xerox

FreeFlow® Output Manager
User Guide

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Introduction

Document Conventions

Bold: menu commands, buttons and options are shown in bold.

`Code`: text that you type verbatim, or that expresses syntax for typed commands, is shown in a monospaced font.

NOTE: *Information of special interest is heralded with a pencil icon and preceded by the term "Note" in bold.*

WARNING: Failure to heed warnings can lead to physical injury or death. Warnings are heralded by a yellow triangle with exclamation point. The term "Warning" precedes the paragraph, which is set in red text.

CAUTION: Failure to heed cautions can result in damage to equipment or loss of data. Cautions are heralded by a yellow circle with a black exclamation point. The term "Caution" precedes the paragraph, which is set in black, boldfaced text.

TIP: information that can enhance productivity is shown as a Tip, with a lightbulb icon in the left column and preceded by the term "Tip."

1. FreeFlow Output Manager

FreeFlow Output Manager allows you to control the flow of print jobs to your networked printers. Output Manager accepts documents from client applications at user workstations on your network and automatically routes them to printers based on load, availability and job requirements. This increases printer efficiency and productivity.

Output Manager can be configured for automatic load balancing, based on the queue and printer settings, and job processing rules that you establish.

Output Manager provides a secure environment for managing your network printers. Users are required to log in before making changes or operating the system. Further, configuration is restricted to those with only the highest level of access.

See Also

How Output Manager Receives Jobs

FreeFlow Output Manager can accept jobs from network clients using the following methods:

- LPR network printing protocol
- IPP network printing protocol
- FreeFlow Applications
- a local Command Line Interface (CLI)
- local or network "hot folders"
- clients with direct port connections
- Web GUI interface for Job Submission
- Job Messaging Format (JMF)

Client applications for FreeFlow Output Manager include:

- FreeFlow® Makeready
- FreeFlow® Process Manager
- FreeFlow® Print Manager-Advanced Print Path
- FreeFlow® Web Submission Client
- Windows queues (using the IPP port monitor) or TCP/IP port configured for LPR
- UNIX and LINUX systems via LPR and IPP
- Multifunction Devices

See Also

Receiving Jobs from Multi-Function Devices

The purpose of the Send to Production feature is to allow documents to be scanned from Multi-Function Devices (MFDs) and submitted to production print shops where high volumes and special finishing options can be processed. This will reduce MFD contention when either large documents or large quantities are needed, and will allow MFDs to stay within their duty cycles.

The feature supports the following four MFD product series:

- WorkCentre 2xx - half panel mono
- WorkCentre 56xx - half panel mono
- WorkCenter 76xx - full panel color

FreeFlow Output Manager queues can be designated to appear as "Job Templates" to the MFD. The settings for the templates are

derived from the queue settings. Because of the limited number of attributes that can be set at the MFD, the Output Manager queue can be setup with default attributes that will be applied to any job sent from a MFD. This expands the available number of job options far beyond the capabilities of the MFD by itself.

FreeFlow Output Manager must be configured to broadcast the queues that are available as Job Templates to specified MFDs. When the send to production feature is selected at the MFD, the Job Templates will appear at the MFD, along with a set of specific attributes that can be programmed at the MFD.

See Also

FreeFlow Output Manager Applications

The primary applications are Job Manager, Queue Manager and Printer Manager. As the names imply, they allow you to manage jobs, the queues to which they are submitted, and the printers assigned to those queues.

Output Manager also has some utility applications for creating custom solutions.

Hot Folders

The Hot Folders Client allows you to create monitored folders on the local or remote file system. When a job is placed in a hot folder, the processing application you associate with the folder is launched to process and print the job.

This is especially useful for jobs that require pre-processing before being sent to a printer. For instance, documents that require pre-defined separation pages to be inserted before printing.

Port Controller

The Port Controller allows you to create ports to which applications may spool data. The spooled data is then processed and printed. For example, print jobs from a mainframe can be spooled to a Port and there converted to a Page Description Language (PDL) such as PostScript using a third-party application such as M.I.S. Print.

Command Line Interface

Output Manager has, as its primary interface, a graphical user interface. However, it also allows you to submit textual commands at the command prompt.

This Command Line Interface feature allows you to type commands at the system prompt or create batch files. These batch files use the scripting commands for Output Manager to perform certain tasks. For example, you could write a batch file that the Port Controller or Hot Folders applications execute when they receive client data.

See the FreeFlow Output Manager *Command Line Interface User Guide* for more information.

See Also

"Queue Manager" on page 2–1

"Printer Manager" on page 3–1

"Job Manager" on page 4–1

"Port Controller" on page 7–1

"Hot Folders" on page 6–1

Logging On to Output Manager

To provide security for your printers and network, FreeFlow Output Manager requires users to log in before they can modify system settings or manage jobs, printers and queues.

Output Manager has five levels of access:

- **Administrator**: The highest level of access, the administrator can view and change all system settings, except for service-related functions and data.

- **Operator 1**, **2** & **3**: Operator 1 has the highest level of access, operator 3 has the lowest. Operator access is intended for printer operators.

- **Guest**: The Guest does not require a password, but has minimal access. This is the default access level when the system is started.

    NOTE: *If Custom View Groups is enabled, 'Enter as a Guest' is no longer valid. Instead, authenticated users may be added to the Custom View Groups for view access. Guest users are not members of the Administrators, Operator 1, 2 & 3 user groups. See* "Creating Custom View Groups" on page 1-9 *for more information on this feature.*

To Log In to Output Manager

1. Enter the URL for the FreeFlow Output Manager page into the address field of the browser, or, if available select **log in** from the toolbar on the right of the screen.

2. Enter your **User Name**.

3. Enter your **Password**.

4. Enter your network **domain**.

5. Click **Log In**.

NOTE: *Guest users may access the system by clicking* **Enter as a Guest**. *If the Guest account has been disabled, use the System Configuration page to enable that account. See* "System Configuration" on page 5-4 *for more information.*

See Also

"Queue Manager" on page 2–1

"Job Manager" on page 4–1

"Printer Manager" on page 3–1

"Job Scheduling and Load Balancing" on page 1–16

"Password Security" on page 1–11

"Shutdown and Restart" on page 1–12

Logging Out of Output Manager

Log out from the system when you are finished. By default, the system automatically logs you out after a certain period of inactivity.

To Log Out

Clicking on the **Log Out** link on the right hand corner will log you out from the system. The default Log In screen is displayed.

User Access Levels

NOTE: *See the Installation and Configuration Guide for instructions on configuring access for Administrator and Operators 1 through 3.*

Table 1-1. Actions permitted by User Access Level

	Operation	Administrator	Operator 1	Operator 2	Operator 3	Guest
Queue	New Queue	X				
	Delete Queue	X				
	Do Not Accept Jobs	X	X	X		
	Accept Jobs	X	X	X		
	View Queue Properties	X	X	X	X	X
	List Queues	X	X	X	X	X
	Do Not Release Jobs	X	X	X	X	
	Release Jobs	X	X	X	X	
	Release Jobs At	X	X	X	X	
	Edit Queue Properties	X	X			
	Purge Jobs	X	X			

Table 1-1. Actions permitted by User Access Level

	Operation	Administrator	Operator 1	Operator 2	Operator 3	Guest
Job	Cancel	X	X	X		
	Delete Job	X	X			
	View Job Properties	X	X	X	X	X
	Hold New Jobs	X	X	X		
	Release Held New Jobs	X	X	X		
	Hold	X	X	X	X	
	Release	X	X	X	X	
	Edit Job Properties	X	X	X		
	Request Printer	X	X	X		
	Hold Job Until	X	X	X		
	List Jobs	X	X	X	X	X
	Reprocess Job	X	X	X		
	Resubmit Job	X	X	X		
	Move To Queue	X	X	X	X	
	Submit Job	X	X	X	X	
	Save Job	X	X	X	X	
	View Conflicts	X	X	X		
	Copy	X	X	X		
	Preview	X	X	X	X	
	Rename	X	X	X		
	Change Priority	X	X	X		
	Change Quantity	X	X	X		

Table 1-1. Actions permitted by User Access Level

	Operation	Administrator	Operator 1	Operator 2	Operator 3	Guest
Printer	Enable Job Limits	X	X			
	New Printer	X				
	Delete Printer	X				
	Do Not Accept Jobs	X	X	X	X	
	Accept Jobs	X	X	X	X	
	List Printers	X	X	X	X	X
	View Printer Properties	X	X	X	X	X
	Edit Printer Properties	X	X			
Document	Cancel Document	X	X	X		
	Delete Document	X	X			
	Edit Document Properties	X	X	X		
	List Documents	X	X	X	X	X
	View Document Properties	X	X	X	X	X
	Move up / Move Down (Document Details)	X	X	X		
System	Shutdown	X	X			
	System Usage Data	X	X	X	X	X

Creating Custom View Groups

The application's default behavior grants all users the same view of Output Manager; that is, users see the same queues, printers, and jobs regardless of their access level. Access level only determines the operations accessible to that user. This Custom View Groups feature allows the system administrator to create customized views of Output Manager via the creation of custom access user groups

Information Technology (IT) Administrators may add new groups (called Custom View Groups), through the Windows Authentication Service, to control which printer, queues, and jobs members have access. The IT Administrator adds FreeFlow Output Manager users to these groups. The Output Manager Administrator then configures a queue to allow access to all the users of a Custom View Group. Those users that are not a part of the queue's access group will be restricted from viewing the queue, its printers, or jobs submitted to it.

CAUTION: The FreeFlow Output Manager administrator should determine whether to enable or disable this feature when Output Manager is started for the first time. Once this feature is enabled, it can be disabled but it *should not* be re-enabled. Doing so will compromise the integrity of the system.

