



User Manual

Copyright © 1995-2005 AIT International

Revised edition: November 2005

Contents

Introduction	3
Overview	3
Getting Started.....	3
Screen Layout.....	4
Queue	6
Adding a New Queue.....	7
Queue Setup.....	8
General.....	9
Paths	9
Sizes.....	11
Template.....	12
Settings.....	12
Nesting	13
Interface.....	14
Status	20
Removing a Queue	21
Queue Operation	21
Running Queues	21
Stopping Queues	22
Schedule Queues	22
Job	24
Active Folder Jobs	24
Hold Folder Jobs	26
Error Folder Jobs	27
Archive Folder Jobs	27
Reprint Jobs	28
Logs	28
Media Matching	29
Nesting.....	31
Server Administration	33

Introduction

This document describes the functions and use of the Server module in Shiraz RIP.

Overview

Server module is responsible for managing queues and their associated jobs in the RIP. You can add, remove, start, stop or schedule queues from this program. You can also manage jobs on the queues and examine the status of each queue and its jobs.

There can only be one Server per workstation in a network. Each Server can manage one or more queues. There are no limits to the number of queues you can create, but your Shiraz security key (Dongle) controls how many you can run concurrently.

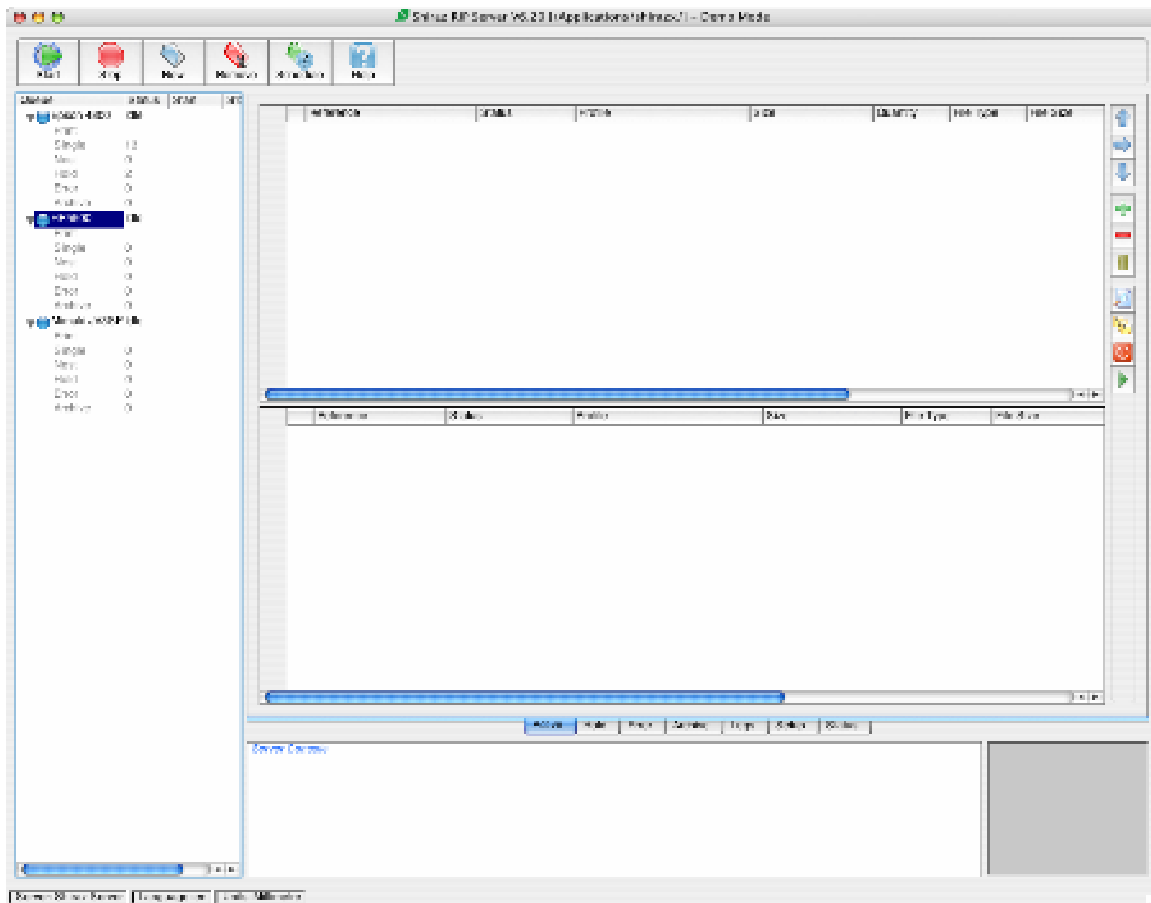
Queues are created for a specific printer make and model and assigned a media (more on this later). You can create more than one queue for a single physical printer to separate jobs if you wish, but you have to make sure they are not run at the same time, otherwise they both will try to output to the same printer (most probably resulting in I/O error in one of them).

Jobs are created specifically for a queue and cannot be moved between queues. Each queue has some folders which can interchange jobs depending on their status. The following sections will describe each area fully and take through examples.

The Server is designed to run continuously in the background with minimum intervention. However jobs can also be submitted to the queue from the Server or re-submitted from Archive folder

Getting Started

The Server module can be started from either the Shiraz Launcher or from the program group shortcut. The main Server screen is displayed after a short splash screen giving details of the software.



Screen Layout

The top area of the screen is the main toolbar which contains button for managing queues on the Server. This contains button for starting, stopping, scheduling, creating or removing a queue, and a help button.



The Left hand side contains a list of queues in the Server and a summary of their jobs and current queue status. Each queue can be expanded to show the number of entries in each folder. The coloured icon shows the current status of the selected queue

Active - This folder has two sections. The top area shows all the active Single Jobs for the current selected queue. The bottom area shows Jobs to be nested by the queue. Jobs can be moved (drag & dropped) between the two areas when the queue is not running.

Hold – Jobs held due to media mismatch or incorrect roll size, are shown in this folder. These are jobs which have been submitted for print but are held until the holding cause is rectified. User can also put jobs on hold from the Active folder.

Error – Jobs which have errored during the queue run are moved to this folder. The reason for the failure is shown in the job status.

Archive – This folder contains jobs which have been successfully processed. Reprint jobs are also moved here which can be resubmitted by moving to the Active folder.

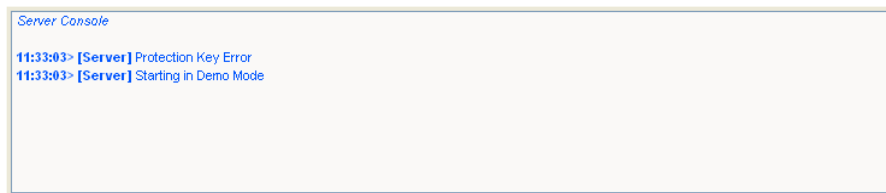
Logs - This tab shows a list of all available logs for this queue. Each log file can be examined by double clicking on the entry and opening it in an editor utility. Logs are created daily for each queue and all messages are appended to the same log file for each queue run.

Setup – Various queue setup parameters are controlled via this tab. The queue setup section later in this document describes these in detail.

Status – Printers can be interrogated by the Server for information relating to their ink levels , media size and their current status. Also some remote functions such as nozzle check can be executed remotely on certain printer makes and models.

Toolbar – The small toolbar at the right hand side contains buttons for various functions relating to the current folder of the selected queue. These functions are only applied to the currently selected job(s).

The bottom section of the main Server screen shows the system Console. This area displays messages relating queues and activities on the Server.



Queue

Queue is the placeholder for jobs to be processed for a particular output device. A queue is created based on a specific printer and will contain information relating to that device. You can create as many queues as you like. Normally you would create one queue per printer device, however if needed multiple queues can be created for one single output device.

Each queue is continuously scanned for incoming jobs which automatically appear on the job list depending on their settings. For example jobs submitted as single prints are put in the Single area of the queue Active folder, and jobs to be nested are moved to the nesting area of the Active folder.

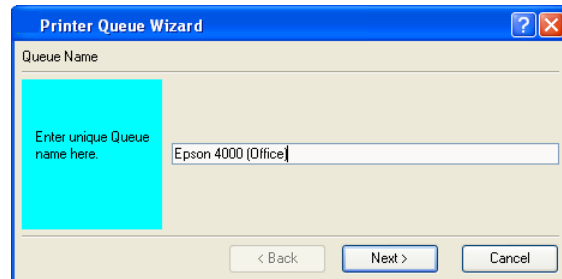
Jobs can only be moved between various folders of the same queue and cannot be moved between queues.

Queues will be available to users connecting to this Server for submitting jobs. On first installation of the software there are no queues in the Server. You will need to add at least one queue before starting to work with other parts of the RIP. The next section takes you through adding a new queue and setting it up for printing.

