environment can now be generated by using "Auto" Button in the General Tab of the Print Environment. The generated Name and Description can be edited. The Generator will create the Print Environment Name based on the used Base Driver, the No. of set Printing Inks in the Printing Ink Assignment, the used Resolution and the used Major Version. It also adds the current date and the logged user. The Description will contain the following information: Dither/Resolution/PrintMethod/DotSizes/Media/DriverInfo/Heater Info/Colors/Version/Time created/User

### The Quality Tab

Allows you to specify the resolution and the dithering method, to adjust light ink settings and dot sizes, to limit the ink amount and to use a density linearization and printer profile.

### The Output Device Tab

Allows you to set up a printer configuration which determines how the data is sent to a specific printer. Once created, this configuration can be selected whenever you create a new print environment for this printer. The **Print Client** can also be activated and set here.

## Printer Pools Option

Each Print Environment in the new [HP Ergosoft RIP Color Edition](#) is linked to one specific Printer ID. A Printer ID is comprised of one specific printer type, a port connection and a spool folder. Once a job is in the process of ripping and printing, this connection cannot be changed. In production situations where many identical printers may likely be in use, having to create and manage separate Print Environments for each printer can become cumbersome. Preparing a Printer Pool allows creating sets of identical or suitable printers and to link them to separate print environments rather than one specific Printer ID. Whenever this Print Environment is used to create a job, the job can be printed on any of the member printers in the pool. Should multiple copies of the printed job be required, it becomes possible to divide the number of copies onto several of the printers in the pool simultaneously. Only printers of identical printer types may become members of a printer pool. Once defined and set up, a Printer Pool may be used in several Print Environments.

### The Extras Tab

Contains the legacy ink control strips, job mirroring, automatic size change consideration, target printer simulation and the Named Colors Profile.

### Printing Ink Assignment Tab

Gives you a control of the ink's positions in the printer. If you are not sure in which slot an ink is located in, go to *Tools > Linearization & Profile Tools > Print Ink Assignment Chart*, which will automatically print out each color in all dot sizes available with the number that indicates the corresponding slot from left to right.

### The Ink Control Tab

Allows keeping a control over all inks in the printer. The production stripes can be set by side, width, horizontal distance, stripes count and coverage. Note that coverage is set for each ink, 4 inks each with 100% coverage means 400% ink on your media! The visual control stripes show more in detail the evolution of the ink during the printing process. You can select the side, the width and height with the corresponding distance, the shade count and the mode (one column, dot sizes in row or continuous) with all dot sizes or just the biggest one.

### Media Size Tab

To set up a specific media size which should always be used for a specific print environment, check the option **Use as default for this Print Environment** and select or add the default media size you want to use for the printer. Some printers have this information in the printer driver and transmit it to the program. The media size is handled in the global options by default, located in the menu bar *Tools > Options > Preferences > Job > Job Default Settings > Media Size*.

### Device Options Tab

You can choose the device specific options you want to use. Among these settings – depending on your printer and your medium – are print direction, number of passes, dot size, dry time, etc. If you use a predefined print environment, please keep in mind that these settings have an influence on the quality of the final printout and changing them is not recommended.

## Job


### Job Handling

A job basically represents the media which is in your printer. Multiple jobs can be edited at the same time in multiple windows. The job size (usually=media size) including margins can be set for each job any time.

### Creating a New job

Click the  icon in the toolbar, **Ctrl+N**, *File > New*.

### Specifying the Job Size

Click the  icon in the *Properties* window or *Tools > Options > Preferences > Job > Job Default Settings > Media Size* – either basic settings or ask for every new job.

### Opening an Existing Job

An existing job can be opened with all settings – *File > Open*.

### Opening a Recent Job

To open a recent job – *File > Recent Jobs*.

### Multi Page Jobs

To get several pages per job click right on an image and choose *Page per Image*.

### Saving a Job

A job can either been saved under its current name or under a new name – *File > Save* or *Save as...*, **Ctrl+S**.

### Closing a Job

To close a job, click either on the x on the right top corner of the job or *File > Close*.

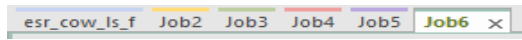
### Closing All Jobs

To close all jobs at once – *Window > Close All Documents*

Note: You see the name of all opened jobs listed in the window menu.

## Tabbed job view

You can open several jobs at the same time. They will be tabbed and you can change from one to the other.



## Visualizing Multiple Jobs


To visualize 2 jobs at the same time, click right on one tab and choose *New Horizontal/Vertical Tab Group*.

## Adding Image or Job Element to Job

### Importing Image

This command adds images to a job. In [HP Ergosoft RIP Color Edition](#), any number of images can be added to a job. You can select a predefined Image Format while importing an image using an *Image Format*.

### Importing Images

 icon on the toolbar, *File > Import Image* or **Ctrl+I**.

### Opening a Recent Image

To open a recent image, click right or *File > Recent Image*

Note: Recent images are imported using the same import format as before.

### Adding Job Element

You can insert a gradient rectangle, a job length line, a separation line between images or a variable text on your job.

### Add a Job Element

*File > Add Job Element* or *right click > Add Job Element*.

### Modify added parameters

*Image > Edit Parameters*.

## Editing Job

The job window shows you the imported images that you can edit now. The [HP Ergosoft RIP Color Edition](#) allows you to format your images in an easy and intuitive way. To arrange the image on your job window you have several options like positioning, rotating etc.