When enabling this feature, the following prerequisites and limitations should be kept in mind:

- A user may belong to one or more Custom View Group.

- When the feature is enabled, the "Enter as a Guest" account function is no longer valid. Instead, authenticated users or user groups may be added to the Custom View Group. Guest users are not members of the 4 predefined groups.

- Custom View Groups are created using the Windows Operating System, via the system administrator.

- The access group name must have the prefix "Xerox FFOM". For example, "Xerox FFOM LA Print Shop". Without this prefix Output Manager does not recognize the group as a Custom View Group.

  - Output Manager operators must be added to these groups.

  - Guest users are authorized users and are members of these groups but are not members of the FFOM operators/admin group.

- Once the Custom View Groups are created, users logged in through the Xerox FreeFlow Output Manager Administrators group shall be able to list the groups and assign printers and queues to them.

- Queues and printers can only be added to a single group. Once a queue or printer is added to a group, it becomes unavailable for addition to another group.

- Administrators have an unrestricted or complete view of the system. Operators and authorized users have customized views of the system based upon the groups they belong to, and the settings for those groups.

- If the system administrator decides to change the Custom View Groups group name for whatever reason, it will be not be reflected in Output Manager. The application will treat the altered group name as a new group.

CAUTION: FreeFlow Output Manager cannot track group name changes made at the operating system level and then update Custom View Group assignments based on those changes. The system administrator should exercise caution when making changes through the operating system to groups used by Output Manager.

Password Security

To maintain system security, the logon password for the Administrator and Operator's should be changed after the system has been installed and at regular intervals thereafter.

See Also

Changing Passwords

Only the Administrator has the authority to set and change the passwords for the Administrator and Operators. Individual users can change their own passwords.

Password for FreeFlow Output Manager are changed at the operating system level. Follow the procedures for the particular operating system to change passwords.

NOTE: *On Windows computers, only users with Windows Administrator level access can change Output Manager passwords.*

Shutdown and Restart

To restart Output Manager you must first restart the computer and then log in to Output Manager.

See Also

"Shutting Output Manager" on page 1–12

"Restarting Output Manager" on page 1–13

"Queue Manager" on page 2–1

"Job Manager" on page 4–1

"Printer Manager" on page 3–1

"Job Scheduling and Load Balancing" on page 1–16

"Logging On to Output Manager" on page 1–4

"Password Security" on page 1–11

Shutting Output Manager

Shutting down Output Manager causes the application to close after it has completed processing of the most recently submitted job and sent it to a printer. Jobs are not accepted or released until the computer is restarted.

To Shutdown Output Manager

1. Click **Shutdown Server**.

2. Click **OK** when asked to confirm shutdown. The message "*Output Manager is unavailable...*" is displayed.

See Also

"Restarting Output Manager" on page 1–13

Restarting Output Manager

Use the Restart procedure when a recovery procedure directs you to restart the computer.

When shutdown has occurred, no new jobs are accepted until after the computer has been restarted and the Output Manager application re-opened. This feature is available to an Administrator or Operator 1 and 2.

To Restart Output Manager (Windows)

1. Click **Shutdown Server** (only available to Administrator or Operator 1) to exit Output Manager. Wait for Output Manager to display "Output Manager is Unavailable."

2. Click **Start: Shut Down**.

3. In the Shut Down Windows dialog, select **Restart** from the list. The system restarts.

4. Open FreeFlow Output Manager and log in.

See Also

 "Shutting Output Manager" on page 1–12

Backup and Restore operations

Output Manager provides backup and restore utilities in the unlikely event of a catastrophic failure of your system.

The configuration settings and data that is backed up and restored are the following:

• Output Manager application configuration settings.

• Jobs, Queues, and Printers.

• Accounting Module configuration settings, reports, database, and exported data.

• Hot Folders and Port Controller configuration settings.

• If the Printer Registration and/or Standalone Repository Management System are present on the machine, the configuration settings for those applications are backed up and restored.

There are two means of invoking the backup and restore application:

• "Backup or Restore using the Windows application" on page 1-14

• "Backup or Restore using the command line" on page 1-15

> **NOTE:** *The backup and restore operations will automatically shutdown and restart the Output Manager and Accounting Module services.*

Backup or Restore using the Windows application

Follow the procedure for backing up or restoring the Output Manager system using the Windows application.

> **NOTE:** *You must be logged in as the Windows Administrator to perform the backup or restore operations.*

> **NOTE:** *If Output Manager is installed on the Windows 2008 Server Operating System right-click on the Start menu GUI command and select Run as Administrator to run the program as an Administrator..*

Perform the following to backup the Output Manager system

1. Select **Start: Programs: Xerox FreeFlow: Output Manager: Backup**.
2. In the browse dialog, select a folder location to save the backup information.
3. Enter a file name in the text box or accept the default file name.

> **NOTE:** *If you specify a file name that is a duplicate of a previous backup, a dialog will display. Select **Yes** to overwrite the previous backup, or **No** to specify an alternate filename.*

4. Select **Save**. A progress bar dialog will display the status of the backup.
5. Select **OK** when the operation is complete.

Perform the following to restore the Output Manager system:

1. Select **Start: Programs: Xerox FreeFlow: Output Manager: Restore**.
2. In the browse dialog, select a folder location of the backup information.
3. Select the ZIP file containing the backup information you want to restore.
4. Select **Open**. A progress bar dialog will display the status of the backup.
5. Select **OK** when the operation is complete.

Backup or Restore using the command line

Follow the procedure for backing up or restoring the Output Manager system using the command line.

NOTE: *You must be logged in as the Windows Administrator to perform the backup or restore operations.*

NOTE: *If Output Manager is installed on the Windows 2008 Server Operating System, right-click on the Command Prompt icon and select **Run as Administrator** to run the program as an Administrator.*

Perform the following to backup the Output Manager system

1. From the /bin folder located in the Output Manager installation directory, enter the ffom_backup command followed by a fully qualified path to the backup file to be created.

    • For example: ffom_backup c:\Backup\<todays_date>

NOTE: *If you do not specify a backup path, the ffom_backup will create a backup file in a default location. The default location will be in the <installation directory>\backup.*

Perform the following to restore the Output Manager system:

1. From the /bin folder located in the Output Manager installation directory, enter the ffom_restore command followed by a fully qualified path to the backup file to be restored.

    • For example: ffom_restore c:\Backup\<todays_date.zip>

System Requirements

Output Manager requires the following minimum hardware and software requirements.

NOTE: *The installation program will validate that the system meets the minimum requirements prior to running the installation.*

Hardware Requirements: PC-Compatible

• Dual Processor Intel Xeon 2.8 GHz equivalent or better

• At least 4 gigabyte of RAM

• At least 250 GB of free disk space, plus any additional expected spool space

• Ethernet Capability: 10/100/1000 Mb/sec

Software Requirements: PC-Compatible

- Windows® Server 2003 R2 (including Service Pack 2)

- Windows® Server 2008 (including Service Pack 2) 32-bit

- Windows® Server 2008 R2

- One of the following Web browsers:

    – Internet Explorer 7.0, or 8.0

    NOTE: *Internet Explorer 8 must be set to run in Compatibility Mode in order for Output Manager to function properly when using that browser version. See your FreeFlow Output Manager Install and Configuration Guide for instructions on how to configure Compatibility Mode in Internet Explorer 8.*

    – FireFox 3.0, 3.5 or 3.6.

Job Scheduling and Load Balancing

FreeFlow Output Manager receives jobs, schedules them, chooses a printer or printers for each job, and, if necessary, splits a job across multiple printers to balance printer work load.

Job Scheduling

Jobs are scheduled for printing using the First-in, First-out (FIFO) method, so that the first job to arrive in the queue is the first to print. You can override this by assigning a higher priority to a job, thus pushing it to the front of the queue.

Printer Selection

Jobs come into a queue, to be sent to a printer associated with that queue. Output Manager selects the printer for a particular job in the following manner:

1. Output Manager determines which printers are eligible to print the job. If capability matching is enabled, only printers that match the job requirements are considered as eligible printers. If capability matching is not enabled, all printers are considered eligible.

2. From the list of eligible printers, Output Manager chooses the printer using either the round robin or least-busy printer, or least-buy-by-pages method.

Capability Matching

If capability matching is not enabled, only the document format is compared against the printer's supported document formats. If there is a match, the job is scheduled to the printer.

Output Manager also checks if the document has color content. If the job contains color content, it can only go to a printer that supports color. If the document does not have color content, then it can be sent to a monochrome printer.

Example

If you submitted a job to be printed on glossy, drilled paper, one of the following occurs:

- capability matching is enabled:
  - The job is scheduled to a printer that contains the selected stock properties.
  - If none of the printers have the selected stock properties, the job is placed in the **Held** state.
  - After 5 minutes, the job is checked.
  - If the resources are now supported at the printer, the job is scheduled to that printer.
- capability matching is not enabled:
  - The job is sent to a printer.
  - The job is sent with the set properties and it is up to the printer to print the job or hold it for resources.

NOTE: *Under Job Manager > Edit Job Properties > Job Processing Options > Job Properties Match option allows you to select from* **Allow Substitutions** *and* **Honor All Job Properties**. *If the selected value is* **Allow Substitutions***, the job is sent to the next available printer, if no printer matching the required resources is found. Otherwise, the job is held.*

Controlling How Jobs are sent to Printer

Output Manager provides a configuration option that controls how jobs are forwarded to printers. The following two configurations control how jobs are sent to the printer:

- Sending multiple jobs to the same printer simultaneously. This method improves the throughput of jobs sent to printers but does not guarantee the order of the jobs as determined by the Output Manager queue policy. This is the default setting.
- Preserving job order

  This method ensures that jobs arrive at the printer in the order determined by the Output Manager queue policy. This method is required when iGen4 220 Perfecting Press printers are

configured on Output Manager.