Adding a New Queue

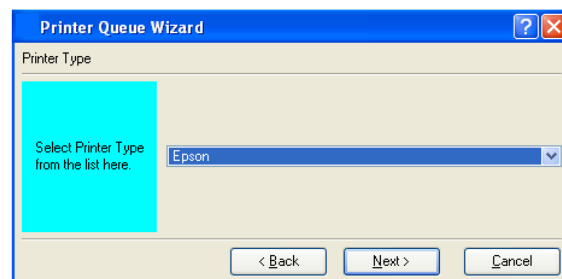
Press New on the main Server toolbar, Printer Queue Wizard is started which will take you through the steps. Each screen has a Next and Back button allowing you to navigate forward and back to change your selection. The Next button will only become active when you make a valid selection. Press Cancel at anytime to exit the whole process.

First select a unique name for your queue. Remember you will often have to refer to this queue from other modules, so it is a good idea to make it recognisable, say by including the printer name and model.



The screenshot shows the 'Printer Queue Wizard' window with the 'Queue Name' tab selected. A text box contains 'Epson 4000 (Office)'. A yellow callout box on the left says 'Enter unique Queue name here.' At the bottom are buttons for '< Back', 'Next >', and 'Cancel'.

Next step shows a list of available printer types on a drop down list. Select the appropriate printer type for your output device.



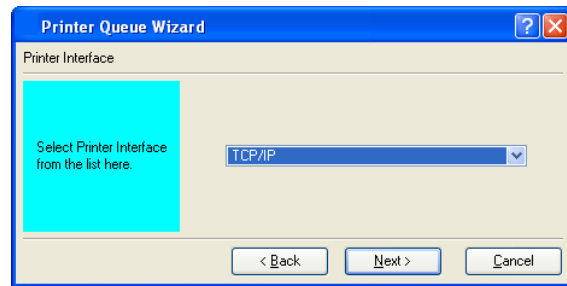
The screenshot shows the 'Printer Queue Wizard' window with the 'Printer Type' tab selected. A dropdown menu shows 'Epson'. A yellow callout box on the left says 'Select Printer Type from the list here.' At the bottom are buttons for '< Back', 'Next >', and 'Cancel'.

Next step requires you to select a printer model. The list shows all the models supported for the selected printer type.

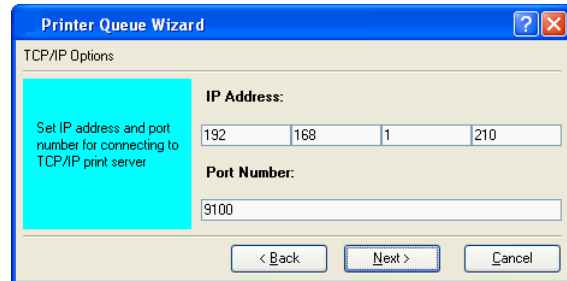


The screenshot shows the 'Printer Queue Wizard' window with the 'Printer Model' tab selected. A dropdown menu shows 'Stylus Pro 4000'. A yellow callout box on the left says 'Select Printer Model from the list here.' At the bottom are buttons for '< Back', 'Next >', and 'Cancel'.

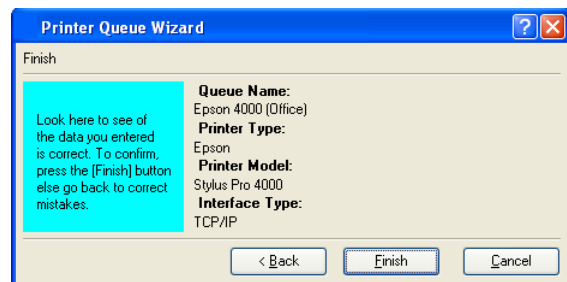
Select a printer interface in the next step. If you are not sure about the interface detail, you can select NULL, otherwise select one of the supported interfaces for your printer.



The next screen depends on the selected interface type. Some interfaces require further detail to be entered. For example for a network printer connected via TCP/IP you have to enter the node address and port number.



Finally confirm the details of the new queue and press Finish to add the queue.



After creating a new queue from the Wizard, the Server adds it to the list of available queues and all the associated structure is automatically created. You should now check the setup of the queue and change any option required.

You cannot change the queue name or change the associated printer type/model after it has been added, which can only be achieved by removing and adding another new queue.

Queue Setup

Select the queue on the queue List and press the Tab button to access the queue setup page. There are a number of categories which can be accessed from this screen. You can only edit these parameters if the queue is Idle. The next sub-sections will take you through the various groups and describe the options:

General

This shows queue general properties:

Category

- General
- Paths
- Sizes
- Template
- Settings
- Nesting
- Interface

Queue general properties

Printer: Epson

Model: Stylus Pro 4000

Create Date/Time: Wed 22 Sep 2004 14:29:33

Description:

Active Hold Error Archive Logs **Setup**

Printer- Displays the printer type for this queue (Read-Only)







Model – Displays the printer model number (Read-Only)

Create Date/Time – Shows the date and time the queue was created on this Server (Read-Only)

Description - You can enter an expanded description for the queue here. This will be shown in reports and can be used to identify further information about the printer such as location, owner, etc.

Paths

The paths category shows the full system file path for various parts of the queue. You may change some of these paths by using the browse button to the right of each entry.

Various paths used by the queue	
Profile	D:/shirazx/profile/epson/sp4000/
Template	D:/shirazx/profile/epson/sp4000/
Hot Folder	D:/shirazx/queue/Epson 4000 (Office)/file/ 
Working	D:/shirazx/queue/Epson 4000 (Office)/rtf/ 
Reprint	D:/shirazx/queue/Epson 4000 (Office)/reprint/ 
Pending	D:/shirazx/queue/Epson 4000 (Office)/pending/ 
Temp	D:/shirazx/queue/Epson 4000 (Office)/temp/ 
Library	D:/shirazx/queue/Epson 4000 (Office)/library/ 

Active Hold Error Archive Logs Setup

Profile - This displays the full path to the Server profile folder for this queue. This is for information only and cannot be changed

Template - This displays the full path to the Server template folder for this queue. This is for information only and cannot be changed

Hot Folder – This is the path to hot folder for this queue. Files dropped in this folder are automatically picked up by the Server and added to the queue job list. You can change the path of the hot queue to a different location.

Working – Runtime scratch folder (RTF) path for the queue. This folder is used for storing intermediate files used during processing of jobs. You may want to change this folder to a different location on a different disk to provide larger scratch area and reduce disk I/O bottlenecks when multiple queues are running.

Reprint - The reprint files are stored in this location. You may change the location by browsing to a new path. Remember that any existing reprints will not be transferred and may be lost.

Pending - The pending path is the location of a folder used by the queue internally for storing intermediate image files.

Temp - The location of queue temporary folder.

Library - This shows the path to the Server folder which stores image files sent by a network Design applications. Jobs submitted via a network will have their image files copied here for access by the queue.

Sizes

This category shows various sizes for the queue. The unit of display is determined by the system measurement unit selected in Server Preferences (see later). You can however enter in any supported unit by adding a unit identifier:

I, i, "	inch
M, m	Millimetre
C, c	Centimetre

For example if the system measurement unit is currently millimetre, then

25.4 = 25.4m = 1" = 2.54c

The screenshot shows a software interface for configuring printer settings. On the left, a vertical 'Category' list includes 'General', 'Paths', 'Sizes' (which is highlighted), 'Template', 'Settings', 'Nesting', and 'Interface'. The main window area is titled 'Printer and various sizes' and contains four labeled input fields: 'Max Print Length' (empty), 'Printer Side Margin' (containing '3.000'), 'Roll Width' (containing '430.000'), and 'Roll Print Width' (containing '424.000'). At the bottom of the window, there is a row of buttons: 'Active', 'Hold', 'Error', 'Archive', 'Logs', and 'Setup' (which is highlighted with a yellow border).

Max Print Length - Where a maximum print length is applied, the length is shown here. On printers that support status feedback for media size, this information is then automatically updated by updating the printer status (see Status).

Printer Side Margin - Most printers have a fixed hard side margin. This area is not printable and applies to both left and right side of the roll.

Roll Width - Enter the actual width size of the roll loaded on the printer. Remember to change this value if you change the roll to a different size later. On printers that support status feedback for media size, this information is then automatically updated by updating the printer status (see Status).

Roll Print Width - Actual printable area of the roll. This is the size used in determining layout and in Nesting. (Read-Only, calculated automatically from Roll Width and Side Margins).

Template

This category shows the queue default template and its associated parameters. Each queue has a default template for applying parameters to new jobs. You can select a template from the drop down list in this category.

The profile selected by the template and its details are shown below the template.

The screenshot shows a web interface for configuring a printer queue. On the left is a 'Category' sidebar with a tree view containing: General, Paths, Sizes, Template (highlighted), Settings, Nesting, and Interface. The main content area is titled 'Queue default template applied to new jobs'. It features a 'Template' dropdown menu currently set to 'default'. Below this is a 'Profile' section with three read-only fields: 'Name' (Enhanced Matte Paper 720), 'Media' (Enhanced Matte Paper), and 'Description' (Epson media: Enhanced Matte paper.). At the bottom of the interface is a horizontal tab bar with buttons for 'Active', 'Hold', 'Error', 'Archive', 'Logs', and 'Setup' (which is the active tab).

