studiorip XF

Version **v4.0.540**

XF Release Notes

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Introduction

StudioRIP XF is the next stage in the evolution of StudioRIP. It has been redeveloped with new architecture within the server to give XF new features and enhancements for this version and future editions.

Important Upgrade Information

Because version XF is very different from previous versions, care should be taken to take note of the changes to aid a smooth upgrade installation.

New dongle system

Version XF uses a new dongle security system, which allows for future expansion and also gives some extra features in XF such as starting the RIP via RDP.

The dongles used are still the standard HASP based dongles, and no physical swop out is required for version 3 users. But the dongles do need to be upgraded via a V2C file update.

This update will allow your dongle to run with XF and is also backwards compatible.

Unfortunately with the new system it is not possible to generate a working C2V file for the upgrade from existing version 3 software. It must be from the new XF software. Therefore we suggest to use our version 3 to XF dongle upgrade utility in advance of an upgrade to avoid downtime awaiting for dongle updates

The recommended upgrade process is as follows:

Action	Description
Download dongle upgrade tool	Download From www.StudioRIP.co.uk
Extract C2V file	Using the V3 to XF dongle utility save C2V (Customer to Vendor) file
Request ppgrade	On Internet Page : www.studiorip.co.uk/changethis Give your details and attach the C2V File
Request processed	Request will be processed during UK working hours
Upgrade V2C file issues	StudioRIP UK will return the V2C (Vendor to Customer) File via supplied email address
Dongle upgraded	The dongle can either be upgraded once XF software has been installed using the Update Hard key option or upgraded using the standalone upgrade tool
Install version XF	

New installer application

The new installer has an optional backup function for creating a backup of the version 3 install. It is recommended that this be carried out when upgrading to XF.
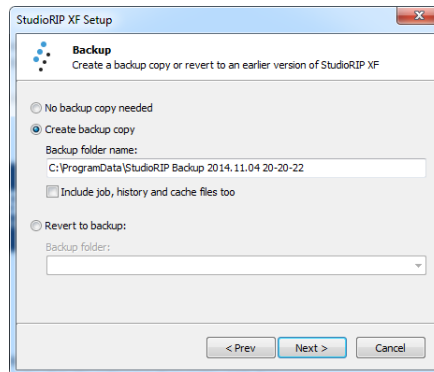
To restore a previous version the Installer should be run and downgrade option used

Upgrading with OEM builds

As with previous versions, it is not possible to upgrade from an OEM build to StudioRIP. Attempting to do so will create a nonfunctioning system. Please contact your supplier for OEM specific build of the RIP.

File formats

The file format of files such as jobstyles and calibrations has changed in version XF. The XF upgrade process will update version 3 files to XF automatically. But it will not be possible to copy configurations files from a version 3 calibration file into an XF RIP.

The internal format of XF configuration is still uses text based configuration files.

New manual

Both the printed and PDF version of the manual have been updated with the new settings.

New Features

StudioRIP adds some completely new features as requested.

64 Bit OS support

StudioRIP XF is now optimised for 64 Bit operating systems which are becoming the standard for current shipping PC computers.

The improvement means StudioRIP makes use of more than 4GB RAM when running on 64 Bit operating system.

StudioRIPs new PDF/Postscript engine utilises the multiprocessing capability of multi core processors to increase ripping speed. While the RIP can run at 64 bit, some devices use drivers may require 32 BIT operating system to be installed. This is because the drivers are old and the Interface systems were designed for PC systems of that age. These devices are likely to be SCSI and Highwater PCI based Interfaces.

For customers who are running on older systems with these devices who would like to upgrade the RIP. The existing PC can still be used as a satellite Print Manager, with the StudioRIP server running on a new 64BIT OS.

Please contact StudioRIP support for more information.

New architecture

The server system has been redeveloped to give greater stability. Job processing occurs as a separate process to the main server so that jobs can be cancelled without shutting down the whole RIP. The incoming jobs now have a file based job folder format, with a record of the job and its rip configuration.

Mac client

StudioRIP XF now has a native Mac client.

The client works from version 10.7 to the latest current 10.10 edition of OS X. The client has the same features as the PC client with the exception of any function that uses external hardware such as Photospectrometer and USB Microscope. The server still needs to be installed on a Windows Platform, but there is no need for StudioRIP to be loaded on a server OS with terminal services licenses.
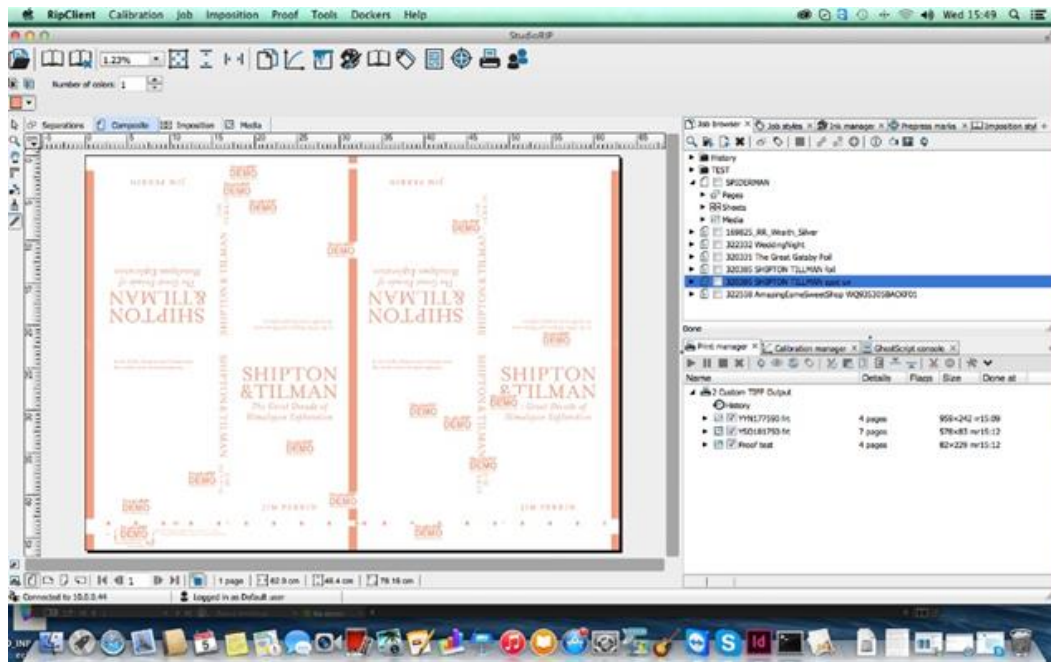
New trapping engine

There are several new features in the trapping.

Image to object trapping

The Trapping engine has been updated to include new Image trapping options. This allows for vector objects such as text to be trapped when sitting over image data.