Setting the Job Order Policy

To set the Job Order Policy, perform the following:

1. Edit the file OBS.properties found in the following directory:

   <FFOM installation directory>\config

2. Locate the file JOB_ORDER and change value to the appropriate setting.

   • **UNORDER**: Jobs are submitted in the order determined by the Output Manager queue policy but due to the job size and network factors, jobs may arrive at the printers out of order. Currently UNORDER is the default job ordering policy.

   • **ORDER:** Ensure that jobs arrive at the printer in the order determined by the Output Manager queue policy.

3. Restart Output Manager.

Load Balancing

Printer load balancing, or job splitting, is used to keep printers working equally. This avoids having one printer always busy while another is only sometimes used. Output Manager automates load balancing to increase operator and printer efficiency, using the following methods:

- **Simple:** Assign more than one printer to a queue. The jobs will be printed using either the round robin or least-busy printer method.

- **Number of copies**: If multiple copies are being printed, Output Manager can send some of the copies to each of the printers in the queue.

- **Color pages**: Output Manager can send the color pages of a black and white document to a color printer, if one is in the queue. In this way your color printer is used only for color printing and not kept busy with black and white pages. This feature also allows you to set a threshold based on a percentage of color pages, or a set number of color pages, where the entire job is sent to the color printer. The threshold setting is used to save time collating a job that has a minimum of black and white pages.

- **Page range**: Output Manager splits the total job into groups of sequenced pages, and sends each page sequence to a different printer.

- **Documents**: A job can consist of multiple documents. Output Manager can split the job and send each document to a separate printer.

- **Page Count**: Output Manager can load balance to printers that are least busy based on the pages pending to print. The least busy printer is determined by estimating the number of pages pending at the printer. The estimate is arrived at by calculating the number of pages sent by Output Manager to that printer. Pages sent to the printer from non-Output Manager sources are precluded from the calculation.

- **Document Set**: refers to VI Container splitting.   A VI Container is a job format that it has 3 sub-types (also known as modes), PPML, VIPP-database, and VIPP. VI Containers can contain many document sets. FreeFlow Output Manager only supports document-set split for a VI container that is in the VIPP-database format.

See Also

"Job Manager" on page 4–1

"Printer Manager" on page 3–1

"Queue Manager" on page 2-1

2. Queue Manager

A queue maintains pools of jobs and is responsible for managing the distribution of these jobs to the printers on your network. You may create a queue of all color printers, for example, or a queue of all printers in one geographic location. The queue is the central object in Output Manager: incoming jobs arrive in a queue; outgoing jobs are sent to printers from the queue.

Queue Manager allows you to create and manage queues.

- A queue can accept submissions from any inbound gateway.
- A queue can send jobs to any number of devices (including zero).
- A device can accept jobs from any number of queues.

NOTE: *All jobs are spooled into Output Manager before processing can be initiated.*

NOTE: *The options that are available to you within Queue Manager will depend on your Output Manager access rights.*

See Also

The Queue Manager Window

The Queue Manager window displays all of the queues available to the logged in user on the FreeFlow Output Manager system. Each queue can be thought of as a virtual printer which has unique characteristics that are defined when the queue is created. The queue list displays the name and state for any queues available at the system.

Queue Manager is accessed by selecting the Queue Manager menu in the Output Manager window. The main window displays the following:

Queue Status

Presents the following information:

- **Number of Selected Queues**: Displays the number of queues in the Output Management system that match the option selected in the **Status** drop-down menu.

- **Queue Status**: The queue name with additional columns that report on the status of that queue.

Status Menu

The **Status** menu allows you to view a list of queues by current status:

- **View All:** this is the default selection that lists all the queues in the Output Management system.

- **Accepting**: displays the queues that are enabled to accept new jobs for printing.

  - **Accepting/Releasing**: displays the queues that are set to accept new jobs for printing and automatically print incoming jobs.

  - **Accepting/Not Releasing**: displays the queues that are set to accept new jobs for printing. Jobs will be printed when the queue is set to release.

- **Not Accepting**: displays the queues that are prevented from accepting new jobs for printing.

  - **Not Accepting/Releasing**: displays the queues that are prevented from accepting new jobs, but are set to automatically print jobs that are already in the system.

  - **Not Accepting/Not Releasing**: displays the queues that are prevented from accepting new jobs and jobs already in the system can only be printed if the queue is set to release.

- **Bypassing Processing**: displays queues that do not process any job and submit to the printer as they are received.

Automatic Update Menu

The **Automatic Update** menu allows you to set the interval at which the queue list is updated. If **Update Now** is selected, the queue list is immediately refreshed regardless of the Automatic Update setting.

The Queue List

The **Queue List** displays all of the queues in the system. Each row represents a queue and contains information about that queue.

All columns can be sorted by clicking the column header. The sort arrow shows which column is sorted and whether it is in ascending or descending order.

You can manage **Queue List** selections from the **Status** menu.

Queue Name

Name of the queue.

Jobs in Queue

The number of jobs residing in each queue.

Selecting Queues

To modify a queue, you must first select it.

To Select a Queue

Select the checkbox next to a queue name to select that queue. Clear the checkbox next to the queue to cancel the selection.

To Select All Queues

Click the **Select All** button in the column header to select all queues. Click the button a second time to clear the selection of all queues.

Custom View Access Group

This column displays the group name that the queue belongs to. This column will appear when the administrator is logged on to the system.

Accepting

The column display will either be **Yes** or **No**. If **Yes** is displayed the queue is enabled to accept new jobs for printing. If **No** is displayed the queue is prevented from accepting new jobs for printing.

See Also

Releasing

The column display will either be **Yes** or **No**.

If **Yes** is displayed the queue will automatically print incoming jobs.

If **No** is displayed the queue is paused and jobs cannot be manually released unless the queue status is changed.

Release Jobs At

Indicates the time and date that the job is scheduled to be released to the printers.

Hold New Jobs

Holds all incoming new jobs. Jobs which entered the queue prior to this state being enabled, are not affected and are not placed in a held state.

See Also

"Releasing Jobs from the Queue" on page 2–14

"Setting a Queue to Hold Jobs" on page 2–75

Bypass

A Bypass queue forwards a job to the printer in an "as is" condition. As a result, you can think of a bypass queue as submitting a job directly to the printer.

A checkmark indicates that Bypass is enabled.

NOTE: *A Bypass queue cannot be used when splitting jobs.*

See Also

"Using the Job Processing Options Detail" on page 2–15

Default Split/Maximum

Indicates the default split type and the maximum number of splits allowed by the queue.

Retain Job

Indicates the amount of time a job is retained on the system before the job information and associated print data is deleted. If a duration is not displayed, the job is retained in the system until the retain job default policy elapses.

When a job is retained, you can reprint or resubmit the job to print again.

See Also

"Releasing Jobs from the Queue" on page 2–14

"Setting a Queue to Hold Jobs" on page 2–75

"Keeping Completed Jobs" on page 2–23

The Queue Properties Window

The Queue Properties window has the following controls:

Queue Name List

If you selected more than one queue from the Queue Status screen, you can switch between them by selecting them from the Queue Name drop-down list.

View Menu

The **View** menu option allows you to expand or collapse all property detail displays, and switch between View and Edit modes.

Value Options Menu

The **Value Options** menu allows you to append or overwrite values imported from the printers and .xcp files associated with the queue and save the properties of the queue to a file.

Command Buttons

- **Apply**: Saves all property changes to the selected queue without closing the window. You do not need to select **Apply** before selecting **OK** to save changes.

- **OK**: Saves all property changes to a queue and closes the window.

- **Back to Queue Status**: Returns the view to the main Queue Manager window.

- **Previous Queue/Next Queue**: Displays the properties view of the previous or next queue in the queue list.

CAUTION: *Do not use the browser Back or Forward navigation buttons to return to previously viewed pages, or the Refresh button. This action may cause unpredictable behavior.*

Queue Options Menu

The Queue Options menu presents the following selections:

- **Hold New Jobs**: Incoming jobs to the selected queue are held. This selection does not affect jobs that are currently processing.

- **Release Held New Jobs**: Releases jobs that are held using the Hold New Jobs operation. Jobs that are held by other methods remain on hold.

- **Release Jobs At**: Allows you to schedule the day and time that jobs in the queue are released.

- **Purge Jobs**: Deletes all the jobs in the queue, regardless of the state of the job. New jobs entering the queue while this operation is executed are not affected.

- **Delete Queues**: Deletes the selected queue(s) from the system. To delete selected queues, each queue must be disabled and it cannot contain any active jobs.

Creating New Queues

Before jobs can be printed, they must be submitted to the printer device(s) through a print queue. The function of a queue is to manage the flow of print jobs through the controller to the printer device(s). You may want to create a new queue to manage a group of printers that handle specific job requirements, or to have a queue available for a particular group of people.

When a queue is associated with printers, the features which the printers support are added to the queue property menus.

The **Supported** selection acts as an accelerator to select all the values within a particular option. Once options are selected, the value is supported and can be selected when editing job properties.

NOTE: *There is no limit to the number of queues that can be created on the FreeFlow Output Manager system.*

To Create A New Queue

1. Open **Queue Manager**.

2. Click **New Queue**. The New Queue wizard opens.

3. Type a name in the **Queue Name** box. Names may have up to 127 characters, using only letters, numbers, underscores and dashes. Spaces are not allowed in the name.