### Arrangement of the Images

#### Nesting

The new *Nesting* feature, fully integrated into the [JobComposer](#) and the [HotFolder](#) application, improves the automated arrangement of multiple images per job.

It offers two different basic modes:

- Easy Cutting (Guillotine Cut)
- Minimum Waste (Space Optimized)

*Easy Cutting (Guillotine Cut)* arranges the images in a way that a horizontal cut line is provided, ensuring a smooth finishing of the job. *Minimum Waste (Space Optimized)* nesting arranges the images in the most space saving way to minimize the waste of paper. Both of these modes can be selected either with Rotation or without Rotation.

To create *Nesting* go to the menu *Edit* where you can choose following 5 options:

- Easy Cutting Allow Rotation
- Easy Cutting No Rotation
- Keep Image Order
- Minimum Waste Allow Rotation
- Minimum Waste No Rotation

#### Selecting Images

To modify an image, it must be selected. You can either select one or several images. The blue squares in the image corners indicate which images are selected and which one is active (bigger blue square).

#### Selecting One Image

Mouse click on image, to move from one to the other **tab key**.

#### Selecting Several Images

**Ctrl key** while mouse click on selected images.

#### Selecting Successive Images

Drag rectangle with the mouse on selected images or **Shift key** and mouse click on first and last image.

## Selecting All Images on the Job

**Ctrl+A** or *Edit > Select All*.

## Positioning Images

It can be important to position your image on a certain place on the job; e.g. to save media, to print the image on an exact distance to another image, or for any other reason.

### Numerical Input

◉ icon on the *Properties* window and the toolbar, **V key**.

### Simple Positioning

Drag image with the mouse.

### Positioning Adjoining another Image

Drag image with the mouse, hold down **Shift key** while releasing left mouse button.

### Activating Overlay Mode

*Edit > Overlay Mode*, you can overlay all images.

### Split overlaid images

*Image > Split Overlay* or *right click > Split Overlay*.

### Alignment Functions

*Image > Center*

### Grouping Images

*Image > Group* or *right click > Group*.

### Moving an Image to another Job

Drag with the mouse. Keeps all image formats (get paneled if job is smaller).

### Cancel Moving

Press **Esc** while moving, **Ctrl+Z**, *Edit > Undo*.



## Rotating Images

Rotating images is often useful to save media, diversify the print direction on a structured media etc. Attention: Printing rotated images consumes more calculation time and therefore can reduce the output speed!!

### Rotating Images

By 90°, 180° or 270° -  icon on the *Properties* window, **R key** or *Image > Rotate*.



### Rotating Image Parts

By 90° -  icon on the toolbar, **Alt+Ctrl+R**, or *Image > Rotate Part*.

## Mirroring Images

Allows you to mirror complete images or image parts horizontally.


### Mirroring Images

 icon on the *Properties* window or  icon on the toolbar, **Ctrl+M** or *Image > Mirror*.

## Duplicating Images

This option creates copies of the selected image. You can either create one copy of the image or generate a grid of duplicated images.

### Duplicating Images

 icon on the *Properties* window and the toolbar, **Ctrl+D**, *Image > Duplicate*, **Ctrl+hold left mouse button**, duplicate and position next to another image using **Shift+Ctrl**.

## Image Layout

### Scaling Images

Extends or shrinks the selected image to any size.

#### Access to the Scaling Dialog

 icon on the *Properties* window and the toolbar, **S-key**.

#### Numerical Scaling

Can be done by changing the size in selected unit or by absolute or relative %.

#### Manual Scaling

Proportional scaling by dragging one corner of the image

### Cropping Image

This command allows that only a part of the current image is used and the rest is discarded.

#### Access to the Cropping Dialog

 icon on the *Properties* window and the toolbar, **C key**.

#### Numerical Cropping

In the *Properties* window in selected unit on left, right, top or bottom side.

#### Manual Cropping

In the *Preview* window.

### Tiling Images

When importing an image that is wider than the job, the image gets automatically tiled. Manual tiling allows you to define the size of the different tiles. You can separate the image in horizontal and vertical cut tiles, as well as rotate one of two or print every tile on a separate page what allows you to easily reprint one specific tile of the job.

#### Manual Tiling

 icon on the *Properties* window


## Disconnect Parts

To treat each tile individually you need to disconnect parts – *Image > Disconnect parts*

## More Image Layout Functions

In addition to the basic image layout function some special functions are available with the [HP Ergosoft RIP Color Edition](#).

## Print Marks

To have some information on your printout you can set print marks –  icon in *Properties* window, *right click > Print Marks* or *Image > Print Marks*.

Note: You can edit print mark presets, use a predefined one or create a new one.

## Undo/Redo

Allows you to cancel or to restore a manipulation.

## Center

Centers the image precisely in the job or media (width).

## Group

Allows you to group several images. All manipulations are done for the whole group.

## Export

Allows you to export an image including color management to any folder.

## Edit

Available when a program for image editing is specified in the options.

## View

Available when a program for image viewing is specified in the options.

## **Printing a Job**





This command controls the job output.

Using the **Print Client** is mandatory and helps to handle and manage printing jobs as well as to avoid errors during production through an easy, intuitive interface.

## **Composite Presets**

### **Default Presets**

The default presets allow an access to the application defaults.