Because of the processing power involved in trapping, this processing time takes longer when working in this mode. The processing time for image to object trapping will take longer for higher resolution and larger trap size.
The image trap option is not required for Image to object trapping to work.

Trap Set Limit

This new setting allows for faster ripping when trapping, the default value of 8 reduces the resolution of trapping for traps sizes greater than 8 pixels. This reduction in resolution will speed trapping of files and should not typically have any negative visual effect on printed output

Image trapping

Image to image trapping is now available. In this mode the StudioRIP will trap a block of colours inside an image. But care should be taken, as this is very processor intensive, and should not typically be turned on unless this function is required.
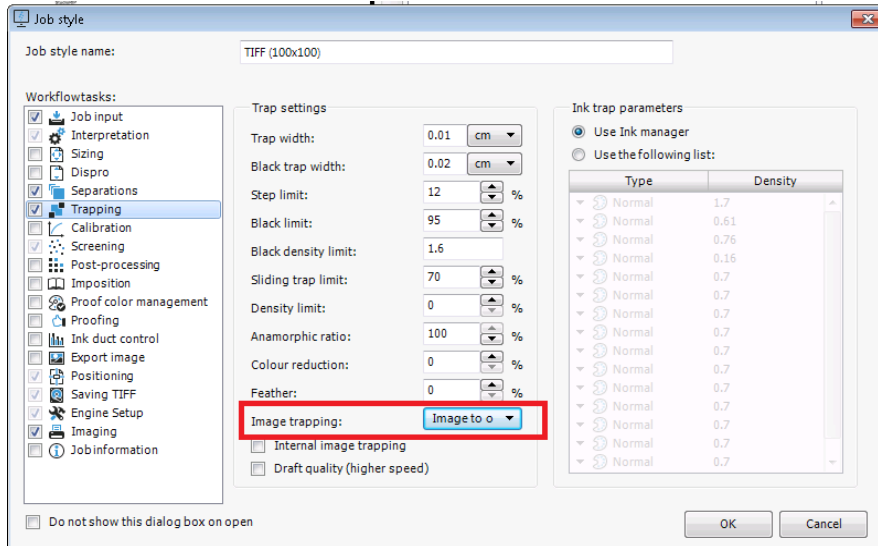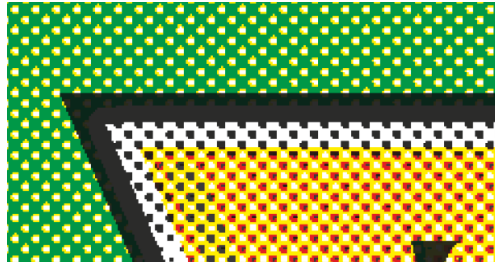
Job ticket folders

StudioRIP XF now stores each job within its own folder structure. Each job keeps a copy of the original file, and jobstyle settings and imposition used.

As file status is no longer saved in memory, when the server is shut down and restarted all jobs will be in the same state as they were left before shut down.

Jobs can be exported from one system to another keeping all settings.

| Name	Date modified	Type	Size
Data	12/06/2014 17:08	File folder	
Stream	12/06/2014 17:10	File folder	
FILMACION - Sheet 1 PANTONE 485 C - ...	12/06/2014 17:05	TIFF image	6,759 KB
Job	13/06/2014 12:17	Configuration sett...	19 KB
ProcessingParams	12/06/2014 17:07	Configuration sett...	14 KB
RasterCore log	12/06/2014 17:10	Text Document	6 KB

Job browser history

When a job is sent for output, rather than the job (and the job folder) disappearing from the job browser it moves in to a history folder and is saved in a folder format of, by Year, Month Day. This will from the client keep all the settings for the job, and if an imposition was previously applied it will keep this as well.

If your job needs to be re-output or edited, it needs to be moved out of history to the root. This can be done by dragging the file, or right clicking and selecting move to root.

Because the size of the job folders in the history can be large due to the preview files. The history will need to self purge when the hard disk starts to fill up.

How this is done is controlled from Server Options in the Tools menu. The options allow you to select when the system will auto delete
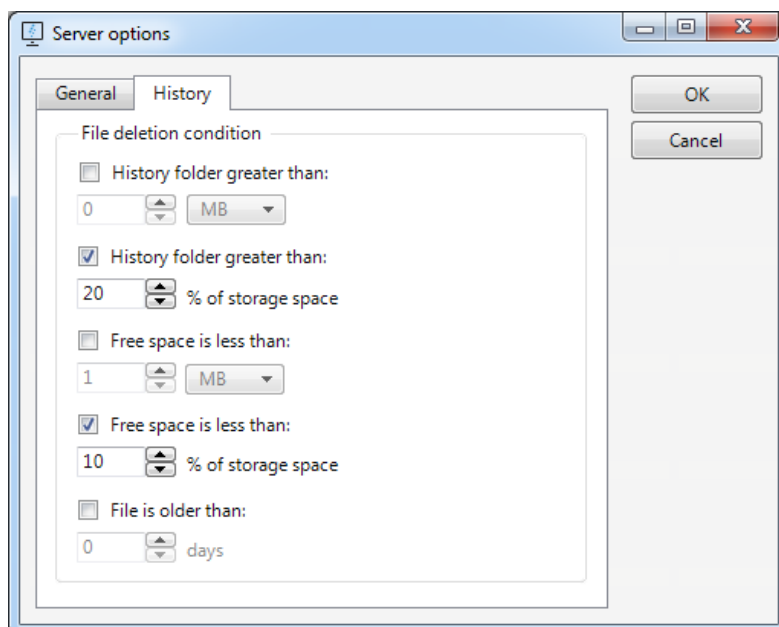
Fully exportable job styles

StudioRIP XF allows users to export job style information from one system to another. With version XF, not only is the jobstyle information saved, but any associated calibrations, ICC profiles etc. as well as printer profile information. This allows for easy transfer of settings between systems for example for Epson CTF/CTP systems. The job style can be saved either from the jobstyle editor or editing job properties, even of a job in the history
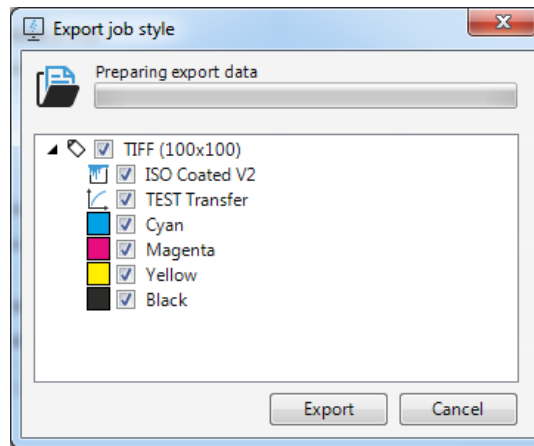
New calibration system