Template - A list of all available templates for this queue (based on printer type and model). You can select a different template to be applied to new jobs here.

Profile Name - If the selected template has a profile entry, the name of the profile table is shown in this field (Read-Only)

Profile Media - The Media setting of the profile in the template (Read-Only)

Profile Description - The Profile description of the profile in the template (Read-Only)

Settings

The settings category contains options to control various queue behaviours.

The screenshot shows a software settings window. On the left is a sidebar with a 'Category' list containing: General, Paths, Sizes, Template, Settings (highlighted), Nesting, and Interface. The main area is titled 'General queue settings' and contains the following options:

- ☒ Error jobs with no profile
- ☒ Error jobs with missing fonts
- ☒ Keep jobs in archive when finished
- ☒ Auto rotate jobs to save media (Roll only)

Below these is a label 'Remove jobs from archive after:' followed by a dropdown menu showing 'Disabled'.

The 'Media' section is separated by a horizontal line and contains:

- A label 'Name' followed by a dropdown menu showing 'Photo Imaging Gloss'.
- ☒ Hold jobs not matching queue Media

Error jobs with no profile - when selected, jobs which have no profile selected are sent to the error folder without processing. This is advisable as without profiles jobs may over-ink on the loaded media and cause damage to the printer.

Error jobs with missing fonts – documents with missing fonts are sent to the error folder when this option is selected.

Keep jobs in archive when finished – select this option if you want the jobs to be kept in the Archive folder after it has been successfully processed. Otherwise jobs are removed from the queue permanently.

Auto rotate jobs to save media (Roll only) – If an image can be rotated to use less medias then it will be by the RIP if this option is selected. This option does not apply to sheet media or nesting area.

Media Name - this option shows a list of all available media in the Server. Select this option only if you require automatic media matching by the RIP. This is explained further below.

Hold Jobs not matching queue Media - when selected a job with a profile which has a different Media than the one selected above is held until the queue Media is changed. If either the queue or the job Media are set to “None” or this flag is not selected, no check is done and all jobs are processed anyway. (see media matching section later in this document for further details)

Nesting

The nesting category contains the various parameters used in queue media saving feature. You can control the Nesting behaviour of your queue by changing the parameters in this section. (see Nesting section later in this document for further details).

Category

- General
- Paths
- Sizes
- Template
- Settings
- Nesting**
- Interface

Nesting

Min Area: 75%

Wait Time: Disabled

Max Nest Items: Unlimited

Nesting Gap: 10.000

Nesting Height (Roll):

- ☒ Auto
- ☐ Fixed

1000.000

☐ Do not nest (single) jobs for hot folder

In order for a nesting group to be set Ready (i.e. processed for printing) one of the following three conditions must be met.

Min Area - minimum area (in percentage) of the roll to be filled before starting a nesting group job on the queue. Nesting groups are set to the Ready state when this condition is met.

Wait Time - maximum time (in minutes) to wait for new jobs to fulfil a minimum width criteria before starting a nesting group job on the queue.

Max Nest Item – sets the maximum number of images required in the nesting group before the minimum condition is met.

Nesting Gap – sets the size of the gap used between images in the nesting group in the currently selected unit.

Nesting Height (Roll) – the Auto option here instructs the RIP to set the height of the nesting group to the height of the biggest image or if the fixed option is selected the user can set the maximum nesting height to be used. This option does not affect nesting for the sheet media.

Do not nest (single) jobs for hot folder - Determines if files accepted from the queue hot folder should be nested or printed as single job.

Interface

This category allows you to change the interface for the selected queue and any parameters relating to the interface. There are many different types of interfaces available depending on Printer and the operating system being used. In the following sections each interface type is described in details.

File

File interface outputs to a system binary file instead of sending to an actual physical printer. This option is useful for examining output from the Server or for testing the queue without actually printing. This file can also be sent to the printer by third part spooling program if required.

The screenshot shows the 'Interface settings' window. The 'Interface' dropdown menu is set to 'File'. Below this, the 'File Settings' section is visible, showing the 'Output Path' as 'D:/shirazx/queue/Epson 4000 (Office)/temp/' with a browse button to its right, and the 'File Extension' as '.rtl'.

Output Path - The path to the folder where the output files are written. You can change this path through the browse button next to the entry.

File Extension - The output filename comprises of the job reference plus the extension entered here. The output is a binary file.

TCP/IP

Printers connected to the network via TCP/IP protocol are setup via this screen.

The screenshot shows the 'Interface settings' window with 'TCP/IP' selected in the 'Interface' dropdown. The 'TCP/IP Settings' section includes:

- IP Address:** Four input fields containing '192', '168', '1', and '210'.
- Port Number:** An input field containing '9100'.
- Timeout:** A dropdown menu set to 'Disabled'.
- Buffer Size:** A dropdown menu set to '48KB'.

 A 'Test Connection' button is located at the bottom of the settings section.

IP Address - IP address of the printer on the network in 999.999.999.999 format. Make sure the address has the same domain range as the computer.

Port Address - the port address of the Print-Server on the printer where direct binary printing is done. Most Print-Servers use 9100 as their port, however some may be different. Refer to the print server documentation for the correct port number.

Timeout - timeout value in seconds which has to expire before an I/O error occurs, if the receiving node is not responding or accepting data. For maximum throughput speed, set this timeout to 0, effectively disabling timeout checks.

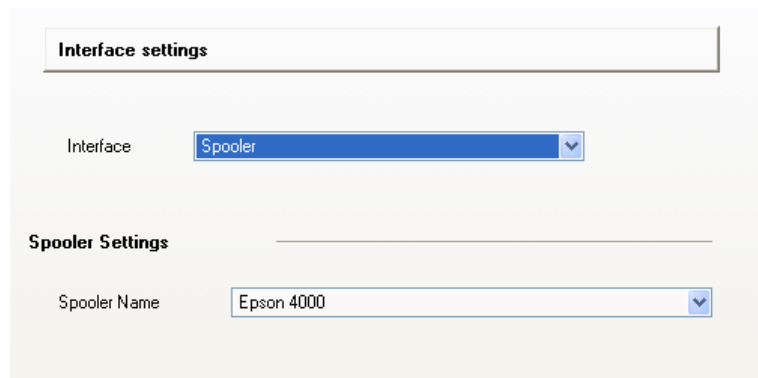
Buffer Size - size of TCP/IP internal buffer which is used to store data before outputting packets on the actual I/O channel. The optimum size is dependent on system and will require some trial. The default 48KB will work best on most systems.

Test Connection – click here to test that the connection from the host computer to the printer is ok.

Spooler

Spooler interface outputs to a system spooler connected to the printer. Selecting spooler will allow you to free the queue sooner as the outputs will be queued on the spooler allowing the queue to carry on to the next job.

Spooler interface port can be set to any output supported by the platform such as USB, Firewire, TCP/IP, etc.



The screenshot shows a window titled "Interface settings". Inside, there is a section for "Interface" with a dropdown menu currently showing "Spooler". Below this is a section titled "Spooler Settings" which contains a "Spooler Name" dropdown menu currently showing "Epson 4000".

Spooler Name - This entry shows a list of all available spoolers on the network which can be accessed by the queue. The list contains all local and shared network spoolers. You can select a spooler on a network spooler for printing via a remote computer.

Please note that this option is only available for MS Windows operating systems.

Parallel

Printing via parallel port on the computer:

The screenshot shows a window titled "Interface settings". Inside, there is a section for "Interface" with a dropdown menu set to "Parallel". Below this is a section titled "Parallel Settings" which contains a "Port Name" dropdown menu set to "LPT1".

Port Name - Select one of the available parallel ports for printing.

This option should not be used normally as it is a very slow way of sending data and is only available for Windows operating systems.

Mimaki Firewire

The Mimaki printers support a proprietary Firewire interface. This interface option allows the queue to communicate with the printer via Firewire connected to the Server.

The screenshot shows a window titled "Interface settings". The "Interface" dropdown is set to "Mimaki Firewire". Below this is a section titled "Mimaki Firewire Settings". It contains three settings: "Device Name" with a dropdown set to "<None Selected>" and a scan button (a square with a circular arrow); "Timeout" with a dropdown set to "300s"; and "Buffer Size" with a dropdown set to "64KB".

Device Name - Select one of the available Firewire devices on this workstation. You can use the update button next to the entry to scan for new devices connected to your machine.