You can either change settings in an existing preset () , delete it () , rename it () or create a new one () .

Note: For the image presets you have the same functions. For further information, see in chapter *Image Presets*.

## **Image Color Control**

### **Color Management**

Color management describes a controlled conversion between the colors of various color devices such as scanners, digital cameras, monitors, printers, and corresponding media.

The primary goal of color management is to obtain a good match across color devices. For instance, imagine an image which should look the same on all media printed with any printer. Color management helps to achieve the same appearance on all media and printers, provided the device is capable of delivering the needed color intensities. Therefore, some rules must be respected.

The color management is split into color management for

- Raster Images (TIFF, BMP, PNG, JPEG, PSD)
- PostScript (PS) and EPS
- PDF and AI

### **Components of Color Management**

#### **Input Profile**

Controls the conversion from the image color space to Lab. The color profile characterizes the source of the image data. Select the color profile in the list that corresponds to the source of the image data. When a monitor profile has been selected, the effects of the selected color profile can be seen in the preview window.  icon in the *Properties* window or *Tools > Options > Preferences > Color Management*.

#### **Rendering Intent**

The rendering intent specifies how out-of-gamut colors of the device-independent Lab color space are to be converted into the printer gamut. This conversion is necessary because the Lab color space holds much more colors than the printer gamut. Select the Rendering intent

to be used for printing the selected image.  icon in the *Properties* window or *Tools > Options > Preferences > Color Management*.

## **Color Replacement**

The color replacement function allows customizing the ink mixture of certain colors in the images according to your needs and letting the color management control the ink mixtures of the rest of the image.

### **Access to Color Replacement**

 icon in the *Properties* window.

Note: To see the colors of your selected image, click on “Show Colors”.

### **Color Replacement Presets**

Color replacement presets have lists of RGB/CMYK/Lab/Gray values that are automatically replaced by the specified Lab or device color values. Color replacement presets can be activated globally or selected just for the current image.

### **Access to Color Replacement Presets**

*Tools > Options > Preferences > Color Replacement*.

 icon in the *Properties* window.

## **Tune**

The tune function allows setting the saturation, brightness and contrast, the color balance and the gradation. In the *Preview* window you can display either only the preview, the original image and the preview, the printer preview, the pixel color information as well as all colors out of the printer gamut.


### **Access to Tune**

 icon in the *Properties* window.

## **Pure Colors**

While selecting one of the colors in the pure colors dialog, this color will not be modified by the color management if it contains only this color in the original image. This function allows avoiding visible dots of another color.

### **Access to Pure Colors**

 icon in the *Properties* window or *Tools > Options > Color Management > Raster Images > Pure Colors*.

## Color Tools



### Swatch Book

The **Swatch Book** tool provides the possibility to manage colors in so called swatches and selectively use them for example for color replacement.

Before a swatch can be used for color replacement, it needs to be defined in the **Swatch Books** dialog.

#### Access to Swatch Book Dialog

*Tools > Color & Special Features > Swatch Books.*

#### Add New Colors

To add new colors, you can choose them by color picker, measure a color on a substratum or import from a file.

#### Print Similar Colors

The icon **Print Similar Colors** allows finding the best fitting color for the human eye. The created job generates a chart with color variations and their Lab value.



### Named Colors

The **Named Colors** function allows saving colors you need for a special product which can be very useful for colors that absolutely have to match every time they are used (for example for a logo).

#### Access to Named Colors

*Tools > Color & Special Features > Named Colors.*

#### Add New Colors

To add new colors, you can choose them by color picker, add from a swatch book, measure a color on a substratum or import from a file.

#### Print Similar Colors

The icon **Print Similar Colors** allows finding the best fitting color for the human eye. The created job generates a chart with color variations and their device value.

## **Measure Colors**

This function can help you to find the Lab values of a color. After a color was measured, the dialog **Add Color** automatically pops up. The **Add Color** dialog lets you add a name to the measured color and adds it to the currently active color tool.

### **Access to Measure Colors**

*Tools > Color & Special Features > Measure Colors.*

## Configuration



### Application Defaults

In the **Application Defaults** dialog you find all basic settings that can be globally fixed.

The main settings of the image preset are identical to the global job settings.

### Access to Application Defaults

*Tools > Options.*

### Preferences

For general presets you can load one in the preferences list or create a new one. The short description gives you the main information about the settings.

#### Image

- Image format - scale, fit and alignment, rotate and mirror.
- Print marks - crop marks, register marks, image label.
- Image AddOns - company logo, seam extension, canvas mounting extension, dashed cut line. The following AddOns can be installed: Caption, Label, Eyelets, Gradient Frame, Solid Frame, Seam Margin etc.
- Image margin – predefined margin or personal margins, rotate margins with image.

#### Color Management

- Raster Images – select color profiles to be used for images as default input profile – RGB images, CMYK images, Grayscale images and Lab images with respective rendering intent.
- PostScript/EPS - use named colors profile for spot color replacement, input profile for CMYK data - chose profile and rendering intent, input profiles for RGB data – choose profile and rendering intent.
- PDF and AI – use named colors profile for spot color replacement, input profile for CMYK data - chose profile and rendering intent, input profiles for RGB data – choose profile and rendering intent, input profiles for Grayscale data – choose profile and rendering intent, input profiles for Lab data – choose profile and rendering intent. Configure PDF/X interpretation.