XF has a new calibration system. Changes have been made in both the Jobstyle calibration settings and the calibration manager
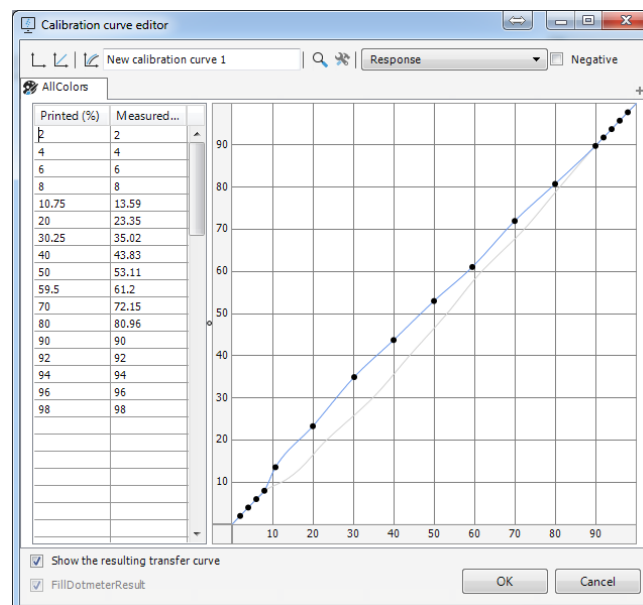

There are now 4 different types of curves

Type	Description
Response	This is typically a device linearization curve to calibrate the imaging device such as CTP/CTF.
Transfer	This additional curve allows for extra manipulation of output without having to adjust the linearised response curve.
Dot Gain Actual	This curve is used when trying to compensate for press gain. This curve will linearise the press.
Dot Gain Intended	This curve is used to adjust the press gain to enable it to reach a standard for dotgain, and standards like Fogra/ ISO do not expect a linear output but gain to a recognised value.

The new system of dotgain curves adds to the existing dotgain compensation tool. It allows more friendly adjustment for users who want press reading tools but do not have supported spectrophotometer units such as the i1.

This should also allow 3rd party supplies of press checking and adjustment software to easily adjust integrate with StudioRIP.

The assignment of curves to colours is no longer carried out in the jobstyle. Instead the colours are set in the calibration. By default when a new curve is created it is set to all "colours" but by clicking on the "+" button specific colours can be added, allowing different colours to have different curves.

The Jobstyle setting for calibration only displays the calibrations to be used and does not hold any colour information.
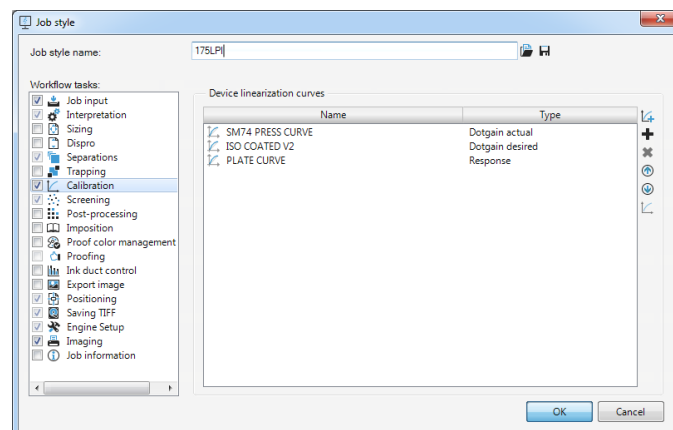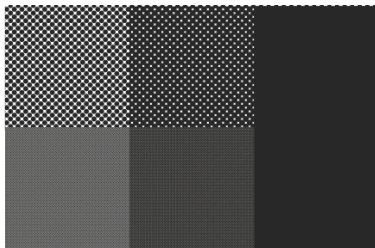

Multiple screening

StudioRIP now supports the ability to interpret jobs with multiple screening types embedded in the job, as often used in packaging industry and flexography.
In order to support this, the override frequency option in screen rules in screening option in the jobstyle must be turned off.
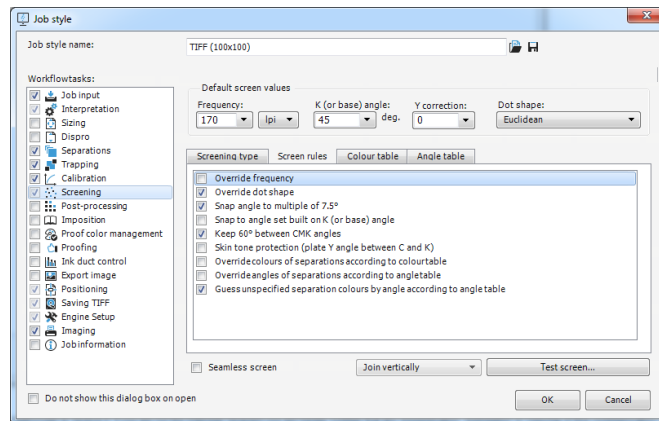
This allows for the Job to use the screening that is set in the job.
As well as this function there is also the possibility to override the frequency and the dot shape and frequency.


Above : Multi screening example:
75/90/100% patches imaged at 52LPI Round and 200 LPI Square
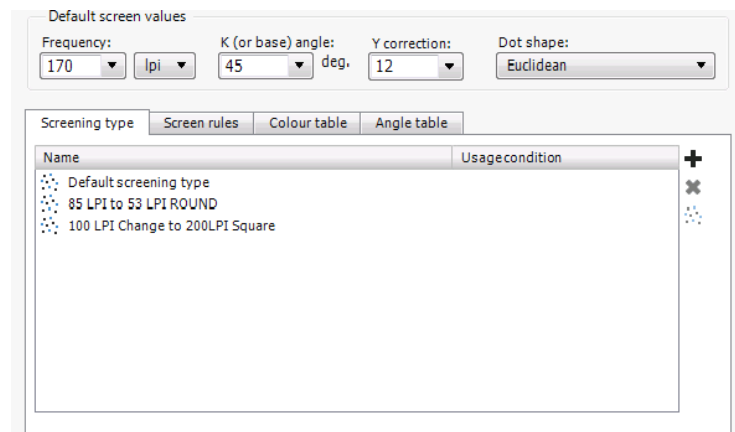
Above: Example where of screening types where multiple overrides are used.