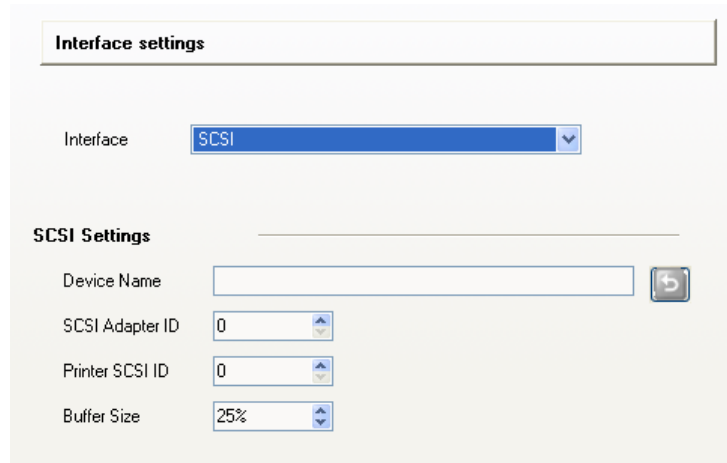
Timeout - Timeout value in seconds which has to expire before an I/O error occurs, if the receiving node is not responding or accepting data. For maximum throughput speed, set this timeout to 0, effectively disabling timeout checks.

Buffer Size - Size of internal buffer which is used to store data before outputting packets on the actual I/O channel. The optimum size is dependent on system and will require some trial. The default 64KB will work best on most systems.

SCSI

This option selects the SCSI interface for output to the Seiko range of printers.

SCSI interface settings:



The screenshot shows a software window titled "Interface settings". Inside, there is a section for "Interface" with a dropdown menu currently set to "SCSI". Below this is a section titled "SCSI Settings" which contains four configuration fields: "Device Name" (a text input field with a scan button to its right), "SCSI Adapter ID" (a numeric spinner set to 0), "Printer SCSI ID" (a numeric spinner set to 0), and "Buffer Size" (a percentage spinner set to 25%).

Device Name - Select one of the available SCSI devices on this workstation. You can use the update button next to the entry to scan for new devices connected to your machine.

SCSI Adapter ID - This parameter identifies the SCSI channel in the computer. Set when a device is selected

Printer SCSI ID – This parameter identifies the SCSI channel on the printer. Set when a device is selected

Buffer Size - Size of internal buffer which is used to store data before outputting packets on the actual I/O channel.

Please note that you will need to install the ASPI drivers for the SCSI card being used for this option to work. This option is only valid for the Windows system.

USB

To Print via USB interface on Mac OSX platform, select USB from the interface list. USB on PC platform is done via spooler interface.

The screenshot shows a window titled "Interface settings". Under the "Interface" label, a dropdown menu is set to "USB". Below this, the "USB Settings" section contains a "Device Name" field with the text "EPSON : USB2.0 Printer (Hi-speed) : NE00302082615" and a small square button with a circular arrow icon. The "Buffer Size" is set to "128KB" with a small up/down arrow button next to it.

Device Name - Select one of the available USB devices on this workstation. You can use the update button next to the entry to scan for new devices connected to your machine.

Buffer Size - Size of internal buffer which is used to store data before outputting packets on the actual I/O channel.

Epson Firewire

Epson printers on Mac can be connected via this interface. On PC platform the spooler is used to connect to Firewire interface.

The screenshot shows a window titled "Interface settings". Under the "Interface" label, a dropdown menu is set to "Epson Firewire". Below this, the "Firewire Settings" section contains a "Device Name" field which is currently empty, and a small square button with a circular arrow icon. The "Buffer Size" is set to "128KB" with a small up/down arrow button next to it.

Device Name - Select one of the available Firewire devices on this workstation. You can use the update button next to the entry to scan for new devices connected to your machine.

Buffer Size - Size of internal buffer which is used to store data before outputting packets on the actual I/O channel.

Status

Some printer makes and models support bi-directional communication and can send back certain information about their supply level (inks, media size etc.) and other status to the Server. Also possible on some models to execute remote commands such as nozzle check and head clean.



The screenshot displays the Canon printer status interface. At the top left is the Canon logo. To its right is a text box containing 'Large Format W6200PG'. Below this is a status box showing 'Online : Sleep - in power save mode'. Further down are buttons for 'Update', 'Offline', 'Print Status', 'Nozzle Check', and 'Printhead Adj'. The 'Update' button is accompanied by the text 'Last updated: 11/30/05 11:35:34'. To the right of these controls is an image of the Canon Large Format W6200PG printer. Below the controls is a section for 'Ink levels (%)' with six color-coded bars and their corresponding percentages: Black (40%), Cyan (100%), Magenta (80%), Yellow (40%), Light Cyan (60%), and Light Magenta (60%). To the right of the ink levels is a table with printer details.

Name	Value
Tray Name	Roll Unit 1
Media Name	coated paper
Media Width	610 mm
Remaining Media Length	Unknown

At the bottom of the interface is a navigation bar with buttons for 'Active', 'Hold', 'Error', 'Archive', 'Logs', 'Setup', and 'Status'.

To get the printer status click on the 'Update' button. The Server will now get and display the information available. If the printer supports media size reporting then this information is automatically put into the Size section of the queue setup.

It is recommended that every time the media is changed on the printer the Update button is clicked to update the roll size information. The time and date of last update is shown next to the Update button for information only.

Other information shown in the table next to the ink levels is printer type dependent. These information can include things such as Heater settings, Firmware version etc. Also shown on the top box, below the printer's make and model name, is the current printer status.

Removing a Queue

Queues and its content can be permanently removed from the Server by selecting a queue and pressing the Remove button in the main toolbar. This deletes all the jobs under the queue and can only be done when the queue is Idle.

Ensure that there are no users connected via remote Design stations to this queue before removing it.

Queue Operation

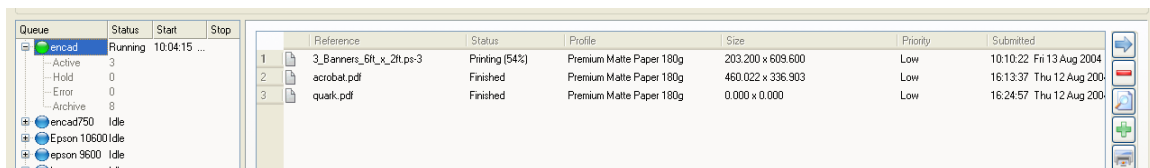
You can start, stop or schedule individual queues for running from the main Server screen. The Dongle determines how many queues are allowed to run simultaneously. The queue status is shown via coloured buttons and in the status column next to the queue list.

Running Queues

To start a queue select the queue in the list and press Start from the main toolbar. The queue status will now be changed to 'Running' and its light will turn green. You will not be able to change the queue setup while the queue is running.

All jobs in the Active folder ready for printing are processed. Single jobs are processed with order of highest priority and oldest submission time. Nested jobs are printed when a group is marked as Ready, which means it has reached the minimum nesting requirement.

The status of the current job being processed is shown in the job table under the status column.



The screenshot shows the Server interface. On the left, a 'Queue' list shows 'encad' as 'Running' (green button) and other queues as 'Idle' (blue buttons). On the right, a 'Job Table' displays the following data:

	Reference	Status	Profile	Size	Priority	Submitted
1	3_Banners_6lt_x_2lt.ps-3	Printing (54%)	Premium Matte Paper 180g	203.200 x 609.600	Low	10:10:22 Fri 13 Aug 2004
2	acrobot.pdf	Finished	Premium Matte Paper 180g	460.022 x 336.903	Low	16:13:37 Thu 12 Aug 2004
3	quark.pdf	Finished	Premium Matte Paper 180g	0.000 x 0.000	Low	16:24:57 Thu 12 Aug 2004

If a job finishes successfully then it is moved to the Archive folder with a status of 'Processed'. This job can then be resubmitted back to the Active folder for outputting again if required. Processed jobs are kept in the Archive folder for as long as the setting's in the queue setup indicate (please refer to the Setup section for more details).

If a job encounters any problems during its processing then it is moved to the Error folder where its status will indicate the nature of the problem. Jobs can be resubmitted back to the Active queue from here if required.

The Console at the bottom of the screen displays all the messages from the running queue which are also recorded in the queue log.

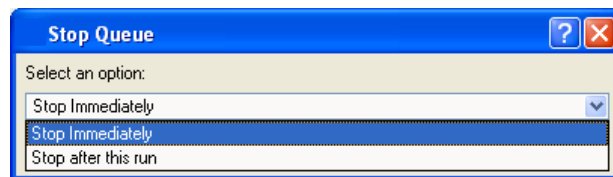
```
Server Console

10:21:10> [encad] Started
10:21:11> [encad/acrobat.pdf] Initializing
10:21:11> [encad/acrobat.pdf] Copy 1 of 1
10:21:12> [encad] Initialising ICC Colour World
10:21:20> [encad/acrobat.pdf] Interpreting
10:21:35> [encad/acrobat.pdf] Processing
10:21:36> [encad/acrobat.pdf] Printing
10:22:06> [encad/acrobat.pdf] Finished
```

The queue stays in the Running status until it is stopped, even after all the jobs are processed, and will continue to scan for new jobs which will be processed immediately. You can start a queue and leave it running and use the Design to submit jobs for printing at all times.

Stopping Queues

You can stop a queue at anytime by selecting it on the list and pressing the Stop button on the main toolbar. You will be given a choice of stopping immediately or after the current run. There is also an option of 'Exit- Force Kill' whenever the Server does not seem to be responding to the stop command. This will execute an immediate abort of the queue.