#### PostScript/PDF Parameters

- Automatic raster resolution reduction, minimum resolution.
- Raster resolution reduced by factor X.

#### Mask Image

- Allows selecting files with mask to create very special effects within the job layout.



## Step and Repeat

- Configure horizontal and vertical seamless repetition of a pattern. Supported with all file types supported by the [HP Ergosoft RIP Color Edition](#).

## Job

- Job default settings - ask for every new job or global settings for media size and margins.
- Extras – outer margin, image center mode, auto tiling and Fotoba marks.

## Application

- Display – monitor profile, units, images, tree view option.
- Snapshots – store all snapshots in a common local folder, update automatically, image folders in use, snapshot display options.
- PostScript/PDF interpreter – temporary raster files, PostScript RIP, Compression of raster data, PostScript buffer size.

## Spectrophotometer

- Type of spectrophotometer.
- Measurement specification (CIE Illuminant/Observer).
- Calibration charts – print marks.

## User Interface Preferences

- Selection context menu.
- Automatic apply discard.
- Job double click action.
- Ask to Save Modified Jobs
- Ask for Infos when creating a new Job
- Adjust Job to Print Environment
- Show advanced rendering intents

## Special features



### Step and Repeat

This command allows importing a pattern to repeat it several times in both horizontal and vertical direction. Mirroring and shifting the pattern are also included. The pattern must be saved as a TIFF or BMP image. Alpha channels in the image are used as masks so that the covered part of the image will be treated as if it would not exist.

### Access to Step & Repeat

Open the Image Import Dialog and from the Filetype Menu, select “Step & Repeat”, or *Properties > Step & Repeat...*





### Cutting Job

This command starts contour cutting of the job on a cutting plotter. It requires that the cutting option is included in your software package. You can cut the whole job at once, activate the paneling or cut multiple paths per image.

Note: Please note that cutting the medium after printing is not part of the cutting option but enabled in the print environment and the printing dialog when the used printer supports this function.

### Access to Cutting Option

 (cut environment),  (cut settings),  (contour cutting activation) icons in the toolbar, or *Tools > Cut Environments...*

## Linearization and Profile Tools

Even before we print out an image, we have a distinct idea of what the image should look like in print. To achieve this goal, we need to be able to tell the printer exactly how the image is supposed to look using RIP software. Before we can make these guidelines, we have to analyze how the printer reacts without external influence. Therefore, you need to do a density linearization to know the behavior of your printer. After that, limit the ink amount and finally create an ICC profile. For more detailed information, please refer to the concerning application note.



### Density Linearization

Inkjet printers often have a problem caused by mechanical limitations: the optical impression of the printout is not linear from 0% to 100%.

The density linearization has to compensate the non-linear behavior of the printer. This can only be done when the characteristic of the printer is exactly known. To get this information, the density linearization process is printing and measuring customized calibration charts.

#### **Creating New Density Linearization**

*Tools > Linearization & Profile Tools > Density Linearization.*

Note: To assure a stable density linearization, the curve must be limited.

### Density Relinearization

The density linearization should be repeated from time to time to make sure that the printer is still in a linearised state. The density relinearization offers the density linearization with fix settings extracted from the current density linearization so that the conditions for the relinearization cannot be changed.

#### **Realizing a Density Relinearization**

*Tools > Linearization & Profile Tools > Density Relinearization.*

## Other Tools

### Scan and Twain Source

Import an image from an external device.

#### Access to Scan and Twain Source

*File > Scan*, select an external device for importing images – *File > Twain Source*.

## Maintenance Tool

### Configuration

Some basic configurations concerning the RIP software itself can be set here.

#### Select User Interface language

You can choose one of the supported languages for the user interface.

#### Set User data path

You can change the folder in which the user data such as print environments and configurations are saved to switch from basic installation to another one.

#### Automatically Start Program

If you activate the Startup Manager you can run several [RIP Servers](#) at the same time (what helps you enormously to reduce waiting time) as well as choosing the threads per server. You can activate the checkbox to start the [JobComposer](#) at Windows start and initiate various [Print Clients](#) from the beginning.

#### Activate Windows Explorer Job Previews

Activates the thumbnail preview for jobs inside the Windows Explorer

#### Deactivate Windows Explorer Job Previews

Deactivates the thumbnail preview for jobs inside the Windows Explorer

#### Manage User Levels

Let's you create and manage specific User Levels with different rights

#### Show License Info

Opens your Web browser and shows information about your License

## **Troubleshooting**

Some problems that may occur can be solved with the following functions.

### **Create Support Data ZIP File**

Create a data file with information needed for support purposes that you can send to your support partner on request.

### **Register COM Interfaces**

Run if you come upon an installation or registration problem.

### **Empty Snapshot Folder List**

Clear the list of monitored image folders.

### **Delete all temporary raster files**

Clear the list of monitored image folders.

### **Reset Current Print Environment**

Run if you have a problem with a specific print environment (e.g. after a system crash).

### **Reset Current Cut Environment**

Run if you have a problem with a specific cut environment (e.g. after a system crash).

### **Shut down all RIP components**

Run only if program is blocked. Be careful! Not saved files might be deleted!

### **Reset current JobComposer workspace**

Resets the current JobComposer to its default settings (Not saved files might be deleted!)

## Documentation

### About

This dialog gives some information about your version of the [HP Ergosoft RIP Color Edition](#):  
Version information, and folder in which the user data are saved.