Re-ripping of job from client

The RIP now gives the ability to view all settings used when job was ripped, by looking at the job properties. This can be reached by right mouse clicking and selecting properties.
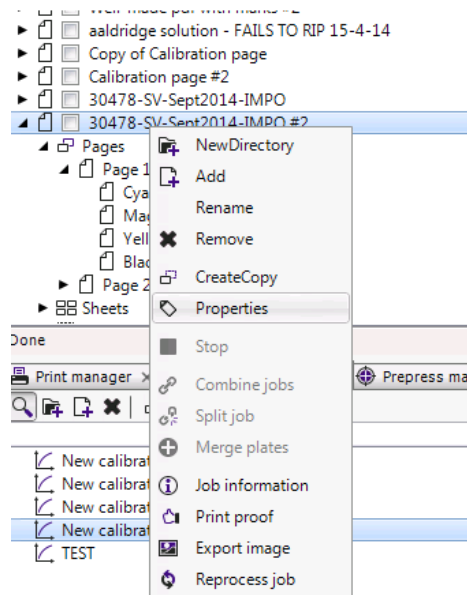
If any item of the job has changed which require re-ripping, it will ask if the user would like re-process the job. When "Yes" is selected the job will be re-ripped with the new settings.
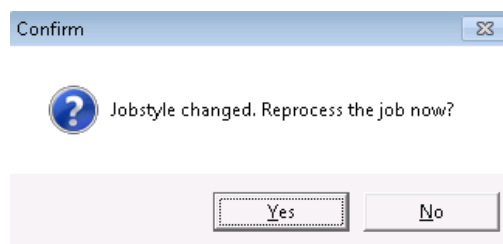
Items such as output settings, media position settings will not require or ask to be re-ripped.

Late colour management

This function is applied when converting spot colours to process. The spot colour is now processed as a spot colour and converted to process at the very last stage which ensures consistent behavior.

CMYK input profiles

CMYK input profiles are now supported in the RIP. This would not typically be needed for most users, but does give the option to override for special circumstances such as:

Ink saving: having an output colour space with very high black generation, significant ink saving can be done by converting all incoming CMYK values into this profile (using as much K instead of CMY as possible).

Technology difference: flexo or screen printers may want to convert offset jobs by remapping offset CMYK colours to their own CMYK colour space (colour metrically this is

more accurate than the dot gain compensation), gaining colour accuracy on the expense of losing the sharpness of objects.

When this process is used the input CMYK is converted to LAB and then converted to the CMYK using the separation profile. So if using the ICC profile for ink reduction, this would be set in the
Separation profile, with a profile for such as ISO Coated V2 being used for the Input profile.

Because this in theory could affect black text, there is an option to preserve black only colours, which will keep black and greyscale objects such as text 100% black.

% Dot tool

The viewer now features a % DOT function which gives the CMYK+Spot Tint value on any area of the job when the mouse is click on. To access the function select the Eye Drop Icon on the viewer tools menu

Cyan: 50% (40.2%)
Magenta: 50% (40.2%)
Yellow: 50% (40.2%)
Black: 50% (40.2%)

% Dot Tool appears in the viewer tool list on left hand side
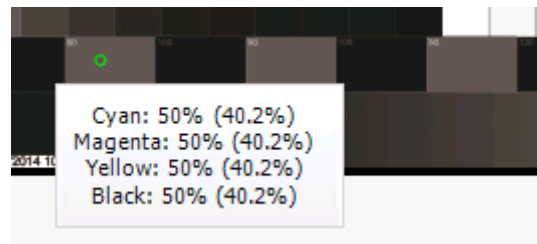
When used it gives the original (uncalibrated) value and the actual (calibrated) values

The tool will display a green circle which displays sample area. The default size is good for typical use. However if using on a very small part of the job, such as trap it may be too large.

To adjust the size of the sample area, hold down the mouse button and move the mouse away to make it larger, or closer to make it smaller.

Radius: 1000 px (1.1 mm)
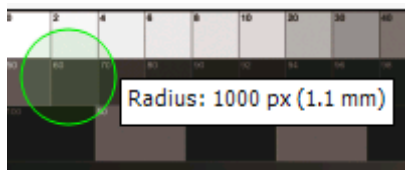
If you press the CTRL button while doing this, the sample area size will be saved as the default size.

Note : Accuracy of sample area is better with a larger sample area. Viewing a small sample area which has a very low LPI screen will produce values which are technically correct for the sample area, but if the mouse is moved slightly in the same area will produce different results.

USB microscope dotmeter

StudioRIP also supports future function of USB Microscope. It can now also used as a basic CTP plate dotmeter. Support for this is limited to supported devices and plates.

Backup and restore utility

There is now a back and restore function built into the RIP. This function is aimed to back up configuration files only. It allows for engineers and users to backup their configuration at will. But also restore configurations. The program is accessed by right mouse clicking on the RIP Server Icon and selecting backup tool.
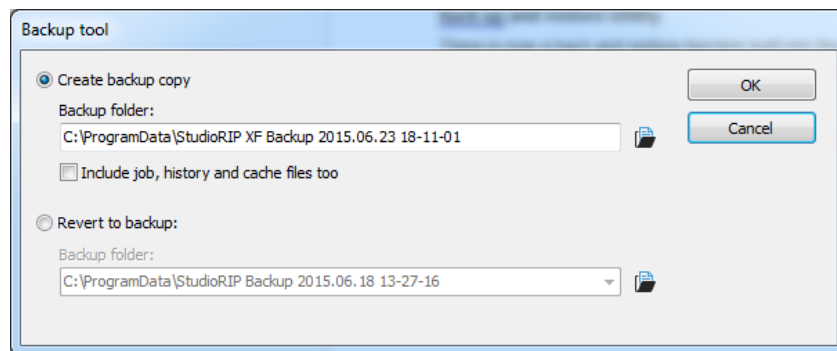
The tool allows users to copy just the configuration files which are needed to restore or all files including jobs, print manager history and cached file which could be very large.

When backup is saved into the custom folder on the install USB drive, it gives very easy emergency reinstall solution.

Enhancements

As well as new features there are a range of enhancements have been made to existing features within the RIP more powerful, faster and easier to use