If there are no jobs being processed then the queue is stopped immediately. If the queue is currently processing jobs then the current job will be aborted and will be moved to the Error folder with a 'User Abort' status. Any remaining unprocessed jobs will stay in on the queue ready for next time the queue is run again.

'Stop after this job' will allow the current job being processed to be finished before stopping the queue. The queue status will change to 'Stop Request' and its status light will turn to yellow.

All stop actions are logged in the Console and the queue log file.

Schedule Queues

Queues can be scheduled to start or stop at a later date/time. To schedule a queue, select it and press the Schedule button on the main toolbar. A schedule dialog will be displayed:

Schedule encad750

Start Date/Time
 10:59:51 Thu 23 Sep 2004
 23/09/2004 ...
 10:59:51

☒ **Stop Date/Time**
 10:59:51 Fri 24 Sep 2004
 24/09/2004 ...
 10:59:51

Help OK Cancel

Start Date/Time - This section can be used to determine the queue start date and time. Start Date/Time earlier than current Date/Time will result in queue being started immediately. If the queue is already running then this section shows the started Date/Time and cannot be edited. Use the expand tool-button next to the date to display a calendar for easy selection.

Stop Date/Time - This section determines the date and time a running queue should be stopped. If you leave the option unselected, then queue will carry on running until stopped manually. Stop Date/Time has to be later than Start Date/Time.

Once you have entered date and time for scheduling a queue its status will be changed to 'Scheduled' and the corresponding times will be shown next to the scheduled queue.

Job

A Job entry on a queue specifies the details of an image file and its output specification. All Jobs have unique Job Reference referring to the entry in the Server. There are many routes from which a new Job can be added to a queue in the Server

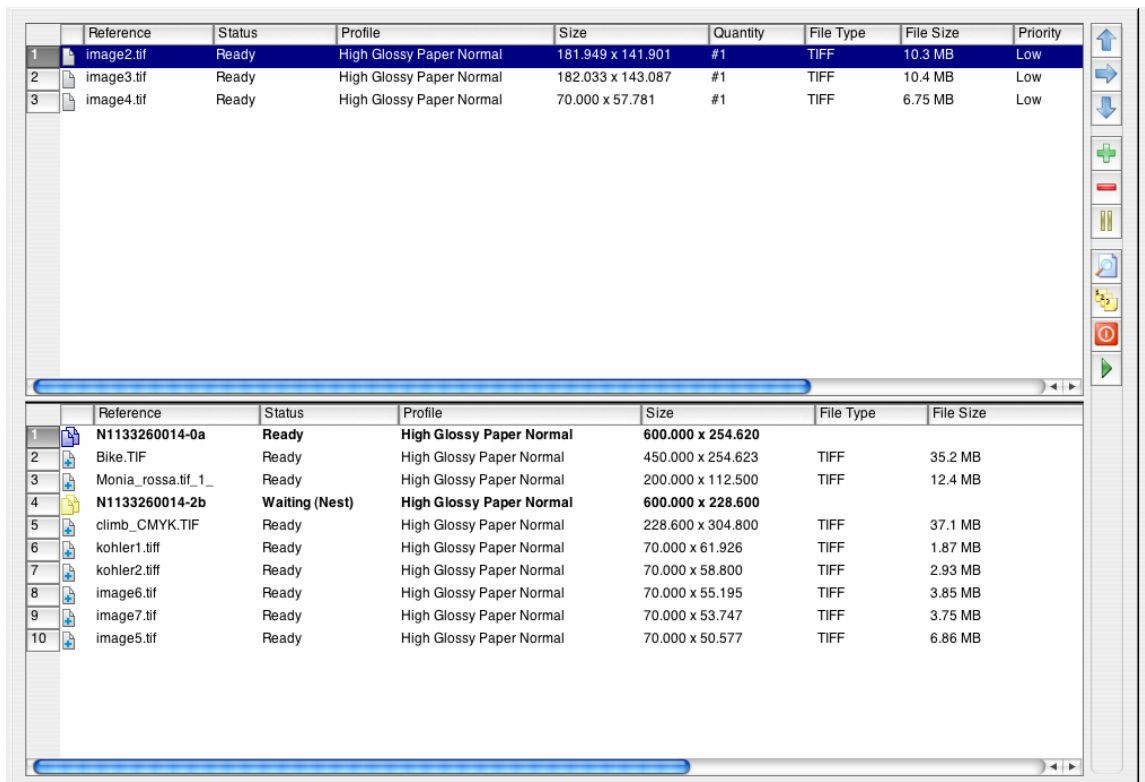
- Submitted from the Design module.
- Direct printing from other applications via Hot Folder and Port Monitor.
- Manually added through Server.
- Manually dropped in Hot Folder.
- Submitted via third party application through Open Server Interface.

Each job created on a queue in the Server will belong to that queue only and cannot be moved to another queue. There are different operations that can be carried out on Jobs depending in the folder they reside.

Active Folder Jobs

Active folder jobs are ready for processing. There are two areas of Active folder: Single, Nesting. Jobs in Nesting are grouped together for printing depending on queue Nesting criteria. You can drag and drop jobs between the two areas if required.

The folders contain a number of columns showing various parameters relating to the jobs. You can sort the list for display by pressing the title bar, this will not change the order the jobs are printed.



	Reference	Status	Profile	Size	Quantity	File Type	File Size	Priority
1	image2.tif	Ready	High Glossy Paper Normal	181.949 x 141.901	#1	TIFF	10.3 MB	Low
2	image3.tif	Ready	High Glossy Paper Normal	182.033 x 143.087	#1	TIFF	10.4 MB	Low
3	image4.tif	Ready	High Glossy Paper Normal	70.000 x 57.781	#1	TIFF	6.75 MB	Low

	Reference	Status	Profile	Size	File Type	File Size
1	N1133260014-0a	Ready	High Glossy Paper Normal	600.000 x 254.620		
2	Bike.TIF	Ready	High Glossy Paper Normal	450.000 x 254.623	TIFF	35.2 MB
3	Monia_rossa.tif_1_	Ready	High Glossy Paper Normal	200.000 x 112.500	TIFF	12.4 MB
4	N1133260014-2b	Waiting (Nest)	High Glossy Paper Normal	600.000 x 228.600		
5	climb_CMYK.TIF	Ready	High Glossy Paper Normal	228.600 x 304.800	TIFF	37.1 MB
6	kohler1.tif	Ready	High Glossy Paper Normal	70.000 x 61.926	TIFF	1.87 MB
7	kohler2.tif	Ready	High Glossy Paper Normal	70.000 x 58.800	TIFF	2.93 MB
8	image6.tif	Ready	High Glossy Paper Normal	70.000 x 55.195	TIFF	3.85 MB
9	image7.tif	Ready	High Glossy Paper Normal	70.000 x 53.747	TIFF	3.75 MB
10	image5.tif	Ready	High Glossy Paper Normal	70.000 x 50.577	TIFF	6.86 MB

The toolbar on the right can be used to perform a number of operations on Jobs in the Active folder



Move To Archive selected Jobs for later processing You can select any job from the Single or Nesting areas.



Move UP moves the selected job up one place in the queue list. This function changes the priority of the selected job.



Move Down moves the selected job down one place in the queue list. This function changes the priority of the selected job.



Pause moves the selected jobs from the Active folder to the Hold folder with the status 'User Hold'.



Remove selected jobs from the queue. You will be prompted before the jobs are removed. This will delete all the associated data with the job such as the image file, reprint info, etc.



View/Edit selected job to examine or change parameters. Double clicking on the job entry also activates this function. For more detailed editing of jobs right click on the selected job and select 'Job ReDesign' option.



New button will allow you to add a new job to the queue by browsing and selecting an image file. The queue default template is used to apply parameters to the new job. The system will prompt the user for the area to submit the job to (Single or Nesting). You can also use the drag & drop option to submit files on to the required area of the Active folder.



Print jobs directly without running the entire queue. Jobs in Single area are printed individually. A job selected from the Nesting area will cause the entire nest group containing the selected job to be printed regardless of its current status.



Sort button will cause the job entries to be listed in their priority order. Higher priority jobs will be at the top of the list.



Abort use this option to cancel the job that is currently being processed. The job will then be moved to the Error folder with status 'user abort'. The Server will carry on to the next job in the list for processing after aborting the current job.

Hold Folder Jobs

The Hold folder stores jobs which are held by the queue and cannot be processed currently. There are three causes which can send jobs to Hold folder.

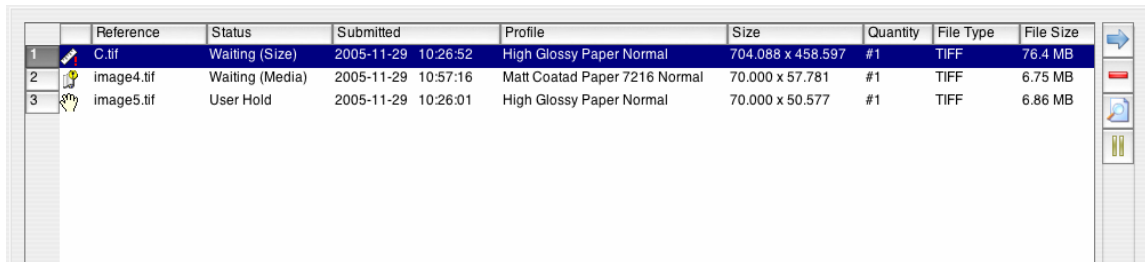
First case is when a job is submitted with output size bigger than the loaded roll size. In this case the jobs are held until a larger roll size is loaded.