## HP Color Tool Guides

### HP Easy Profiling

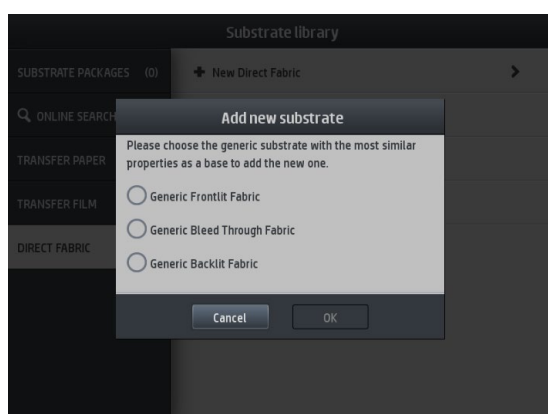
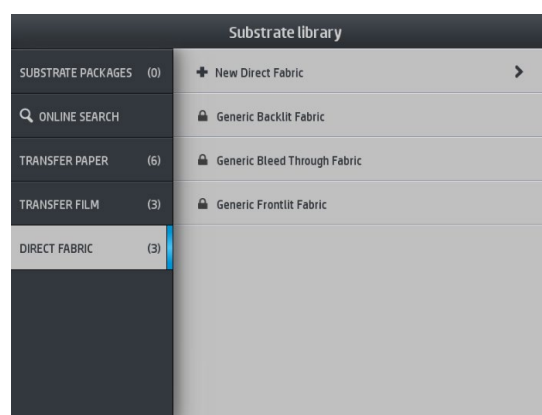
HP Easy Profiling is a powerful profiling wizard. Taking advantage of Ergosoft's advanced color profiling algorithms and HP's industry leading printer technology to deliver an easy to use workflow to create color profiles for your specific material and get the most out of your HP Printer.

Requirements: HP Ergosoft RIP Color Edition, HP Stitch Printer, Spectrophotometer (X-Rite i1, X-Rite i1 iO and Barbieri Spectro LFP are supported).

#### Step 1: Creating a new Substrate on the Printer

To create a new substrate, access the printer's touchscreen panel and navigate to the Substrate library.

From the available selection of general substrate types (Transfer Paper, Transfer Film and Direct Fabric), select the one that corresponds to the overall material type you want to use and then select the first option + New ... . For this example we'll use + New Direct Fabric.



Next, a popup will appear that allows you to make a finer selection of substrate type. Select a generic substrate type that best matches yours.

After selecting the substrate type, a quick guide window will appear, giving an overview over the two step substrate creation process on the panel and in the RIP.

Click *Continue* to proceed.

The following dialog lets you specify the appropriate settings for the new substrate.

Adjustable parameters are *Passes*, *Heater Temperature*, *Color Saturation*, and *Name* for the substrate. More in depth settings are available by clicking the *Advanced Settings* button.

After making the desired adjustments, click *Print test* to print out a test chart to check if the settings are suitable for your substrate. When you are ready to proceed, click *Continue*.

New Direct Fabric

**1a** Adjust settings and print the ink drying and color saturation tests. Repeat this process until reaching the desired result.

**Print test**

Passes: 4 (34 m²/h)\*

If substrate wrinkles: increase passes and decrease temperature.

Temperature: 60 (30 to 60)°C

If ink is not dry: increase temperature 10°C

**1b** Choose preferred color saturation row.

100% ink

**1c** Name the substrate.

Name: Fabric name

Print mode: 4pass\_100%ink

Advanced settings Reset all Continue



A confirmation window will appear, instructing you to complete the substrate creation process by making an ICC profile in the RIP.

Click *Finish* to confirm and return to the substrate library, where the new substrate should now be selected.

Next, move to the PC to begin the ICC profiling procedure.



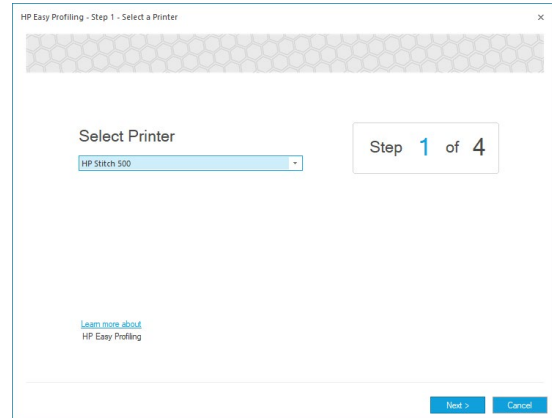
## Step 2: Connecting the RIP to the Printer

To begin the profiling process, take the test chart we printed during the substrate creation and keep it close by.

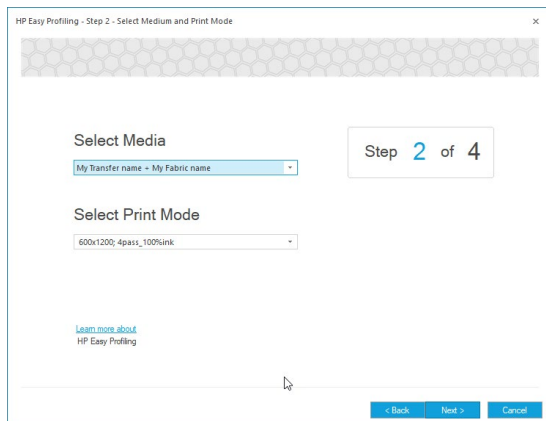
Open the HP Ergosoft RIP Color Edition and access the *HP Color Tools* bar.