Client auto connection to server

StudioRIP server automatically broadcasts on the network so a Client can connect automatically without having to enter in an IP address. If there are multiple server on the network a list is generated of servers on the network
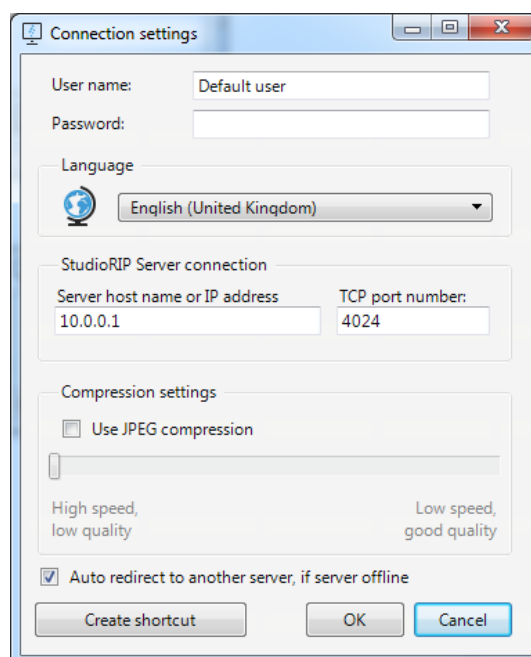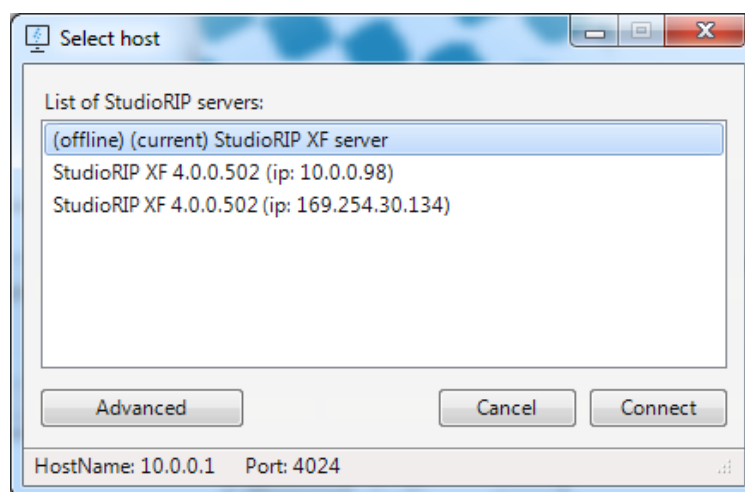
There is also an option to automatically change to another server if available. This is useful if the StudioRIP server is on an address given by DHCP and IP address is likely to change. Because firewalls are often installed as standard you should make sure the following ports are kept open on the Server PC

Port 4024 TCP - This allows the client to connect to the server

Port 4024 UDP – This allows the server to broadcast to the clients for auto connection

Improved viewer

XF has been enhanced further with faster viewing and the ability to view right to pixel level in all modes of the viewer. Issues of false lines around prepress parks have been eliminated.
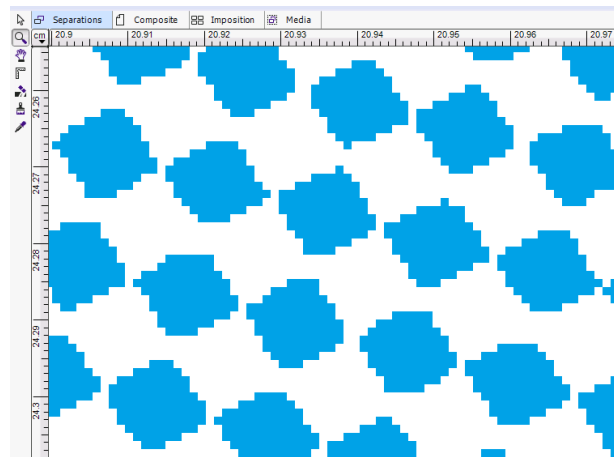
4k and High Resolution Support

StudioRIP has improved support for 4k and other high resolution displays

All parts of StudioRIP

Server based dynamic density modulation

The Dynamic Density Modulation system which is mainly used for Inkjet CTF systems is now carried out during the Job Processing stage as opposed to the Print Manager output stage as in previous versions. This offers improved speed, quality and ability to use the technology with other non-Epson based devices in the future.
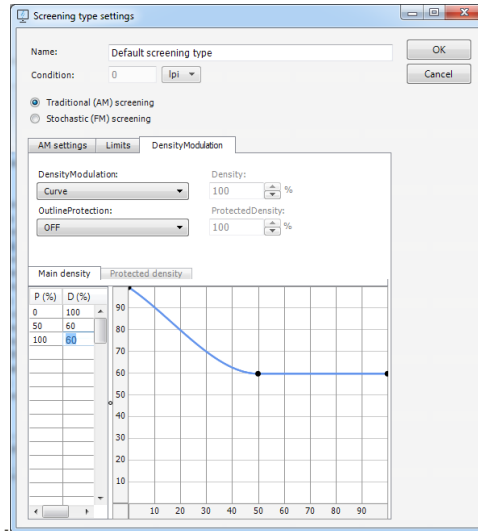
Disable colour management for (fixing RGB text and vector objects)

This option (found under the separations option of jobstyle) replaces and enhances the RGB black and White threshold function, previously found in interpretation section of the jobstyle. RGB colour such as Black, Red or Green will convert CMYK colours, Black which become pure K Black and will not be made up from CMY.

Option	Description
Text	Text will not go through colour management
Text and vector graphics	Text and vector objects like lines will not go through colour management
Text, vector and graphics and images	Turns off colour management for RGB data completely
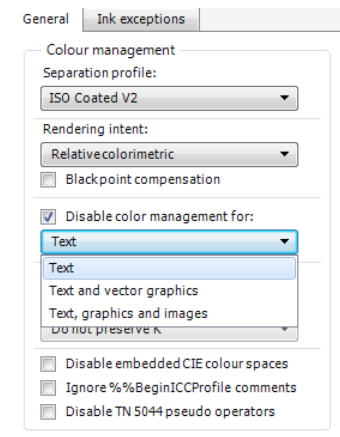
Ink exception list

The ink exception list has been improved to have more options on how the ink should be processed.

Action	Description
Never convert to Process	An ink with this setting will never convert to process regardless of settings elsewhere in the RIP
Ignore	Ink is treated as if it was never in the processed job
Disable	The ink is processed but will be removed after processing

While the latter two look very similar, the effects can be very different, especially if trapping is being used.

Automatic reset after dongle upgrades

If an expired demo dongle is upgraded via the dongle upgrade, the server application no longer needs to be re started. The RIP will notice it has been upgraded and further jobs will use the new dongle settings.

Dot chunk removal limit extended

The 10 pixel limit in size for the dot chunk removal has been increased to 50 pixels.

Custom texture support

Flexo customers who use the texture option in post processing can now add their own texture, without needing the client software to be updated every time.This feature adds texture to solid areas on flexo plates, to allow more ink to be transferred.The texture folder has been moved from program files to:
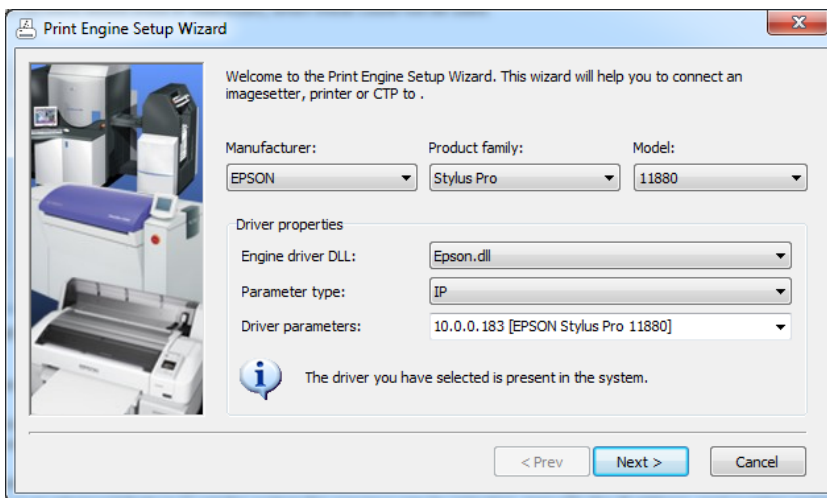
\RIP data Folder\Patterns