Secondly if media matching is enabled and the job's media does not match the queue media then the job is held.

The Third case would be when a job is manually put on hold by the user.

The Server will automatically check for queue parameters and if finds that the held jobs match the queue parameters, it will then release these jobs back to the Active folder. Please note that user held jobs can only be released manually.

The folders contain a number of columns showing various parameters relating to the jobs. You can sort the list for display by pressing the title bar.



	Reference	Status	Submitted	Profile	Size	Quantity	File Type	File Size
1	C.tif	Waiting (Size)	2005-11-29 10:26:52	High Glossy Paper Normal	704.088 x 458.597	#1	TIFF	76.4 MB
2	image4.tif	Waiting (Media)	2005-11-29 10:57:16	Matt Coated Paper 7216 Normal	70.000 x 57.781	#1	TIFF	6.75 MB
3	image5.tif	User Hold	2005-11-29 10:26:01	High Glossy Paper Normal	70.000 x 50.577	#1	TIFF	6.86 MB

The toolbar on the right can be used to perform a number of operations on Jobs in the Hold folder:



Move To Archive the selected job.



Remove selected jobs from the queue. You will be prompted before the jobs are removed. This will delete all the associated data with the job such as the image file, reprint info, etc.



View/Edit selected job to examine or change parameters. Double clicking on the job entry also activates this function. For more detailed editing of jobs right click on the selected job and select 'Job ReDesign' option.



Release moves the selected jobs from the Hold folder back to the Active folder with the status 'Ready'.

Error Folder Jobs

Jobs which have not been successfully processed are stored in the Error folder. The error reason is displayed in the status column. All error jobs are kept in Error folder until removed or moved by the user.

	Reference	Status	Submitted	Profile	Size	Quantity	File Type	File Size
1	image2.tif	User Abort	2005-11-29 10:33:24	High Glossy Paper Normal	181.949 x 141.901	#1	TIFF	10.3
2	Monia_rossa.tif	Error IO Open	2005-11-29 09:36:49	High Glossy Paper Normal	200.000 x 112.500	#1	TIFF	12.4
3	nofonts.eps	Missing Font Error	2005-11-29 12:59:17	High Glossy Paper Normal	297.039 x 209.903	#1	EPS	31 K

The toolbar on the right can be used to perform a number of operations on Jobs in the Error folder:



Move To Active/Archive selected Jobs. You will be asked which folder to move to: Active or Archive.



Remove selected jobs from the queue. You will be prompted before the jobs are removed. This will delete all the associated data with the job such as the image file, reprint info, etc.



View/Edit selected job to examine or change parameters. Double clicking on the job entry also activates this function. For more detailed editing of jobs right click on the selected job and select 'Job ReDesign' option.

Archive Folder Jobs

The Archive folder is used to store processed and Reprint jobs in the queue. Reprint files do not need any further processing and will be printed without a re-rip. To create a reprint job click on the 'keep reprint' option when submitting jobs from the Design module.

	Reference	Status	Submitted	Profile	Size	Quantity	File Type
1	005C0202PM.TIF	Processed	2005-11-29 09:40:09	High Glossy Paper Normal	203.200 x 162.560	#1	TIFF
2	Image1.tif	Processed	2005-11-29 10:04:53	High Glossy Paper Normal	179.975 x 142.000	#1	TIFF
3	Colgate.eps(1)	Reprint	2005-11-29 13:44:45	High Glossy Paper Normal	469.265 x 316.865	#1	EPS

The toolbar on the right can be used to perform a number of operations on Jobs in the Archive folder:



Move To Active folder selected Jobs.



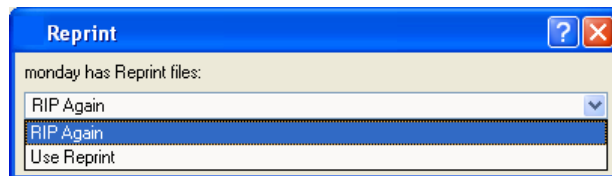
Remove selected jobs from the queue. You will be prompted before the jobs are removed. This will delete all the associated data with the job such as the image file, reprint info, etc.



View/Edit selected job to examine or change parameters. Double clicking on the job entry also activates this function. For more detailed editing of jobs right click on the selected job and select 'Job ReDesign' option.

Reprint Jobs

A job can have a property to keep reprint files after it has been processed. Reprint jobs are moved to Archive folder together with their processed binary files for storage. When resubmitting a Reprint job to the Active folder, you will then have the option of using the already processed data for printing or ask the queue to RIP again:



Logs

The Logs folder displays a list of all available logs for the selected queue. A log is created for each day of queue running and will contain all the messages from the queue normally shown in the Console.

	Log	Size	Date/Time Created
1	2005-11-28	405	Mon Nov 28 17:26:57 2005
2	2005-11-29	5038	Tue Nov 29 12:02:43 2005

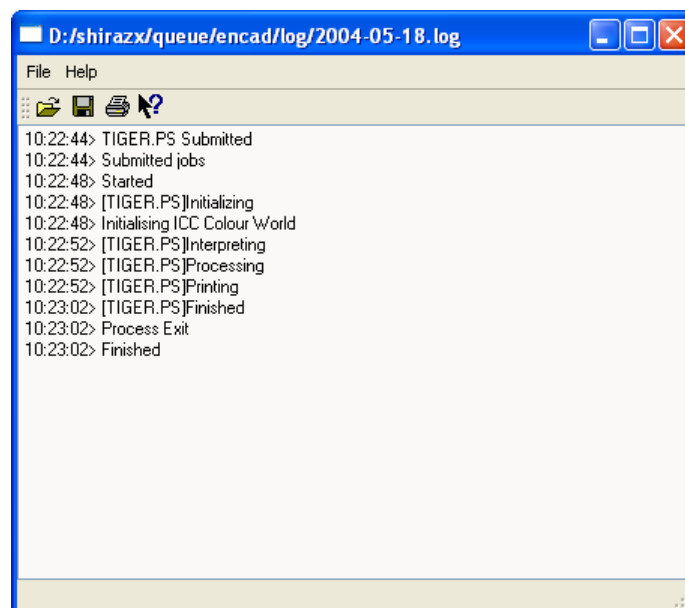


Remove selected log file from system.



Detail of the selected log file is displayed in an editor.

You can double click on each log or select and press Detail to open a log in an editor. The RIP has a cross-platform general editor tool which is used to open the log files for examining and printing.



Media Matching

Media Matching Control feature of the RIP will ensure correct printing of jobs on matching media rolls. In this section we describe the various features and how they are setup to achieve this control.

Every Job has an associated Profile table which defines various features of the print job. This profile also has a Media class tag which is the generic type for the media used in a group of profiles. For example the following table shows the various parameters of a group of Profile tables:

Profile Table	Media	DPI	Passes
QuickSilver Glossy – High Quality	QuickSilver Glossy	1440x720	8
QuickSilver Glossy – Standard	QuickSilver Glossy	720x720	6
QuickSilver Glossy – High Speed	QuickSilver Glossy	360x360	4

Epson Glossy – High Quality	Epson Glossy	1440x720	8
Epson Glossy – Standard	Epson Glossy	720x720	6
Epson Glossy – High Speed	Epson Glossy	720x720	4

When you select a Profile the Media value of the Profile is used in the matching control process.

Jobs can also have a Profile table set to “None”.

Each queue has a media setup parameter which defines the media type for the roll currently loaded on the printer. See queue Media setup section for details.

Every job is matched to the queue using the Media value and decided if there is a match:

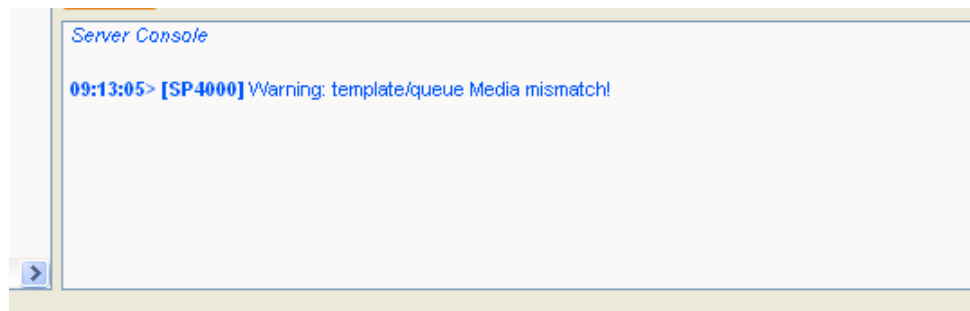
Profile Media	Queue Media	Match
None	None	Yes
None	QuickSilver Glossy	Yes
Epson Glossy	None	Yes
Epson Glossy	QuickSilver Glossy	No
QuickSilver Glossy	QuickSilver Glossy	Yes

If there is a match then the job can be printed. When there is no match then depending on the queue setting (Hold jobs not matching queue media), the job will either print or be moved to hold folder.