   NOTE: *The queue name cannot be changed, however, properties of the queue can be edited at any time.*

4. Click **Next** to proceed to the next screen.

   NOTE: *Click* **Cancel** *to end the queue creation process and return to the Status screen. Click* **Back** *to return to the previous screen to edit previous entries.*

5. To enable Job Splitting for the Queue select **Yes**, otherwise select **No**. If you select Yes, select a Job Split method from the pull-down. Options include:

   • **By Quantity**: A portion of the total quantity may be printed on each available printer associated with the queue.

   At the next screen, pick at least two primary printers.

   • **By Pages**: A different range of pages may be printed on each available printer associated with the queue.

   At the next screen, pick at least two primary printers that support page range.

- **By Documents**: Different documents in a job may be printed on each available printer associated with the queue.

  At the next screen, pick at least two primary printers.

- **By Document Sets**: Different document sets may be printed on each available printer associated with the queue. If the documents submitted are part of a VI container, it is possible to load balance the document sets within the container. Load balancing of VI Container document sets is limited to database mode VIPP print files. The VI Container must include a database master file (.dbm file).

  At the next screen, pick at least two primary printers.

- **By Color**: Color pages may be printed on a printer that supports color, and non-color pages may be printed on a printer that does not support color.

  At the next screen, pick at least one primary printer that supports color, and one primary printer that does not support color. Note that picking a non-color printer that supports the interposer allows color pages to be automatically collated into the non-color pages.

- **By Best Method**: FreeFlow Output Manager will determine the most suitable splitting method depending on job properties and printer availability.

  At the next screen, pick at least two primary printers.

6. Click **Next** to proceed to the next screen.

7. If Custom View Groups has been enabled, perform this step, otherwise go to the next step:

   - If you want to make the queue accessible to a specific Custom View Group, select **Yes**, otherwise select **No**. If you select **Yes**, select an access group from the **Select Custom View Group** pull-down menu.

   NOTE: *If **No** is selected and the Custom View Groups feature is enabled on the System Configuration page, then the queue will only be available to the Administration user. For more information on enabling this feature, see* "Custom View Groups" *.*

8. Click **Next** to proceed to the next screen.

9. If you want all of the printers in your Output Manager system to be considered primary printers for this queue, select **All Printers in the System**. Otherwise, select **Selected Printers**.

   NOTE: *If you selected to make the queue available to a specific Custom View Group, only those printers that have **not** been assigned will appear in the Associated Printers list. For more information on this feature, see* "Creating Custom View Groups"

a. If you chose **Selected Printers**, select each printer you want to associate with the queue.

b. The printers you select will all be assigned a Primary designation. You may want to designate standby printers if all primary printers are not operational or not suitable for particular jobs. To change printers from primary to standby printers, select the **Standby** option for each.

NOTE: *If you selected a job splitting option for the queue, ensure that you select the required number of supported printers for that job split selection. Use the legend and letter designations in the printer list to select printers that have the necessary support.*

10. Click **Next** to proceed to the next screen.

11. If a Job Split Method was selected, you can specify values for the following fields:

- **Maximum Job Splits**: Maximum Job Splits is not applicable on a document split or a color split. The value of this attribute specifies the maximum number of job splits that will be created when splitting a job. The default entry is the number of available printers that can print the job split. For example, if you want to have a maximum of five splits on a job, type 5 in the **Maximum Job Splits** box. You would need a minimum of five printers in order to produce five job splits.

- **Minimum Quantity**: If **By Quantity** is the Job Split Method selected, this attribute specifies the minimum number of copies that a document must have before it can be split. For example, if you want to start job splitting once a job contains more than four copies, then type 4 in the **Minimum Quantity** box.

- **Minimum Pages**: If **By Pages** is the Job Split Method selected, this attribute specifies the minimum number of pages that a document must have before it can be split. For example, if you want to split all jobs containing more than 100 pages, type 100 in the **Minimum Pages** box.

- **Minimum Document**: If **By Document Sets** is the Job Split method selected, this attribute specifies the minimum number of document sets a document must have before it can be split. For example, if you want to start job splitting once a job contains more than four document sets, then type 4 in the **Minimum Document** box.

- Specify an option for **If Job Cannot be Split by Specified Method**.

  – **Print Job on One Printer**: the job will be automatically sent to a single available capable device.

  – **Hold Job**: the job will be set to a Held state.

12. Click **Next** to proceed to the next screen.

13. Select from the following:

- **Yes** to update queue properties using printer information automatically. When a queue is created and the queue is associated with printers, the queue inherits the features from all the associated printers. After features are inherited, the administrator can change the feature set to limit the features that are available when editing the job, or to advertise available features to clients such as FreeFlow Print Manager.

- Select **No** to set the information manually.

14. Click **Create Queue** to add the new queue to the system.

15. If necessary, click **Edit Queue Properties** to further define settings for the queue.

16. Click **Done** to end the queue creation process and return to the Queue Status screen.

See Also

"Hints and Tips for Creating Queues"

"Editing Queue Properties" on page 2–11

Hints and Tips for Creating Queues

TIP: Assign printers of similar capabilities to a queue. This enables jobs to be distributed to most or all printers associated with the queue. This is especially productive for round robin distribution and job splitting by quantity, pages or documents.

TIP: Assign only one printer per queue when using the iGen4 220 Perfecting Press.

TIP: Assign printers of similar print quality. Some printers have write white engines, others have write black engines and should not be part of the same queue.

TIP: Use Bypass queues for jobs that will not be edited using the Output Manager application. Some printers have print controllers that do not support IPP or ASCII/XPIF job ticketing (for example, Fiery, DocumentCentre, Generic LPR and older versions of Creo). Output Manager cannot forward updated job attributes to those print controllers.

TIP: When creating a printer in the Printer Registration application, assign a Custom name with as few characters as possible. This will allow the printer name to display without wrapping in the interface.

Editing Queue Properties

Once a new queue is created, most queue properties can be modified. The Queue Name and Printer Name cannot be modified.

The Queue Properties window enables you to view and specify default settings to process all jobs submitted to the queue. Only Administrators and Operator 1 can edit queue properties.

NOTE: *When setting queue properties, the values can be those received from the associated printers. The values are used as potential values when editing a job. As a result, only values that are supported by the printer will be displayed. This allows the job to be scheduled to the correct printer that meets the job requirements.*

NOTE: *The attributes set on the queue are used to advertise the print capabilities of the printer to IPP clients. This information is used by FreeFlow Print Manager to display the print options available when submitting the job to the Output Manager queue.*

To Edit Queue Properties

All queue property settings are accessed by performing the following:

1. Open **Queue Manager**.

2. Select each queue that you want to access. Click the column header to select all listed queues.

3. Select **Edit Queue Properties** or **View Queue Properties**.

4. Edit the queue properties by adjusting the settings on each detail display.

NOTE: *The administrator or operator 1 determines which features are supported. In order to change a **Printer Default** setting, the Printer Default checkbox must be cleared. A **Printer Default** selection indicates that the feature is handled by the printer that receives the job, using the printer default behavior.*

See Also

"Using the Basic Properties Detail"

"Using the Job Processing Options Detail"

"Using the Queue Manager Settings Detail"

"Using the Paper Stocks Detail"

"Using the Output Format Detail"

"Using the Image Adjustments Detail"

"Using the Color Detail"

"Using the Job Notes and Accounting Detail"

"Using the Multifunction Device Setup Detail"

"Using the Special Pages Detail"

Using the Basic Properties Detail

The available options within the Basic Properties detail are determined by the administrator or operator 1.

To Use the Basic Properties Detail

1. Open **Queue Manager**.
2. Select the queue(s) you want to access.
3. Select **Edit Queue Properties**.

NOTE: *The Queue Name, Jobs in Queue, and Date Created fields are read only.*

See Also

"Accepting Jobs at the Queue" on page 2–13

"Releasing Jobs from the Queue" on page 2–14

"Selecting Associated Printers" on page 2–15

Accepting Jobs at the Queue

Jobs cannot flow through a queue unless the queue is set to accept jobs.

To Accept Jobs at the Queue

1. Open the **Basic Properties** detail.
2. Select from the following **Accepting Jobs** options:
   - **Yes**: New jobs are accepted at the queue.
   - **No**: New jobs are not accepted at the queue.
3. Click **OK** to save your entries and return to the **Queue Status** window.

NOTE: *You can also set queues to accept jobs using the options available on the Queue Status list.*

See Also

"Enabling a Queue to Accept Jobs" on page 2–73

"Preventing a Queue from Accepting Jobs" on page 2–74

Releasing Jobs from the Queue

Although a queue may accept jobs for processing, the jobs will not print unless the queue is set to release print jobs.

To Release Jobs from the Queue

1. Open the **Basic Properties** detail.
2. Select from the following **Releasing Jobs** options:
   - **Yes**: New jobs are released once they enter the queue.
   - **No**: New jobs are held at the queue.
3. To release jobs at a special time:
   a. Select **Release At**.
   b. Select a date and time from the calendar. By default, the current date is selected during the initial opening of the menu. For subsequent uses, the last date and time entered is the default value.

   The left and right arrows on each side of the month and year header allow you to select calendar months. The **Show Today** selection automatically selected the current date on the calendar, but does not affect the time selection. Your jobs release from the queue at the selected date and time.
   c. Click **OK** to accept the date and time entries and close the calendar window.
4. Click **OK** to save your entries and return to the **Queue Status** window.

NOTE: *You can also release jobs using the options available on the Queue Status list.*

See Also

"Setting a Queue to Release Jobs" on page 2–74

"Setting a Queue to Hold Jobs" on page 2–75

Selecting Associated Printers

You can choose the printers that you want to associate with the queue. You may have an installation where you want to allow jobs to use all available and capable printers. If enabled by the administrator or operator 1, jobs sent to this queue can be scheduled to selected devices or all devices in the system.