When a new pattern file (B&W BMP) is added it will now appear automatically inside the post processing: Black tint texture list
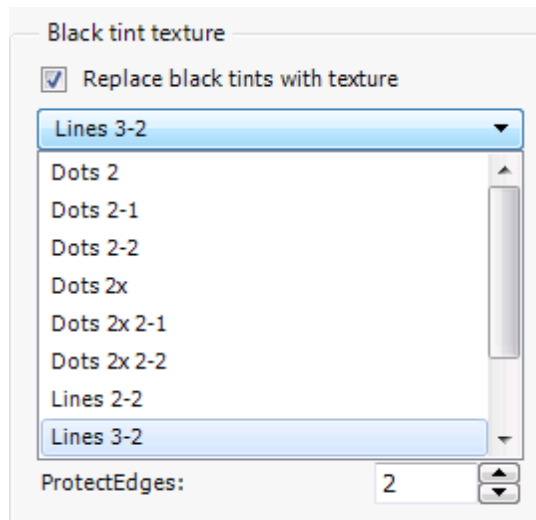
Note: To use this feature the Flexo option is still required

Engine list now in re-organised

When selecting a device the selection of devices has changed from a single list to a selection by manufacturer, family type and device

The internal file used has changed from imagesetter.ini to engine.ini and the structure inside has changed to make use of the new folder structure

Faster TIFF file Processing

When 1 BIT tiff files are sent to the StudioRIP, they are now processed much faster, by avoiding having to be read and resaved, as such on very large plates there is huge savings in time.

This is applicable only when resolution of the TIFF matches that of the output resolution in the jobstyle

IP Support for Epson / HP Printers

Direct IP printing is now possible from Print Engine, no windows driver is required for spooling

Epson driver – preferred channel option

This enhancement improves the quality of the 4 channel mode by default only using the first pair of ink channels in normal use and only using the second pair when required for higher ink density.

When creating a new device in device manager a new entry has been added. This is to select the type of output required. This feature was added for the Epson driver, to list only applicable options. Previous versions would show IP Addresses, when these could not be used.

Epson Length compensation calculator

Built into the Epson Driver is tool to calculate the change needed to correct the length adjustment. Simply print a job of a specified size, enter the value it should be (printed length) and measured length and the adjustment value will be corrected
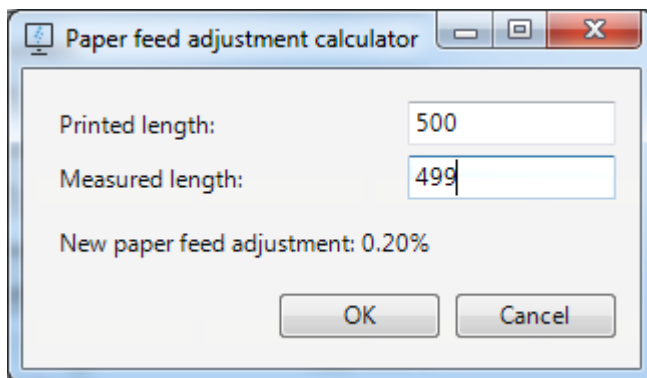
New Twin channel colour options

The Epson Driver now allows for further combinations of colours to be used for twin channel use on devices such as 11880 support for Light Light Black + Light Black and Light light Black + Yellow now included

Automatic Print Manager selection

A new system has been introduced when running Add Print Engine Wizard, or creating a new Jobstyle.

In previous versions, the correct port number and hotfolder location of the print manager needed to correctly set for the link to work. With XF each print manager will publish itself. When selecting a print manager to connect, all the available Print Managers will be in a drop down list. No configuration of ports or hotfolder paths is required.

The system will also work with print managers which are installed on other computers, providing that there is no firewall to block the broadcast messages.
If required there is an advanced feature to set the system the previous way by selecting, manually the IP address, port number and hotfolder location.

The print manager will publish it self via UDP on the configured port number of the Print Manager, So typically 4025 for the 1st Print Manager
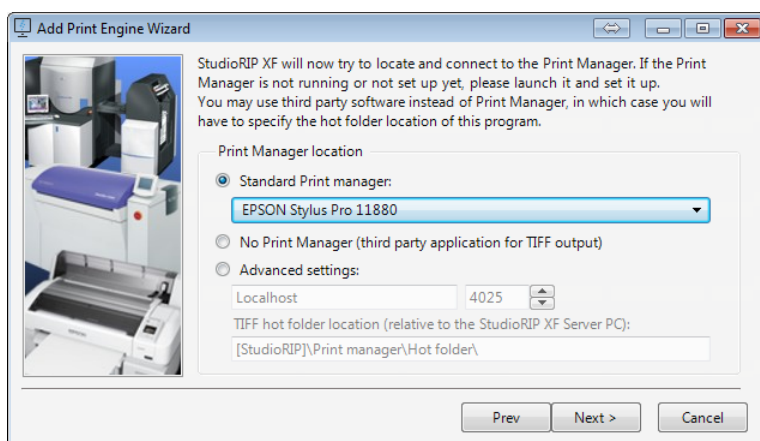
Creep Improvements

The option for creep has been replaced with two modes of creep.

| Action	Description
Push Out	This works as per the system in version 3. It will push the outer sheets further by adding a gutter on the spine. The closer to the center the less the gutter will be. This helps keeps the pages the correct size. But may not be suitable if the cover is to be included, due to the added gutter
Push In	This works by using the defined page size for the outer pages. Inside pages are resized slightly smaller. The inside / center of the page will be cropped the most. This allows for booklets with the cover to be printed. But

	if images spread over 2 pages may clip the image

Creep can now also be added to custom impositions not just saddle stitched options as was previously the case