When you change the queue Media settings, the Server will check all jobs in the Active and Hold folders and move any jobs which have new Match value.

So if you have loaded say an Epson Glossy paper on the printer, set the queue Media value to match the paper loaded and check the control flag to hold jobs not matching media. You will then be able to safely change the paper and set the media parameter to a new value, which will automatically start any jobs matching the new media setting.

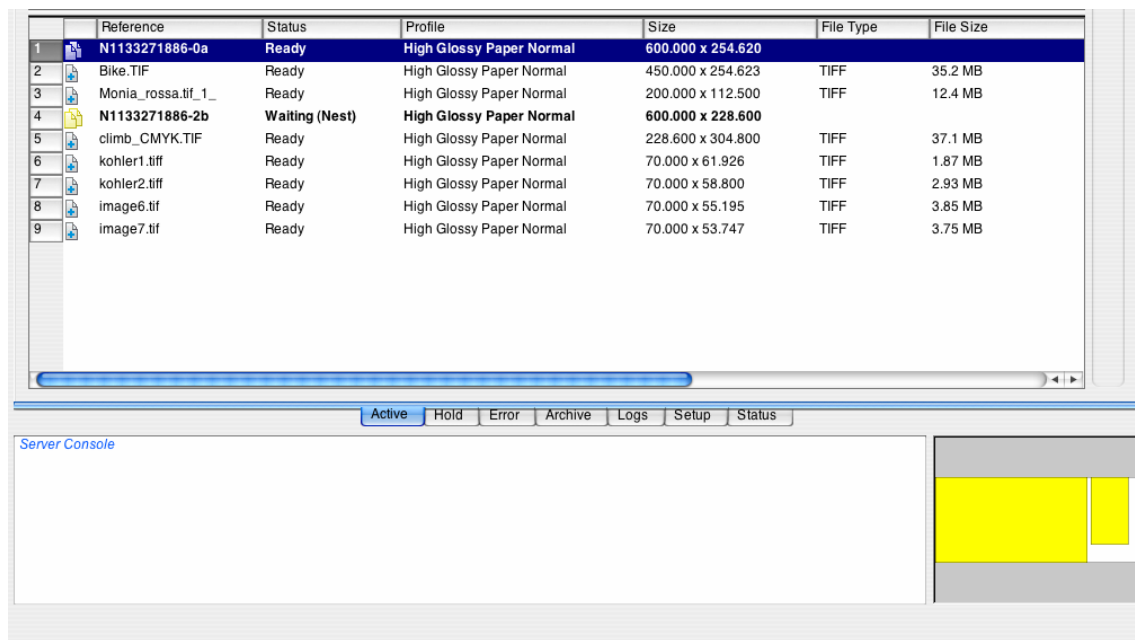
If you select a queue template that has a different Media value than the queue Media setting a warning is displayed on the Console. This means that any job which is submitted through hot folder will have mismatched media and will end up in the Hold folder immediately.



Nesting

When jobs are submitted to the queue, the user has the choice to select if the job should be nested with other jobs or to be printed as Single. All nesting jobs are added to the bottom part of the Active folder window.

The nesting feature of the Server is designed to save media across the width of the roll. When a new job arrives the width of the job is calculated and measured against the available print area of the roll. All the jobs that can be fitted next to each other to fit across the width of the roll are grouped together as a nesting group and given a nesting ID. Nesting groups are listed in bold lettering with a randomly generated reference number as shown below.



The screenshot shows the 'Server Console' window with a table of jobs. The table has columns for Reference, Status, Profile, Size, File Type, and File Size. A nesting group is highlighted in blue, consisting of jobs 1 through 9. The nesting group ID is N1133271886-0a. The status of the nesting group is 'Ready'. The profile is 'High Glossy Paper Normal'. The size is '600.000 x 254.620'. The file type is 'TIFF'. The file size is '35.2 MB'. The nesting group is also listed as 'Waiting (Nest)' in the table. The status of the nesting group is 'Waiting (Nest)'. The profile is 'High Glossy Paper Normal'. The size is '600.000 x 228.600'. The file type is 'TIFF'. The file size is '12.4 MB'. The nesting group is also listed as 'Ready' in the table. The status of the nesting group is 'Ready'. The profile is 'High Glossy Paper Normal'. The size is '228.600 x 304.800'. The file type is 'TIFF'. The file size is '37.1 MB'. The nesting group is also listed as 'Ready' in the table. The status of the nesting group is 'Ready'. The profile is 'High Glossy Paper Normal'. The size is '70.000 x 61.926'. The file type is 'TIFF'. The file size is '1.87 MB'. The nesting group is also listed as 'Ready' in the table. The status of the nesting group is 'Ready'. The profile is 'High Glossy Paper Normal'. The size is '70.000 x 58.800'. The file type is 'TIFF'. The file size is '2.93 MB'. The nesting group is also listed as 'Ready' in the table. The status of the nesting group is 'Ready'. The profile is 'High Glossy Paper Normal'. The size is '70.000 x 55.195'. The file type is 'TIFF'. The file size is '3.85 MB'. The nesting group is also listed as 'Ready' in the table. The status of the nesting group is 'Ready'. The profile is 'High Glossy Paper Normal'. The size is '70.000 x 53.747'. The file type is 'TIFF'. The file size is '3.75 MB'.

	Reference	Status	Profile	Size	File Type	File Size
1	N1133271886-0a	Ready	High Glossy Paper Normal	600.000 x 254.620		
2	Bike.TIF	Ready	High Glossy Paper Normal	450.000 x 254.623	TIFF	35.2 MB
3	Monia_rossa.tif_1_	Ready	High Glossy Paper Normal	200.000 x 112.500	TIFF	12.4 MB
4	N1133271886-2b	Waiting (Nest)	High Glossy Paper Normal	600.000 x 228.600		
5	climb_CMYK.TIF	Ready	High Glossy Paper Normal	228.600 x 304.800	TIFF	37.1 MB
6	kohler1.tif	Ready	High Glossy Paper Normal	70.000 x 61.926	TIFF	1.87 MB
7	kohler2.tif	Ready	High Glossy Paper Normal	70.000 x 58.800	TIFF	2.93 MB
8	image6.tif	Ready	High Glossy Paper Normal	70.000 x 55.195	TIFF	3.85 MB
9	image7.tif	Ready	High Glossy Paper Normal	70.000 x 53.747	TIFF	3.75 MB

There are three criteria for nesting controlled via queue setup. First the percentage area that is filled by a group, second the number of images in the group and finally the time to wait before printing. If the time to wait is disabled then jobs wait forever and will only print once the minimum percentage area is filled or the number of images in the group has been reached.

If the time to wait is set then jobs that have not reached the other two nesting criteria will be set to the Ready state and will be processed.

You can force a print of jobs that are in waiting mode of a nest group in three ways:

- Select jobs in nesting area and drag and drop into single area. This will change the status of these jobs from Nesting to Single and will print them when the queue is running.
- Select jobs in nesting area and press Print in the small toolbar on the right hand side of the screen (or right click and click Print). All jobs belonging to the same nesting group are processed together immediately.
- Select the nesting group ID in the nesting area and right click and select 'Set Ready' to change its status to Ready.

To examine the nesting group visually double click on the nesting group ID.



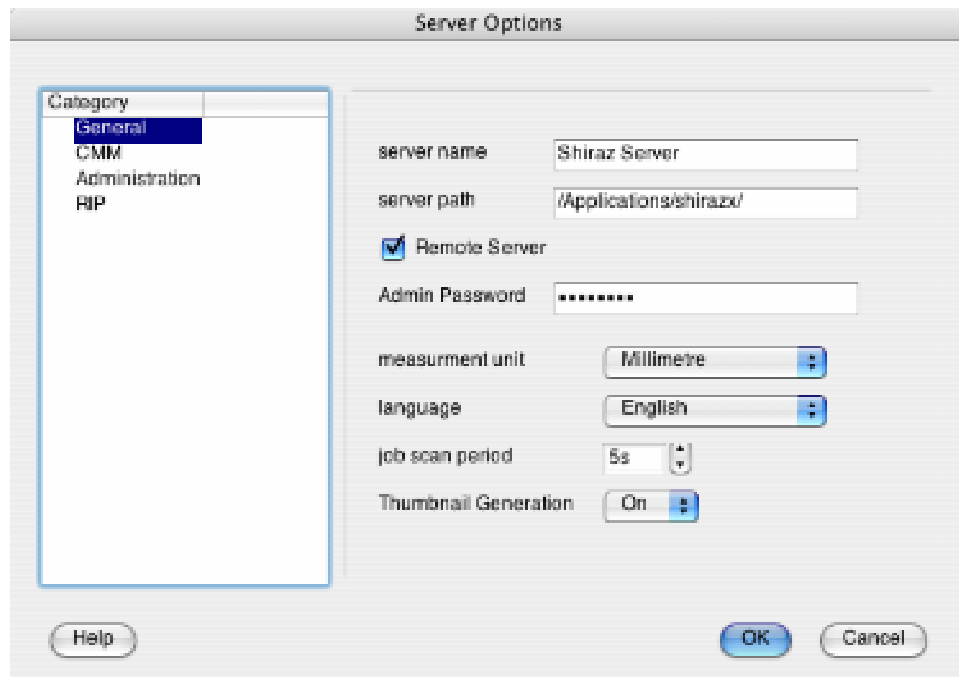
You can now see the actual images in the nesting group. Click on any image to examine its positioning in the nesting area as well as its actual dimensions.