NOTE: *When selecting printers, use the table legend and letter column to select printers that have support for specific options. For example, printers that support color will have the letter "C" in the letter column to the right of the printer name.*

NOTE: *If the Custom View Group feature has been enabled, the printers in the pull-down list will be limited to those that the logged on user has been granted access.*

To Select Associated Printers

1. Open the **Basic Properties** detail.

2. To associate the queue with all printers, select **All Printers in the System**. Otherwise, select **Selected Printers** to open the **Associated Printers** list.

   a. Select the printers you want to associate with the queue.

   b. Select either the **Primary** or **Standby** option for each printer. Standby printers are used only when all the primary printers are unavailable.

3. Select **Update Values from Printers**.

4. Click **OK** to save your entries and return to the **Queue Status** window.

Using the Job Processing Options Detail

The administrator or operator 1 can set up a queue, so that all jobs entering the queue can execute an optional job processing program.

To Use the Job Processing Options Detail

1. Open **Queue Manager**.

2. Select each queue that you want to access. If you want to view or edit the properties of all the queues in the system, select the checkbox column header. If you select multiple queues, the properties for each selected queue can be accessed using the **Queue Name** menu within the **Queue Properties** window.

3. Select **Edit Queue Properties**.

NOTE: *The administrator determines which features are supported.*

See Also

"Setting Job Processing Options" on page 2–17

"Selecting a Job Split Method" on page 2–19

"Setting up Job Routing" on page 2–21

"Holding Jobs for a Set Amount of Time" on page 2–22

"Keeping Completed Jobs" on page 2–23

Setting Job Processing Options

You can set up a queue so that processing of incoming jobs does not occur. This is called a Bypass queue. The job is sent directly to the queue with no pre-processing: The queue does not validate the job's attributes against the queue's supported attributes. If any subordinate device cannot print the job, you are informed when job scheduling fails.

To Set Job Processing Options

1. Select the **Job Processing Options** detail.
2. Select from the following **Job Processing by System** options:
   - **Allow**: Job processing is performed. This is the default selection.
   - **Bypass**: If this is selected, you can only set the following four queue properties:
     – Schedule Jobs at Printer > By Priority (Job Priority)
     – Keep Completed Jobs (Job Retention Period)
     – Post-processing Program
     – Printer Requested (Output Device)

   NOTE: *A Bypass queue cannot be used for job splitting.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

Requesting a Printer

You can select a specific printer to print your job.

To Request a Printer

1. Select the **Job Processing Options** menu.
2. Select a printer from the **Printer Requested** menu.
3. Click **OK** to save your entries and return to the **Queue Status** window.

Selecting Pre- and Post-processing Programs

Output Manager provides a predefined preprocessing program called "xompdlana.bat". The preprocessor performs the following:

- determines the job PDL (that is, PostScript, PCL, TIFF, PDF, ASCII, VI Container)

- determines if the file has color content (PDF and PostScript files only)

- estimates the number of pages in the job (PostScript, PDF, PCL files)

- pre-processing will estimate the number of document sets for a VI Container job, and the type of container.

After a job completes printing, a specific program or script specified as a post-processor is used that can perform job tasks such as sending an email notification that the job is complete, or writing job or document attributes to a file to perform simple job accounting.

To Select Pre- and Post-processing Programs

1. Select the **Job Processing Options** menu.

2. Select a supported **Preprocessing Program**. To enable this pre-processing program to be used on all jobs submitted to the queue:

   a. Select **xompdlana** as a supported pre-processing program.

   b. Select the corresponding **default** radio button.

3. Select a supported **Postprocessing Program**.

4. Click **OK** to save your entries and return to the **Queue Status** window.

Setting the Job Size Supported

The system administrator sets the job size (pages) supported for the queue. The minimum and maximum values are established by the total number of printers in the queue.

To Set the Job Size Supported

1. Select the **Job Processing Options** detail.

2. The minimum and maximum values are displayed above the **Job Size Supported (Pages)** fields of the submitted job. You can type or use the spin boxes to enter values in each field.

3. Click **OK** to save your entries and return to the **Queue Status** window.

Setting the Job Proof Option

This feature allows you to set the queue to print a proof copy of a multi-copy job while eliminating the need to resubmit the job to print once the content and layout have been verified.

To Set the Job Proof Option

1. Select the **Job Processing Options** detail.

2. If Job Proof is enabled, the Supported checkbox is selected. Enter a Job Proof quantity.

3. Click **OK** to save your entries and return to the **Queue Status** window.

Selecting a Job Split Method

Job splitting can be used to balance printer loads, spreading a large job across two or more printers. Splitting can also be used for diverting specialty portions of a job to printers suited for particular tasks.

NOTE: *A Bypass queue cannot be used for job splitting.*

NOTE: *The Proof Quantity must be set to 0 (zero) for split jobs.*

To Select a Job Split Method

1. Select the **Job Processing Options** menu.

2. Select a supported Job Split Method.

3. Specify an option for **If Job Cannot be Split by Specified Method**.

   • **Print Job on One Printer**: the job will be automatically sent to a single available capable device.

   • **Hold Job**: the job will be set to a Held state.

4. If a Job Split Method is selected, you can specify values for the following fields:

   • **Maximum Job Splits**: Maximum Job Splits is not applicable on a document split or a color split. The value of this attribute specifies the maximum number of job splits that will be created when splitting a job. The default entry is the number of available printers that can print the job split. For example, if you want to have a maximum of five splits on a job, type 5 in the **Maximum Job Splits** box. You would need a minimum of five printers in order to produce five job splits.

- **Minimum Quantity**: If **By Quantity** is the Job Split Method selected, this attribute specifies the minimum number of copies that a document must have before it can be split. For example, if you want to start job splitting once a job contains more than four copies, then type 4 in the **Minimum Quantity** box.

- **Minimum Pages**: If **By Pages** is the Job Split Method selected, this attribute specifies the minimum number of pages that a document must have before it can be split. For example, if you want to split all jobs containing more than 100 pages, type 100 in the **Minimum Pages** box.

- **Minimum Document**: If **By Document Sets** is the Job Split method selected, this attribute specifies the minimum number of document sets a document must have before it can be split. For example, if you want to start job splitting once a job contains more than four document sets, then type 4 in the **Minimum Document** box.

- **Enable Color Splits**: If **By Color** is the Job Split method, these settings are enabled. Select **Always When Color Pages Are Present** to split the job when color pages are present. See "Color Splitting Job Options" for more information on additional color split options.

5. Click **OK** to save your entries and return to the **Queue Status** window.

Color Splitting Job Options

There are two sets of additional options available when color splitting a job.

- **Color Page Threshold**: This setting enables color splitting of the job if the number color pages falls below a threshold based on the number or percentage of color pages in the job. The options for setting a color split threshold are:

  - **Based on percentage**: This option will split the job if the number of color pages in the job falls below the percentage setting you enter. For example, the option can be set to only split the job if the number of color pages is less that 80% of the total pages in the document; otherwise, the entire job will be sent to the color printer.

  - **Based on number of pages**: This option will split the job if the number of color pages in the job falls below the number of pages setting you enter. For example, the option can be set to only split the job if the number of pages is less than 20 pages in the document; otherwise, the entire job will be sent to the color printer

- **Exception Page Handling**: If a job has been programmed with exception pages that have color content, this feature allows you to specify whether those pages are routed to a color or black and white printer. In the **Exception Page Splitting** section, select from the following:

  - Select **Route to Either Color or B/W Printer Based on Exception Page Color** to send exception pages with color content to the configured color printer for the queue.

  - Select **Route All Exception Pages to a B/W Printer** to send color content exception pages to the configured black and white printer for the queue.

See Also

Setting up Job Routing

Job routing determines how the queue assigns jobs to printers.

To Set up Job Routing

1. Click **Queue Manager** to open it.
2. Select the queue you wish to set routing for.
3. Click **Edit Queue Properties**
4. Click **Job Processing Options**.
5. Select a **Check Printers for Capability Match** option:

   - **Yes**: The job can be assigned to a printer only if the printer

supports the required job attributes.

- **No**: The queue schedules the job to a device that best supports the job properties. It uses the **Assign Jobs** selection, which follows.

6. Select an **Assign Jobs** option:

- **To Next Printer**: The next printer in the list receives the job. This is the round robin method.

- **To Least Busy Printer by Page Count**: The printer with the least number of pages, as defined by the system administrator, receives the job.

- **To Least Busy Printer by Job Count**: The printer with the least number of jobs, as defined by the system administrator, receives the job.

7. Select a **Schedule Jobs at Printer** option:

- **First In, First Out** (FIFO): generally, the first job to enter a queue is the first job that is sent to a printer.

- **By Priority**: the higher the priority, the faster the job is sent to a printer. Enter a priority setting between 1 (lowest priority) and 100 (highest priority). The default priority setting is 50.

NOTE: *Jobs can be assigned a priority only if **By Priority** is the attribute set at the queue.*

8. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

"Setting Job Priority"

Holding Jobs for a Set Amount of Time

This feature allows you to set the time range that a job can be held. This feature is used when you edit job properties. When a job is held it needs to process again before it can be printed.

To Hold Jobs for a Set Amount of Time

1. Select the **Job Processing Options** detail.

2. Jobs can be held from one minute to 30 days:

   a. Select a **Minimum** time that jobs can be held.

   b. Select a **Maximum** time that jobs can be held.

3. Click **OK** to save your entries and return to the **Queue Status** window.

Keeping Completed Jobs

You can set the amount of time a job is retained on the system before the job information and associated print data is deleted. If a duration is not displayed, the job is retained in the system until the retain job default policy elapses.