Angle tolerance

StudioRIP in order to reduce / eliminate moire will alter the angles slightly to produce the best combination of angles. For some customers in special circumstances the tolerance values of change needs to be selected.
There is now a new setting in the jobstyle, screening, which allows for setting for angle tolerance. The value can be set to 0.1, 0.2,0.5,1 or 2
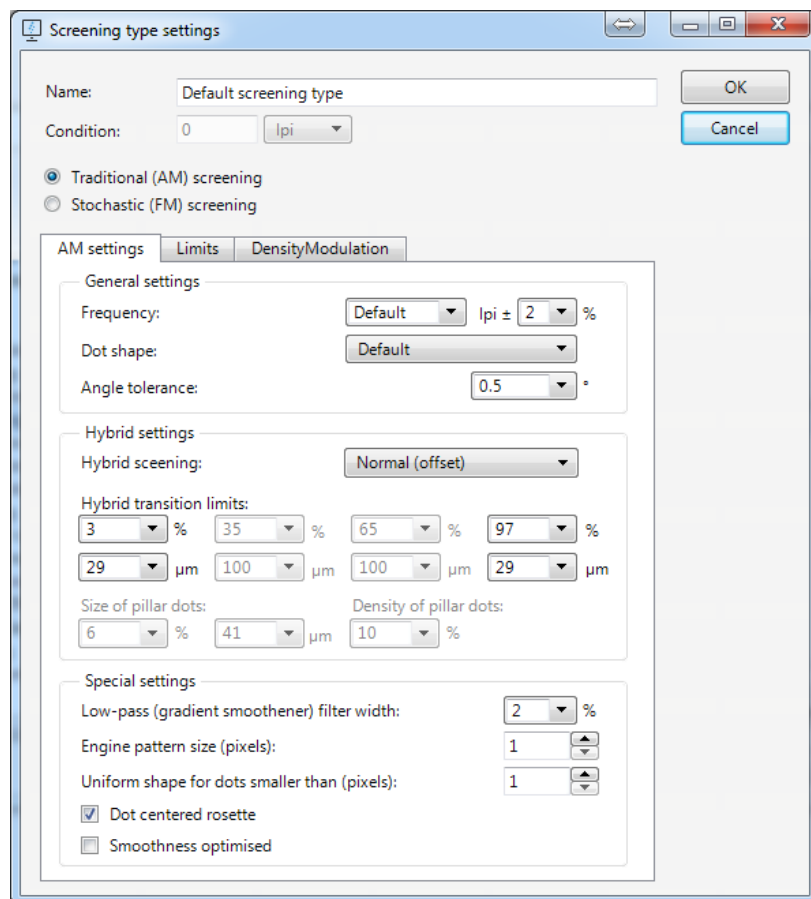
Cached prepress marks

Prepress marks are no longer generated each time a job is ripped. In XF the RIP now use a cache system. This means jobs are ripped more quickly, as they reuse already generated marks. If for whatever reason any part of the configuration in a jobstyle has changed from the settings used to make the cached settings, new marks are generated ensuring correct parks with correct calibrations etc. are being used.

Note : This means the first time a set of cached marks are made, it adds a minute or two to ripping time, but further jobs to the same jobstyle will rip more quickly as no marks are generated.

Tiff files used as prepress marks

Studiorip now allow prepress marks based on tiff files to be processed the same way as jobs, being marks based on tiff such as 1 BIT tiff will not be processed. This means it is possible to load in plate quality marks. A new icon has been added in the prepress marks library which can assigned to such marks

Konica Minolta FD7 spectrometer support

StudioRIP XF now supports the FD7 Photospectrometer from Konica Minolta for use for colour profiling proofers and dot gain compensation.

Socket Input port reservation

Studio Previously used to assign port addresses from port number 9100, however for some external plugins or 3rd party program this could cause a clash. To help avoid this and to give users ability to set their own range a new setting in server options allows to set the first port number to use
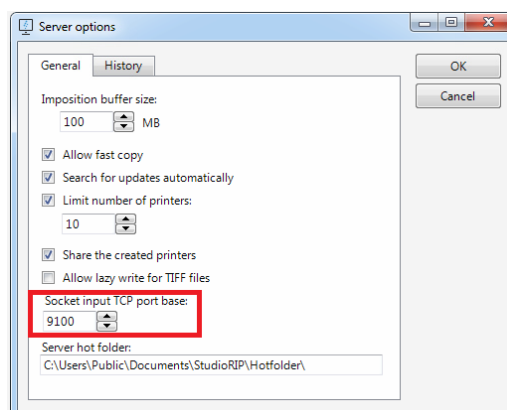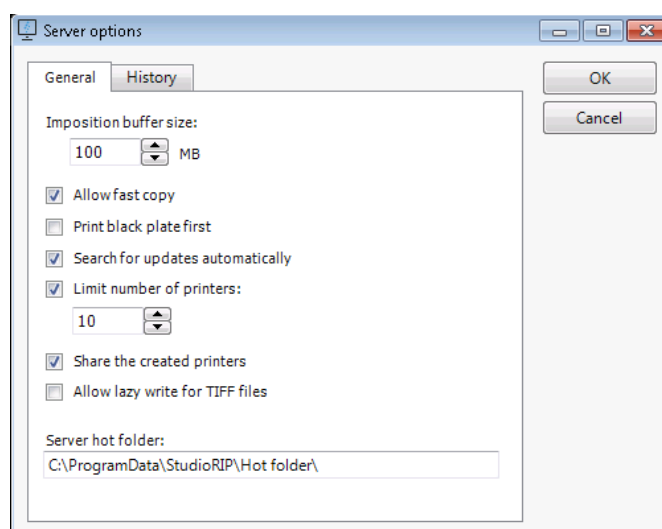
Changes

There are a number of minor changes in how the StudioRIP works. This section explains the major differences

Hot folder path location changes

The RIP installer no longer allows the hot folder path to be selected during installation process. Instead the RIP will be automatically configured to use a folder called "Hot Folder" which is located in the RIP data folder.

There is however a new option in server properties to change the hot folder root path from this default to another folder. If you change this, the hot folders will not appear until a hot folder is created or altered when all the folders will migrate.


External plugin support

The new infrastructure of XF allows for external plugins to change job settings inside StudioRIP. Potential integrators who would like to use this function should contact StudioRIP UK for more information.

Colour to monochrome conversion

In the previous version, turning off the separations option would convert the job to print monochrome. This has been changed in XF. The tick box can no longer be disabled. Instead

on the separations section of the jobstyle select? Convert to grey (k) Output
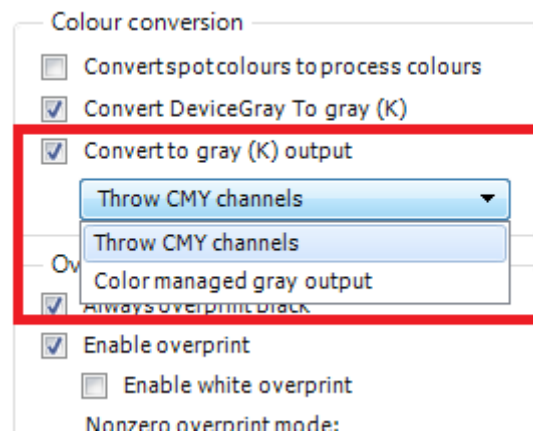
Option	Description
Throw CMY Channels	Excludes the CMY channels preserves the K channel
Colour Managed Gray Output	Lets the RIP use colour management ensuring colour metric results. CMYK colours will be converted to Lab colour space and then to K

RIP administrator service

The RIP administrator is a program that sits in the background - its function is to carry out specific functions that need administrator rights. It is important that this should never be shut down manually. If it is, flattening transparency will not work. If you start the server with the RIP administrator not running an error message will be seen.