Nesting groups are created and destroyed dynamically as jobs arrive to the nesting area or any queue parameters such as roll size are changed. Only jobs with the same profile table (media) are nested together in the same group.

Once jobs in a nesting group have been processed they are then moved to the Archive folder where they can be submitted back to the Active folder as Single or Nest jobs again.

Server Administration

The Options/Preferences window contains a number of categories for administrating The Server. Select Server/Options from the menu in the title bar to display the preferences window:



The first category displays the general system options:

Server Name - You can enter a more user friendly name for your Server which is used in reports and logs.

Server Path – This is the actual system path to the Server. Clients use this path to connect to this Server. This is a Read-Only field and cannot be changed by the user.

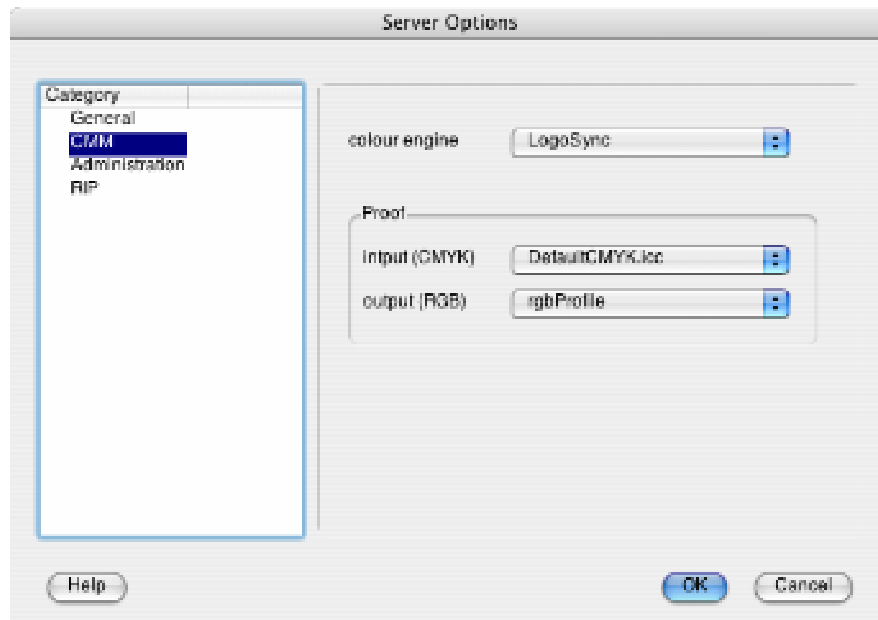
Remote Server (Mac OSX only) – If the server is to be used as a network server then the administrative password must be entered here otherwise jobs submitted from network clients cannot be processed.

Measurement Unit - System measurement unit: Millimetre, Centimetre, Inch. All sizes will be displayed in this unit.

Language - The current language of the RIP.

Job Scan period - Determines the frequency of job input scan in seconds.

Thumbnail Generation – Decides whether the server generates image thumbnails for the job entries in the queue or not. Please note that this option when switched on requires more processing resources and should be switched off on slow computers.

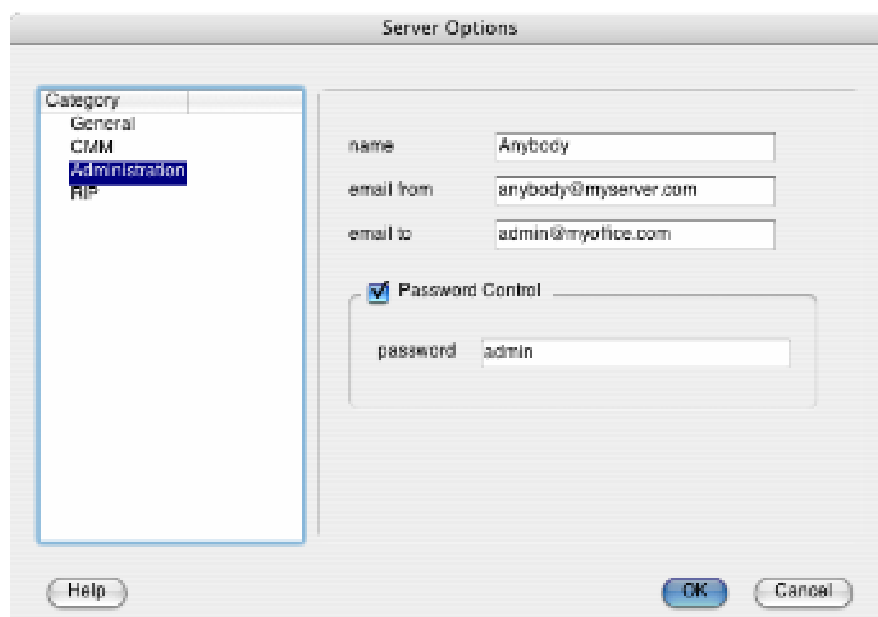


The CMM category shows options relating to system colour management.

Colour Engine - You can change the colour engine to one of the available options. The choice of engines is dependent on the platform the RIP is running on.

Input (CMYK) – Selects the ICC profile used for calculating and displaying CMYK colour spaces. This is used for display purpose only.

Output (RGB) – Selects the ICC profile to use for previewing images on the screen. This will be used as the monitor profile and should be changed by the user to the calibrated monitor profile for your display if available.



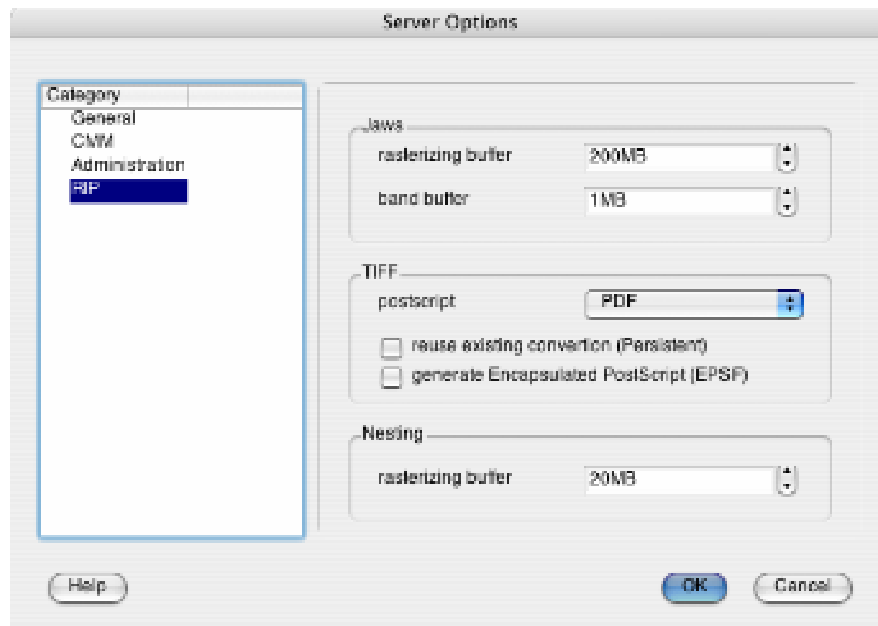
The Administration category contains fields relating to the system administration. The Server is capable of sending queue logs as email. The following parameters are used in creating the email header:

Name – Administrator name identifying you.

Email From - Email address of sending person, has to be a valid Internet email format address.

Email To - Email address to send to.

Password Control – Use this option if you are require password check before removing queues from the system. This prevents any accidental deletion of queues.



The RIP category shows various parameters relating to the RIP engine:

Jaws Rasterizing Buffer - This parameter is used in allocating internal memory buffer for the Jaws Engine in MB. Use about 1/10 of the available physical memory (RAM).

Jaws Band Buffer - The minimum size (MB) of the band buffer used by the Jaws engine in generating output data. This should not be changed normally.

TIFF Postscript - Determines the type of TIFF conversion used.

Reuse conversion – Instructs the RIP to do a fresh conversion of TIFF files every time regardless of existing conversion.

Generate EPSF - This flag is related to the TIFF postscript output. Select to generate EPSF instead of normal Postscript file.

Nesting rasterizing buffer – The amount of memory reserved for the processing of the nested jobs.