Select *HP Easy Profiling* to start the profiling process.

In the first dialog, select your printer model, e.g. HP Stitch. Then click *Next* to proceed. The HP Easy Profiling Wizard will then attempt to establish a connection to the printer and wake it from standby mode if required.



## Step 3: Select Media and Print Mode



Once the connection is established, the printer will retrieve the material and print mode lists from the printer.

In *Select the Media*, choose the material from the printer that you would like to create the profile for.

In *Select the Print Mode*, select the print mode that the profile should be created with.

If the material and/or printmode that you would like to use is not selectable in the dropdown menus, please verify that they are properly set up on the printers panel, then go back to the first dialog and then click *Next* again so the material and printmode list is retrieved again.

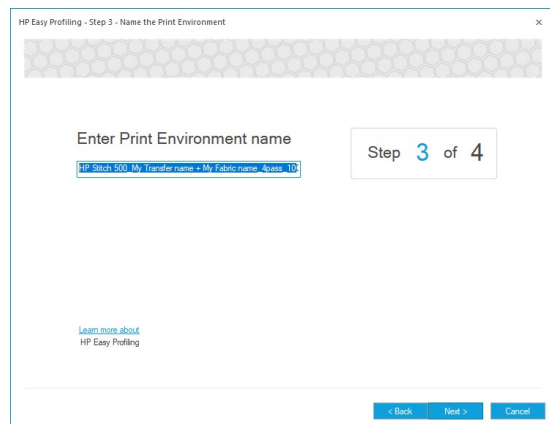
Once you have selected the appropriate material and printmode, click *Next* to move on.

## Step 4: Profile Name

This window lets you specify a name for the Print Environment that will be created.

This is the name under which your set of parameters will appear in the RIP when the profiling process is completed, so we recommend using a unique, descriptive name for the Print Environment.

When you have entered the name, click *Next* again to continue.



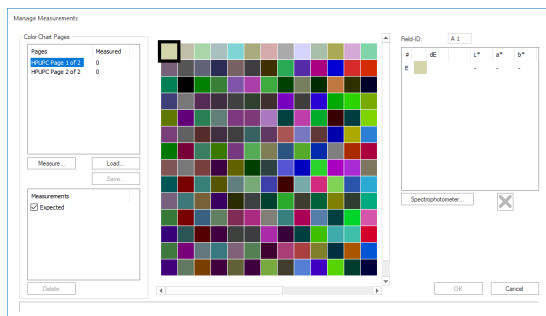
The screenshot shows a software window titled "HP Easy Profiling - Step 3 - Name the Print Environment". The window has a decorative header with a hexagonal pattern. Below the header, there is a text input field labeled "Enter Print Environment name" containing the text "HP Starch 500 - My Transfer name - My Fabric name - Quora 10". To the right of the input field is a box indicating "Step 3 of 4". Below the input field, there is a link that says "Learn more about HP Easy Profiling". At the bottom right of the window, there are three buttons: "< Back", "Next >", and "Cancel".

## Step 5: Measuring

At this point we will be measuring the chart you printed out beforehand and then letting the HP Easy Profiling Wizard calculate the color profile for you based on the measurements.

To start, take the color chart you printed from the printer's panel beforehand, connect your measurement device to the computer and click the *Measure* Button.

This brings up the measurement dialog that allows you to conduct and manage measurements.



The measurement dialog consists of three main areas:

**Chart Ids:** On the left top side you'll find the segment that lists the ID and number of charts that are expected.

**Expected and Effective Measurement Results:** In the center, you'll find a visual representation of the expected color in the chart. When measuring, the actual measured colors are also displayed here.

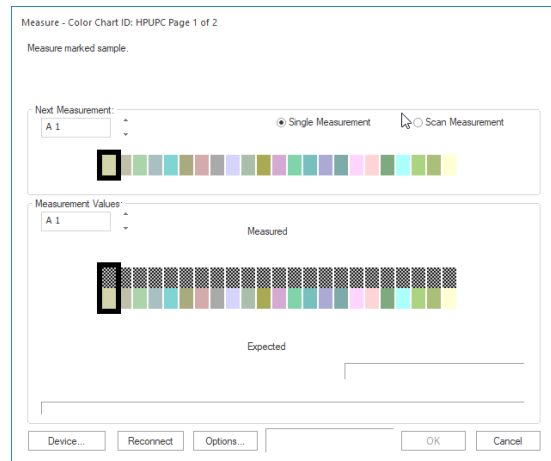
**DeltaE:** The segment on the right hand side displays the color difference between expected and measured color for the selected patch.

To begin the measurement process, first click on *Spectrophotometer*, select your Device from the dropdown menu, then click *Detect* and wait for the connection to be established. After the device is detected, confirm with *Ok*.

Next, click *Measure* to start with the actual measurement.