To Keep Completed Jobs

1. Select the **Job Processing Options** detail.

2. You can keep **Completed** jobs for a minimum of one minute to a maximum of 30 days:

   a. Enter a **Minimum** value.

   b. Enter a **Maximum** value.

   NOTE: *The Default value is set by the system administrator.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

Using the Queue Manager Settings Detail

The available options within the **Settings** detail are determined by the system administrator.

To Use the Queue Manager Settings Detail

1. Open **Queue Manager**.

2. Select the queue(s) you want to access.

3. Select **Edit Queue Properties.**

   See Also

Setting the Job Quantity and Page Range

Allows you to enter number of job sets to be printed.

To Set the Job Quantity and Page Range

1. Select the **Settings** detail.

2. Enter minimum and maximum values in the **Quantity** fields. The minimum and maximum values of the queue are displayed above the **Quantity** field. The **Default** field displays the default number of document copies to print. A job entering the queue with no value for **Job Quantity** will print the default number of copies.

3. **Page Range** allows you to set the page range of the job you want to print. If **Page Range** is supported, the **Supported** field is selected.

4. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

Selecting the Document Format

You can change the format of a document after it has been submitted to the controller. For example, a change from PostScript to ASCII may be desired in order to print the PostScript commands.

To Select the Document Format

1. Select the **Settings** detail.

2. Select a supported **Document Format**. The following Document Formats may be available:

    • **Unknown**:

    • **ASCII**: The American (National) Standard Code for Information Interchange, is a standard character-to-number encoding widely used in the computer industry.

    • **JPEG**: The Joint Photographic Experts Group standard algorithm for compressed digital images.

- **PostScript**: A page description language developed by Adobe Systems, Inc. It supports graphics, text, and images with a wide variety of fonts. It is designed to be printer independent.

- **PCL**: A page description language that provides a set of instructions to the printer describing the appearance of a page or pages.

- **PDF**: Portable Document Format. A file format developed by Adobe Systems, Inc.

- **TIFF**: A common image format developed by Aldus and Microsoft for scanned color and black and white images. It is a versatile, reliable, and widely supported bitmap format designed for exchanging digital information.

- **VI Container**: (Variable Information) Containers are specialized files containing a collection of components that are bundled into a single file called a "container." Output Manager will forward VI container jobs to printers that support this format. Supported VI Container formats include PPML, VIPP, and VIPP Database Mode. The VI Container format needs to be enabled manually because printer will not export it automatically.

NOTE: *PPML, VIPP and VI Database Mode can be set if the version of FreeFlow Print Server is version 5.0 or later. Only PPML is set if the FreeFlow Print Server version is 4.2.*

NOTE: *The Default value is set by the administrator.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

Setting Font Options

A font name can be specified if the document data is in a format that does not have inherent font information (for example, 'text/plain'). If font information is supplied with the job, this selection is ignored.

The font name and size can be selected.

To Set Font Options

1. Select the **Settings** detail. If **Font Size (Points)** and **Font Name** are enabled, the **Supported** checkbox is selected. Each supported **Font Name** is also selected.

2. Enter a **Font Size** in the field provided. The supported queue range is displayed in job properties page

3. Select a supported **Font Name** by selecting a radio button.

    NOTE: *The Default value is set by the system administrator.*

4. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

"Setting the Job Quantity and Page Range" on page 2–24

"Selecting the Document Format" on page 2–24

"Setting OPI Options" on page 2–26

"Enabling Queue Resources" on page 2–27

Setting OPI Options

This attribute indicates the type of OPI image insertion to be performed by the printer.

Open PrePress Interface is used to replace low-resolution proxy images with high-resolution images when the job is decomposed. This is useful because low-resolution images transmit much quicker than high-resolution jobs from the client to the controller. Once received, the controller can then access the high-resolution image during decomposition to be used for print.

To Set OPI Options

1. Select the **Settings** detail.

2. Select a supported **OPI** option.

3. Image Substitution determines the type of OPI image insertion that is performed by the printer. Select an **Image Substitution**:

    •   **On**: OPI images referenced in the document file are retrieved, manipulated as specified, and inserted or substituted for those referenced in the document.

    •   **Off**: OPI images referenced in the document are not retrieved, inserted or substituted for those in the document. The printer ignores all OPI image insertion references.

4. The **Setting** options determine whether the printer pre-scans the document data in order to validate that OPI images referenced within the document are accessible and, optionally, to send them to the Printer, before processing the job. From the **Setting** menu, select from:

- • **None**: A PreScan is not performed on the job.

- • **Pre-Scan**: Before processing the job, pre-scan the document data and validate that each OPI image exists and is accessible.

- • **Pre-Scan & Gather**: Pre-scan the document data and retrieve the referenced OPI images prior to processing the job. This maximizes processing performance on the job.

NOTE: *The Default value is set by the system administrator.*

5. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

Enabling Queue Resources

Resource selections are made available for only PostScript or PDF jobs.

To Enable Queue Resources

1. Select the **Settings** detail.

2. Select a supported **Pre-Scan Action** option.

3. From the **Pre-Scan Action** menu, select from:

- • **None**: A PreScan is not performed on the job.

- • **Pre-Scan**: Before processing the job, pre-scan the document data and validate that each OPI image exists and is accessible.

- • **Pre-Scan & Gather**: Pre-scan the document data and retrieve the referenced OPI images prior to processing the job. This maximizes processing performance on the job.

NOTE: *Default values are set by the system administrator.*

4. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

Setting Retention After Job Completion

This feature allows you to keep or delete a job following the completion of job processing and printing.

When you keep a job, all the document data and instructions required to reprint the job are retained so the job can be reprocessed. When the job retention period expires, all traces of the job are removed from the system.

To Set Retention After Job Completion

1. Select the **Settings** detail.

2. Select a supported **Retention After Job Completion** option.

   - **Keep**: All the document data and instructions required to reprint the job are retained so the job can be reprocessed.

   - **Delete**: When the job retention period expires, all traces of the job are removed from the system.

   NOTE: *The Default value is set by the system administrator.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

Using the Paper Stocks Detail

The available options within the **Paper Stocks** detail are determined by the system administrator.

To Use the Paper Stocks Detail

1. Open **Queue Manager**.
2. Select the queue(s) you want to edit.
3. Select **Edit Queue Properties.**

Features within the **Paper Stocks** menu enable you to set up a default stock to be used for jobs sent through the queue. Be sure the attributes you select are supported on the printing system.

NOTE: *Some menu selections contain an Add New Value "+" designation.*

See Also

"Selecting a Stock"

Selecting a Stock

You can select a default stock used by the queue by either selecting individual stock properties or by selecting a predefined named stock.

To Select a Stock

1. Select the **Paper Stocks** detail.
2. Select a supported stock name or select stock characteristics.
3. Select supported paper stock properties.
4. Click **OK** to save your entries and return to the **Queue Status** window.

NOTE: *Be sure that the paper stock you select is supported on the printer.*

Using the Output Format Detail

The available options within the **Output Format** menu are determined by the system administrator.

The **Output Format** menu contains features used for determining output options that are processed through the selected queue.

Select a supported **Output Format** option by selecting a radio button.

NOTE: *Jobs entering the queue that do not contain a property value, are assigned the Default value.*

To Use the Output Format Detail

All **Output Format** options are accessed by performing the following:

1. Open **Queue Manager**.

2. Select the queue(s) you want to access.

3. Select **Edit Queue Properties.**

See Also

"Setting Page Orientation" on page 2–31

"Selecting Layout Styles" on page 2–32

"Setting the Sides Imaged" on page 2–33

"Setting Collation Options" on page 2–34

"Forcing Pages" on page 2–33

"Output Location" on page 2–35

"Enabling Slip Sheets" on page 2–37

"Using Transparency Interleaving"

"Setting Offset Options" on page 2–38

"Using Sample Delivery" on page 2–39

"Setting Finishing Options" on page 2–41

Setting Page Orientation

Orientation describes the position of the page image relative to the actual printed page and whether the printed image is parallel to the long side of the paper (landscape orientation) or to the short side of the paper (portrait orientation).

To Set Page Orientation

1. Select the **Output Format** detail.

2. Select a supported orientation:

   • **Portrait**: The printed page image is taller than it is wide. When you view a page printed with a portrait orientation, you hold it with the long edges to the side.

   • **Landscape**: The printed page image is wider than it is tall. When you view a page printed with a landscape orientation, you hold it with the short edges to the side

   NOTE: *A job entering the queue that does not contain an orientation value, is assigned the Default orientation value.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

"Using Transparency Interleaving"

Selecting Layout Styles

The Layout feature enables you to control the placement, rotation, cropping, and scaling of source document pages onto the printed output. This process is commonly known as Imposition.

To Select Layout Styles

1. Select the **Output Format** detail.

2. Enter a supported layout: For a description of each layout option, see: "About Layout Options"

NOTE: *A job entering the queue that does not contain a layout value, is assigned the Default layout value.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

"Setting Page Orientation" on page 2–31

"Setting the Sides Imaged" on page 2–33

"Setting Collation Options" on page 2–34

"Output Location" on page 2–35

"Enabling Slip Sheets" on page 2–37

"Setting Offset Options" on page 2–38

"Using Transparency Interleaving"

"Setting Finishing Options" on page 2–41

Setting the Sides Imaged

Use the Sides Imaged option to select whether the job prints on one or both sides of a page.