To restart the RIP administrator, the service needs to be run from Task Manager. Running the application manually from the directory will not work.

Proofing in demo mode

Jobs printed via Proofer in demo mode (with or without a dongle, or using a proofing or a output width not supported by the dongle) will now get a watermark on the RIP and blocks of colour shift on output.

Splash Screen Format changed

For OEM customers designing splash screens the previous requirement of 32 BIT A8R8G8B8 BMP files has been opened up to include standard 24BIT RGB BMP files

New Graphical User Interface

The interface has been resigned for an updated feel, while at first glance the GUI looks familiar there are some changes.

New icons

With XF a new icon design has been implemented, the tool bar structure of StudioRIP still exists but with a new look.

The icons are two colours, black and by default blue. For OEMS customers that would like to change this to their corporate colours it can be changed in Client Settings under the Tools menu. This value can be changed in the setup files so will automatically be install the correct colour.
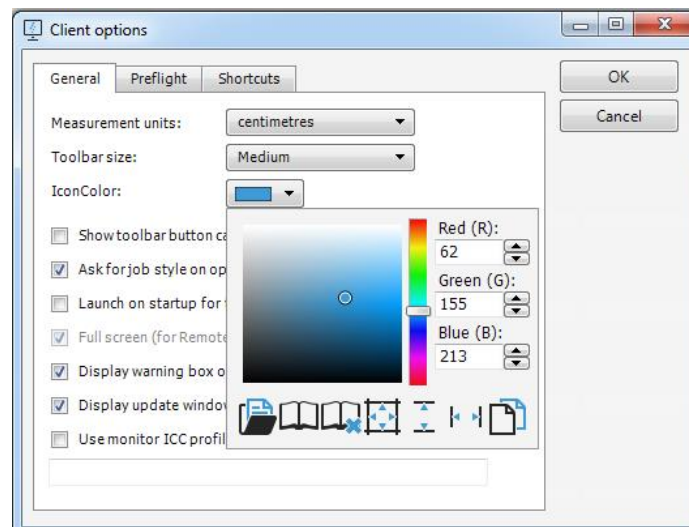
Printer profile settings merged into jobstyles

The profile has been eliminated as a separate docker and the functions have been merged into the jobstyle. This allows for a single source of configuration, and allows for easier import and export of settings.
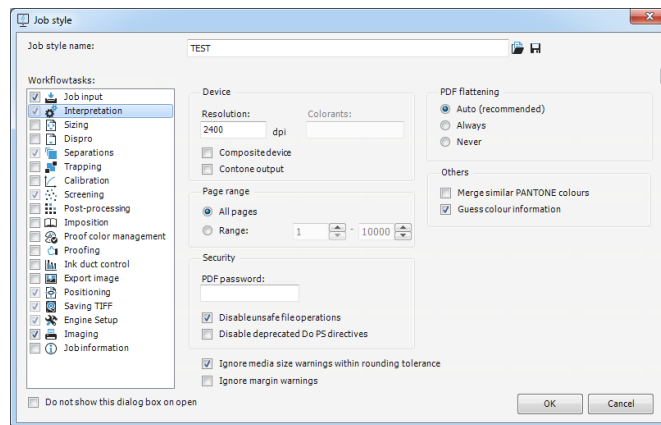
The settings that used in be in the printer profiles are now in different places

Function previously in general tab	New location
Linked printer manager location	Saving TIFF option
Resolution, composite, contone & colorants options	Interpretation option
Tiff file name, photometric tag and orientation tag options.	Saving Tiff option
Function previously in media tab	New location
Media Size , unused area, non-image able area, sheet placement, ganging, Fast scan in feed direction	Positioning tab
Print Full Media Size	Removed – See below

Functions previously in Proof tab	New location
All settings	Proof colour management

| Functions previously in print engine properties tab	New location
All settings	Engine setup option
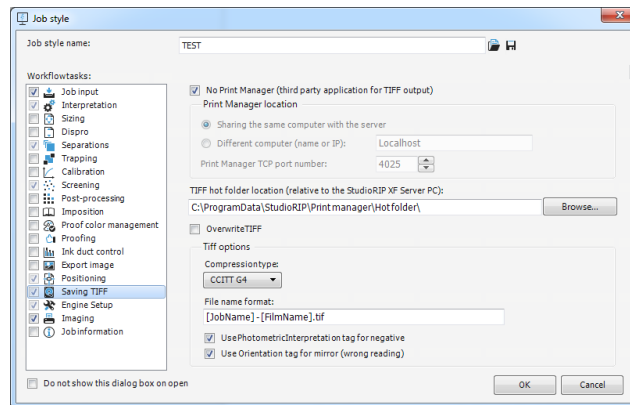
There are some changes to terminology.

Printed area option in positioning

This replaces the previous print full media option, and offers an option of entire media or bounding box contents.
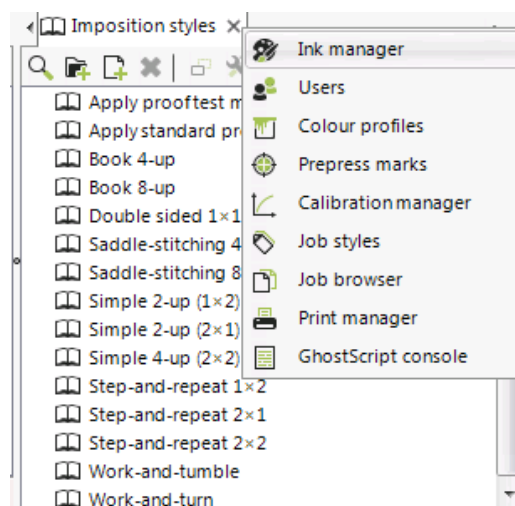
Rotation according to orientation

Ability to set rotation according to orientation of job now available
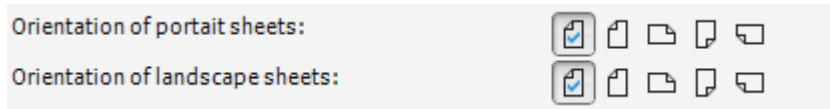
New docker system

The docker system is no longer drag and drop onto to the Window System, instead each window has a small icon, which allows a docker to be aligned to the window. Clicking on the "+" button allows you to select the docker(s) to be applied to that window.

New item management

Each docker item now has the same Item management system. Each type of item can be searched, a new item generated, edited and copied. Items can now be grouped into folders, and if required sub folders of folders. This allows for Impositions to be filed into logical folder orders.

Notes

Further details of new functions can be found in the XF manual.

For any support questions on StudioRIP XF please contact StudioRIP Support.

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