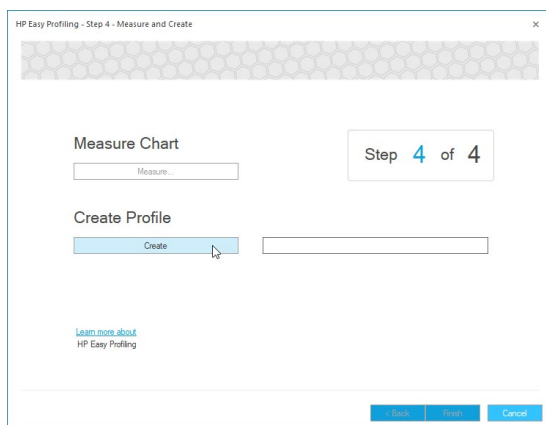
Measure each color patch on the chart with your device in single measurement mode (Scan modes are not supported) until the entire chart is measured.

Visually check if the measured values are approximately match up with the expected values to make sure there were no measurement errors. If any colors are vastly different, simply replace the measurement by selecting the patch and re-measuring.



When you are satisfied with the measurement, click *Ok* to save the measurement, this will take you back to the *Step 4* Dialog.

## Step 6: Generating the Profile



Click *Create* to create the profile. This will use the measured values and calculate an accurate color profile for your printer/media combination. Once the calculation is complete, click *Finish* to complete the process.

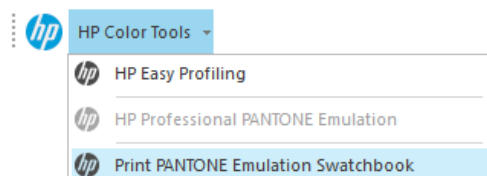
You'll find that the HP Easy Profiling Wizard has now created a new Print Environment in your HP Ergosoft RIP Color Edition that is automatically set to the print parameters you selected, has the proper port configured and your new profile embedded, ready for you to start your optimized print production!

## Print Pantone Emulation Swatchbook

HP Ergosoft RIP Color Edition allows users to easily print color samples of their Pantone Swatchbooks to check color accuracy of the profile on a given medium, ensuring that all colors appear exactly as they should.

To access the Print Pantone Emulation Swatchbook feature, it is important to select a Print Environment with an embedded Profile. If you do not have one already, you can easily set one up either by using the HP Easy Profiling tool or import one from HP's extensive library through the HP Stitch Colorbase.

### Accessing the Feature



Once a Print Environment with profile is in place and selected, access the *HP Tools Bar* and select *Print PANTONE Emulation Swatchbook*.

The opening dialog allows you to configure which Pantone colorbook should be printed and the arrangement of the color strips.

### Selecting the Swatchbook

From the Dropdown-Menu, select the appropriate Swatchbook that best matches your application.

**Pantone Solid Coated:** Color Library of reference color patches suitable for coated (Glossy) materials.

**Pantone Solid Uncoated:** Color Library of reference color patches suitable for uncoated (Matte) materials.

**Pantone Pastels & Neons Coated:** Color Library of pastel and neon color patches suitable for uncoated (Matte) materials.

**Pantone Metallics Coated:** Color Library of metallic color patches suitable for uncoated (Matte) materials.

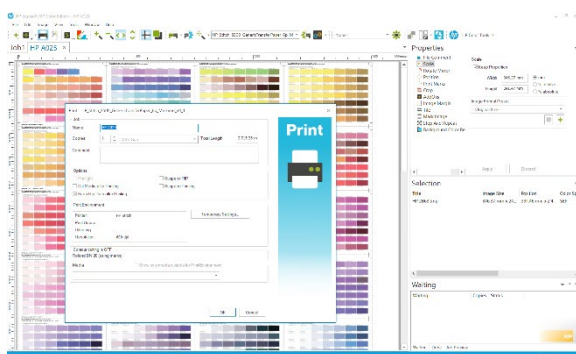


By checking the *Print Color strips vertically* box below the colorbook selection, the individual color patches are rearranged to vertical direction.

## Generating and Printing the Swatchbook Job

When satisfied with the settings, click *Create Swatchbook Job*. The Ergosoft RIP will then calculate the color values of each Swatchbook color through the profile and create a job with color adjusted charts.

Once the chart has been created, exit the *Print PANTONE Emulation Swatchbook* tool using the *Exit* button.



Before printing, you have the opportunity to edit the print job to suit your application using Ergosoft RIP's selection of job editing tools such as rotating, mirroring, positioning, cropping, etc.

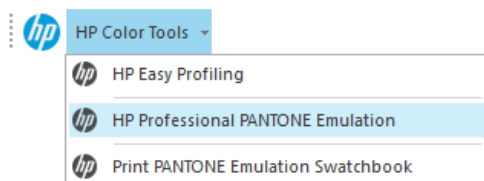
Once you are ready to print, click the *Print* button in the Toolbar and confirm the *Print* dialog with *Ok* to send your Pantone Emulation Swatchbook job to the printer.

## HP Professional Pantone Emulation

HP Professional Pantone Emulation analyzes image files for Pantone spot colors and compares these spot colors to the printable color space of your color profile. By comparing the recipe of the spot color with the possible output, HP Professional Pantone Emulation will display warnings for colors that cannot be accurately printed with the current profile and then allow you to not only find a suitable replacement color but also to substitute them for printing, all within the same tool.

To use HP Professional Pantone Emulation, first make sure that your Print Environment contains a color profile that the Pantone values can be compared to. Then, import an image file that contains spot colors into the Ergosoft RIP HP Color Edition.