To Set the Sides Imaged

1. Select the **Output Format** detail.
2. Select a supported sides imaged option:
   - **1 Sided**
   - **2 Sided, Flip on Long Edge**
   - **2 Sided, Flip on Short Edge**

NOTE: *A job entering the queue that does not contain a sides imaged value is assigned the Default sides imaged value.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

"Setting Page Orientation" on page 2–31

"Selecting Layout Styles" on page 2–32

"Setting Collation Options" on page 2–34

"Output Location" on page 2–35

"Enabling Slip Sheets" on page 2–37

"Setting Offset Options" on page 2–38

"Using Transparency Interleaving"

"Setting Finishing Options" on page 2–41

Forcing Pages

This attribute forces selected pages to be imaged on the front side of a sheet in the printed document. This attribute is typically used to start a new chapter or section of a document.

The pages you want to force to side one must be specified by page number.

Setting Collation Options

Collation controls the sequence in which pages in a job print.

To Set Collation

1. Select the **Output Format** detail.

2. Select a supported collation option:
   - **Collated**: Documents are printed in sequential page order and delivered as separate document sets. For example, if you print three sets of a 3-page document, the output is grouped in the following page order: 1,2,3 1,2,3 1,2,3.

   - **Uncollated**: Documents are printed in separate sets of each page. If you print 3 copies of a 2-page document, the output is grouped with three copies of page 1 followed by three copies of page 2.

   NOTE: *A job entering the queue that does not contain a collation value is assigned the Default collation value.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

Output Location

The Output Location selection determines where the print job is delivered.

Selecting an Output Location

1. Select the **Output Format** detail.
2. Select a supported **Output Location** option:
    *   **Automatic**: This is the default selection. The system determines the most appropriate destination of the given job.
    *   **Catch Tray (top)**: Used for simpler jobs that do not require finishing or collated stacking.
    *   **Stacker**: Used for most jobs that require stacking or stapling.
    *   **Stacker-N**: Choose from the list of available stackers.

NOTE: *A job entering the queue that does not contain an output location value is assigned the Default output location value.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

"Setting Page Orientation" on page 2–31

"Selecting Layout Styles" on page 2–32

"Setting the Sides Imaged" on page 2–33

"Setting Collation Options" on page 2–34

"Enabling Slip Sheets" on page 2–37

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Setting Page Delivery Selections

Page Delivery determines whether the prints are delivered face up or face down and the order in which the printed pages are delivered to an output device, either first to last or last to first. Specifying the page delivery is important for certain types of finishing.

To Set Page Delivery

1. Select the **Output Format** detail.

2. Select a supported Page Delivery option:

   • **System Specified**: This is the default selection. The system determines the page delivery of the given job.

   • **Face Up; 1-N**: Printed pages are delivered face up, first to last with the last page on top (ascending).

   • **Face Up; N-1**: Printed pages are delivered face up, last to first with the first page on top (descending).

   • **Face Down; 1-N**: Printed pages are delivered face down, first to last with the last page on top (ascending).

   • **Face Down; N-1**: Printed pages are delivered face down, last to first with the first page on top (descending).

NOTE: *A job entering the queue that does not contain a page delivery value is assigned the Default page delivery value.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

"Setting Page Orientation" on page 2–31

"Selecting Layout Styles" on page 2–32

"Setting the Sides Imaged" on page 2–33

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Enabling Slip Sheets

Slip Sheets are pieces of paper or other media that are inserted between document sets in a print job. Slip Sheets differ from job inserts in that they separate one job set from another, while job inserts separate pages of a job.

To Enable Slip Sheets

1. Select the **Output Format** detail.
2. Select a supported slip sheets option:
   - **Off**: Slip sheets are not included with the job.
   - **On**: Slip sheets are included with the job.

NOTE: *A job entering the queue that does not contain a slip sheet value is assigned the Default slip sheet value.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

"Setting Page Orientation" on page 2–31

"Selecting Layout Styles" on page 2–32

"Setting the Sides Imaged" on page 2–33

"Setting Collation Options" on page 2–34

"Output Location" on page 2–35

"Setting Offset Options" on page 2–38

"Using Transparency Interleaving"

"Setting Finishing Options" on page 2–41

Setting Offset Options

This feature allows you to offset stacks of output.

To Set Offset Options

1. Select the **Output Format** detail.
2. Select from the supported offset options:
   - **Off**: The feature is disabled.
   - **Between Jobs**: The offset occurs between each job printed.
   - **Between Sets**: The offset occurs between each job set printed.
   - **Between Subsets**: inserts an offset within a stack (uncollated set) after each specified page number.
3. Select the **Pages per Subset** check box to enable that option.

NOTE: *A job entering the queue that does not contain an offset value is assigned the Default offset value.*

4. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

"Setting Page Orientation" on page 2–31

"Selecting Layout Styles" on page 2–32

"Setting the Sides Imaged" on page 2–33

"Setting Collation Options" on page 2–34

"Output Location" on page 2–35

"Using Transparency Interleaving"

"Enabling Slip Sheets" on page 2–37

Using Transparency Interleaving

Specifies that the printer is to insert interleaved sheets into the document. The numbering of pages in the document must not be affected by the interleaved sheets.

To set Transparency Interleaving

1. Select the **Output Format** detail.
2. Select a supported interleaved sheets option:
   - **Off**: Interleaved sheets are not included with the job.
   - **On**: Interleaved sheets are included with the job.
3. Select a paper stock for the interleaved sheet from the list.
4. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

Using Sample Delivery

Sample delivery allows you to select from collated sets or uncollated sheets.

To Use Sample Delivery

1. Select the **Output Format** detail.
2. If Sample Delivery is supported, the following Sample Delivery options are available.
   - **Printer Default**: This is the default selection. The printer determines the Sample Delivery of the given job.
   - **Every**: Enter a numeric value for the amount of Uncollated Sheets or Collated Sets that you want to print.

3. The available Sample Delivery option depends on your collation selection. The **Collated Sets** option is available for collated jobs and the **Uncollated Sheets** option is available for uncollated jobs. You can change the active selection by changing the job collation option.

- **Uncollated Sheets***: Documents are printed in separate sets of each page. If you print 3 copies of a 2-page document, the output is grouped with three copies of page 1 followed by three copies of page 2.

- **Collated Sets***: Documents are printed in sequential page order and delivered as separate document sets. For example, if you print three sets of a 3-page document, the output is grouped in the following page order: 1,2,3 1,2,3 1,2,3.

4. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

Setting Finishing Options

Finishing is a general term referring to the processes, such as stapling, binding, stitching, folding, and hole-punching, that are typically performed on a job after it has finished printing.

To Set Finishing Options

1. Select the **Output Format** detail.
2. Select the supported finishing options from the list in the Finishing area.

    - **Custom Template**: Activates the **Custom Template** menu where you can enter custom template information.

NOTE: *A job entering the queue that does not contain a finishing value is assigned the Default finishing value.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

"Setting Page Orientation" on page 2–31

"Selecting Layout Styles" on page 2–32

"Setting the Sides Imaged" on page 2–33

"Setting Collation Options" on page 2–34

"Output Location" on page 2–35

"Enabling Slip Sheets" on page 2–37

"Setting Offset Options" on page 2–38

"Using Transparency Interleaving"

Using the Image Adjustments Detail

The available options within the **Image Adjustments** detail are determined by the system administrator.

The **Image Adjustments** detail contains controls that allow you to make image quality adjustments including: darkness, toner saver, halftone and image shift. To see a description of each field select from the following links:

Select a supported **Image Adjustments** option by selecting a radio button.

NOTE: *Jobs entering the queue that do not contain a property value, are assigned the Default value.*

To Access the Image Adjustments Detail

1. Open **Queue Manager**.

2. Select the queue(s) you want to access.

3. Select **Edit Queue Properties**.

The key to making adjustments to any of the image adjustments controls is to do so in small increments. Making large adjustments can actually create image quality problems.

See Also

"Using Rotation" on page 2–42

"Using Anti-aliasing" on page 2–43

"Using Resolution" on page 2–44

"Using Halftone" on page 2–44

"Adjusting Darkness" on page 2–45

"Using Toner Saver" on page 2–47

"Selecting an Image Resample Method" on page 2–47

"Using Image Shift" on page 2–48

"Using a VIPP Initialization File"

"Using Background Forms"

Using Rotation

Use rotation to turn a page image 180 degrees from its current position (0 degrees represents no rotation). You may need to rotate a page image so that it prints properly when processed by a finishing device (for example, to allow for right-side stitching or binding).

To Use Rotation

1. Select the **Image Adjustments** detail.

2. Select a supported **Rotation** option:

- **Printer Default**: This is the default selection. The printer determines the Rotation of the given job. A job entering the queue that does not contain a rotation value, is assigned the Default rotation value.

- **None**: Rotation is not performed.

- **90 Degrees**

- **180 Degrees**

- **270 Degrees**

3. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

Using Anti-aliasing

Anti-aliasing is a method for reducing the jagged appearance (caused by rasterization) of curves and diagonal lines. Anti-aliasing enhances the smoothness of such curves and lines.

To Use Anti-aliasing

1. Select the **Image Adjustments** detail.

2. Select from the following Anti-aliasing options:

- **Printer Default**: This is the default selection. The printer determines anti-aliasing for the given job. A job entering the queue that does not contain an anti-aliasing value, is assigned the Default anti-aliasing value.

- **Off**: does not apply the anti-aliasing algorithm

- **On**: applies the anti-aliasing algorithm

- **K100% High Resolution:** applies high resolution algorithm

3. Click **OK** to save your entries and return to the **Queue Status** window.

Using Resolution

Use the resolution option to achieve better performance for jobs that were saved, or scanned (if your system features a scanner). Resolutions vary from printer to printer, and not all resolutions print exactly as expected.

To Use Resolution

1. Select the **Image Adjustments** detail.

2. Select a supported option from the **Resolution** menu.

NOTE: *A job entering the queue that does not contain a resolution value is assigned the **Default** resolution value.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

Using Halftone

Halftone allows you to adjust the pattern of dots or lines of varying sizes applied to an image of varying tones, or same sized dots applied to a tint of color.