### Accessing the Feature



Next, start the HP Professional Pantone Emulation tool through the *HP Tools* -toolbar. Note that if HP Professional Pantone Emulation is not selectable from the toolbar, i.e. grayed out, your image files likely does not contain any detectable spot colors.

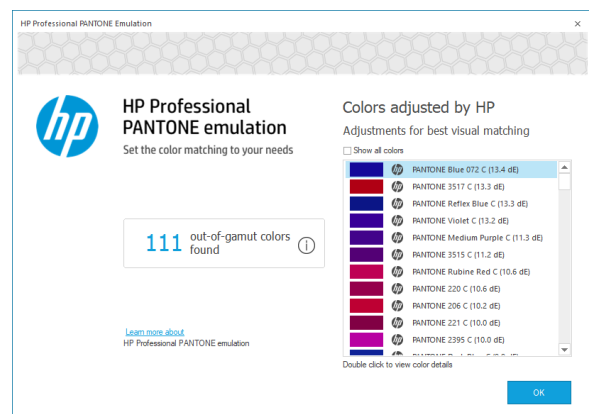
### The Color List

After starting the HP Professional Pantone Emulation tool, the color list dialog will appear. By default, the segment on right of the window will show a list of spot colors in the file that are out of gamut, i.e. not printable exactly with the current profile (By checking the *Show all colors* checkbox, the list will not only display out of gamut colors, but all spot colors detected in the file).

If the list is empty, all the detected spot colors are printable, congratulations!

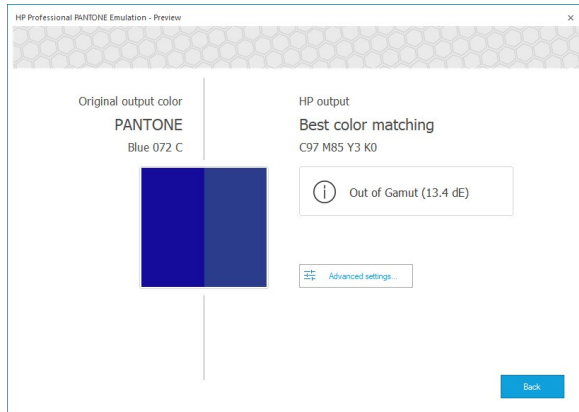
If there are out of gamut colors in the list, HP Professional Pantone Emulation lets you adjust the colors to printable color recipes.

To do this, simply double-click on the color you would like to adjust.



## Color Details

Double-clicking a color in the color list takes you to the adjustment dialog. This window displays several useful data points of information, such as the original pantone color both in name and an actual representation of the color, as well the suggested replacement color and the difference between the original color and the replacement color in deltaE.



The adjustment dialog will show the automatically suggested replacement color that most closely matches the original pantone color. The replacement color is shown both as a visual representation next to the original color as well as in CMYK values.

This is the color that will automatically be used when printing the file as is.

If you are satisfied with this color, there is nothing else you need to do. Simply click *Back* and verify the next color in the list.

If you would like to customize the replacement color, click on *Advanced Settings* to select a different replacement color.

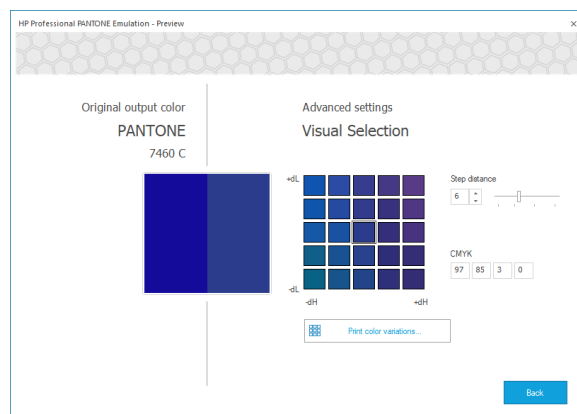


## Advanced Settings (Further Color Adjustment)

In *Advanced Settings*, you can set a custom replacement color for the original, out of gamut Pantone color, by simply selecting a color you like from a grid of similar colors. You can even adjust the color grid to get you closer to the desired color:

**Step Distance:** Sets how far apart the individual patches from the grid are. Increasing the step value means larger differences between the shown colors so larger shifts are possible.

**CMYK:** Shows the CMYK value of the currently selected color. You can also enter custom color values here if you already know the replacement value.



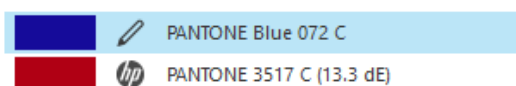
**Print Color Variations:** This button will create a job of the current grid and send it to the printer. This allows you to quickly print the color swatches in the grid to judge which one best matches your expected results.

**Apply these color changes to the permanent color table of named colors:** By default, an adjustment for a color defined through HP Professional Pantone Emulation is only applied to the currently selected image. By checking this box, the adjustment/replacement of the color is saved in the Print Environment as a *Named Color Profile*, so the adjustment/replacement is made every time a color with the same name is printed.

## Saving your Changes

Once you have found and selected your desired color that closely represents your pantone color, click **Save** to select the color, and **Save** again in the following dialog to apply the replacement.

This will take you back to the original list, from where you can move on through the out of gamut colors to specify suitable print values for each of them.



Note that once a spot color has been assigned a replacement value, it will show a small pencil icon next to its list entry, allowing you to easily keep track of which colors have been adjusted/replaced.