To Use Halftone

1. Select the **Image Adjustments** detail.

2. **Halftone** can be applied to the following:

   • **Image**: Specifies how the halftone screens are used by the printer to render image objects within color or black and white documents.

   • **Graphics**: Specifies how the halftone screens are used by the Printer to render graphic objects within color or black and white documents.

   • **Text**: Specifies how the halftone screens are used by the printer to render text objects within color or black and white documents.

3. Select from the supported **Halftone** options:

   • **Printer Default**: This is the default selection. The printer determines the halftone of the given job. A job entering the queue that does not contain a halftone value, is assigned the **Default** halftone value.

   • **None**: No halftone is applied to graphic, image or text objects. This is provided to enable you to override a Printer Default value in situations where no halftoning is desired.

   • **LPI** selections: Applies lines per inch halftoning.

   • **DPI** selections: Applies dots per inch halftoning.

- **Stochastic**: Applies a halftone screen that uses random spot densities to render objects.

NOTE: *A job entering the queue that does not contain halftone values, is assigned the* **Default** *halftone values.*

4. Click **OK** to save your entries and return to the **Queue Status** window.

Adjusting Darkness

The Darkness options allow to adjust print darkness, mode, and toner settings when using monochrome printers.

NOTE: *The key to making adjustments to any of the image quality controls is to do so in small increments. Making large adjustments can actually create image quality problems.*

Options include:

- "Controlling Print Darkness"
- "Selecting a Darkness Mode"

Controlling Print Darkness

The Print Darkness control makes all pixels lighter or darker.

1. Select the **Image Adjustments** detail.

2. If **Print Darkness** is supported, the following options are available:

   - **Printer Default**: This is the default selection. The printer determines the darkness of the given job. A job entering the queue that does not contain a darkness value, is assigned the **Default** darkness value.

   - Enabling the **Print Darkness** control:

     – Clear the **Printer Default** option.

     – Use the slide bar or enter a value in the spin box. Increasing **Darkness** (-) moves all pixels in the image toward black. Decreasing **Darkness** (+) moves all pixels toward white.

3. Click **OK** to save your entries and return to the **Queue Status** window.

Selecting a Darkness Mode

The Darkness Mode allows you to select a print quality:

1. Select the **Image Adjustments** detail.

2. Select a supported **Darkness Mode** option:

   - **Printer Default**: The printer determines the Darkness Mode of the given job. A job entering the queue that does not contain a darkness mode value, is assigned the **Printer Default** darkness mode value. To select a **Darkness Mode**, **Printer Default** must be cleared.

   - **Normal**

   - **DocuTech 135**: This setting prints output that is similar in appearance to that of a DocuTech 135 printer.

   - **DocuTech 135 with Darkness Adjustments**:

   - **DocuTech 6180**: This setting prints output that is similar in appearance to that of a DocuTech 180 printer.

   - **DocuTech 6180 with Darkness Adjustments**

   - **Native:** Specifies the neutral or nominal darkness setting native to the printer.

3. Click **OK** to save your entries and return to the **Queue Status** window.

Using Toner Saver

Enabling Toner Saver uses less toner and is therefore more economical than the full-quality setting (Off). You may want to use the On setting when printing proof documents.

To Use Toner Saver

1. Select the **Image Adjustments** detail.

2. Use the radio button to select a Toner Saver setting:

   • **Printer Default**: The printer determines the **Toner Saver** setting of the given job. A job entering the queue that does not contain a darkness mode value, is assigned the **Printer Default** darkness mode value. To select a **Toner Saver**, **Printer Default** must be cleared.

   • **Off**: Toner Saver is not enabled.

   • **On**: Toner Saver is enabled.

3. Click **OK** to save your entries and return to the **Queue Status** window.

Selecting an Image Resample Method

Use Image Resample to select an interpolation method.

Output Manager provides you with the ability to select an interpolation, or image resample, method in order to achieve maximum image quality at the desired RIP performance.

Interpolation is the process of estimating a value of a function between two known values. In the Image Interpolation context, the function of known values is the input image, and the estimated values are the values calculated for the output image. Image interpolation attempts to produce a smooth transition between adjacent samples rather than simply replicating pixels (which would result in "blocky" images).

The interpolation methods that may be selected (in addition to the system specified setting) include:

To Select an Image Resample Method

1. Open the **Image Adjustments** detail.

2. Use the radio button to select a supported **Image Resample** option:

   • **Printer Default**

   • **System Specified**

   • **Bi-Linear**: A method used to scale image data (pixels) from one resolution to another. The replacement pixel in the scaled image is calculated using a weighted sum of the four nearest pixel values in the source image. This method offers higher quality than Nearest Neighbor Interpolation.

   • **Nearest Neighbor**: A method used to scale image data (pixels) from one resolution to another. The output pixel value is simply the value of the input pixel closest to the output location.

   • **Smart**: A method used to scale image data (pixels) from one resolution to another. This interpolation method automatically chooses between interpolations based on the input image characteristics.

3. Click **OK** to save your entries and return to the **Queue Status** window.

Using Image Shift

Use Image Shift to adjust the location on a page where printing occurs. The procedure to shift an image varies based on whether you are printing on a one-sided or two-sided page.

To Use Image Shift

1. Open the **Image Adjustments** detail.

2. From the **Image Shifts** field, select a unit of measure.

3. Select an image shift from the **Set Shifts On** menu. Your selection activates the appropriate adjustment fields.

4. Adjust the **X:** and **Y:** axis fields:

   • When selecting the horizontal (**X**) image shift, enter a positive number to move the image away from the left side of the paper. Enter a negative number to move the image away from the right side of the paper.

   • When selecting the vertical (**Y**) image shift, enter a positive number to move the image upward or a negative number to move the image down.

5. Click **OK** to save your entries and return to the **Queue Status** window.

Using a VIPP Initialization File

A user defined initialization file can be specified. The file is located on the FreeFlow Print Server.

To use a VIPP Initialization File

1. Open the **Image Adjustments** detail.
2. Select **User Defined** from the VIPP Initialization File pull-down menu.
3. Type the file name for the file into the text box.
4. Click **OK** to save your entries and return to the **Queue Status** window.

Using Background Forms

This feature allows operators to enable whether to hold jobs that request background forms or to schedule them for printing.

NOTE: *If the printer associated with the queue does not support background forms, the controls used to enable this feature will be grayed out.*

To enable Background Forms

1. Open the **Image Adjustments** detail.
2. Locate the Background Forms heading and verify that this feature displays **Supported**.

   NOTE: *If the heading does not indicate Supported, then the printer assigned to the queue does not support background forms. You must assign a printer that supports this feature, or select a different queue.*

3. Perform one of the following:
   • Select the **Yes** radio button option to enable job scheduling for jobs with background forms.
   • Select the **No** radio button to disable job scheduling for jobs with background forms.
4. Click **OK** to save your entries and return to the **Queue Status** window.

Using the Color Detail

Color features are used to assist with matching color for printing. Color Quality features can include hardware devices such as spectrophotometers and colorimeters, and software such as color profiles, tonal reproduction curves (TRCs), and color space transformations.

Devices such as the spectrophotometer measure the printed output of a printer; this data is then used to calibrate the printer and/or create appropriate TRCs which can adjust for any color matching problems caused by the printer itself.

Color matching software is used to convert between device dependent RGB and CMYK color spaces to a device independent color space in order to match colors by adjusting for differences between device color gamuts.

The available options within the **Color** detail are determined by the system administrator.

To Use the Color Detail

1. Open **Queue Manager**.
2. Select the queue(s) you want to access.
3. Select **Edit Queue Properties**.

See Also

"Selecting a Print Color Option"

"Using Black Overprint" on page 2–51

"Selecting a User TRC" on page 2–51

"Using Pantone Color Processing" on page 2–52

"Using Highlight Color"

"Using Trapping"

"Using Lightness"

"Using Contrast"

"Controlling Saturation"

"Adjusting Color Cast"

"RGB Color Space"

"CMYK Color Space"

"Gray Color Space"

"Rendering"

Selecting a Print Color Option

If enabled by the system administrator, this feature enables the printer to render a color document in full color or use an algorithm

that maps the full range of colors to alternate values, such as gray scale or monochrome. If enabled, you can override the color attributes of a job to create a monochrome output.

To Select a Print Color Option

1. Select the **Color** detail.

2. From the **Print Color As** menu, select from:

   • **Printer Default**: The printer determines the **Print Color** setting of the given job. A job entering the queue that does not contain a **Print Color** value, is assigned the **Printer Default** value. To select a **Print Color**, **Printer Default** must be cleared.

   • **Full Color**

   • **Highlight Color**

   • **Black and White**

3. Click **OK** to save your entries and return to the **Queue Status** window.

Using Black Overprint

Black Overprint is an image quality enhancement process performed during RIP that prevents the background of a black object from being removed. With the black being printed over the other color layers, any misregistration in the print engine or press will not result in white gaps. Black overprinting may be affected by the under-colors.

To Use Black Overprint

1. Select the **Color** detail.

2. From the **Black Overprint** pull-down menu, select from:

   • **Printer Default**: The printer determines the setting of the given job. A job entering the queue that does not contain a value, is assigned the **Printer Default** value. To select a **Black Overprint** value, **Printer Default** must be cleared.

   • **Off**: does not print black on top of color.

   • **On**: prints black on top of color.

3. Click **OK** to save your entries and return to the **Queue Status** window.

Selecting a User TRC

You can select Tonal Reproduction Curves (TRC) to achieve desired, repeatable results from specified paper stocks. The TRC

is a graphical representation of 4 curves, one each for Cyan, Magenta, Yellow, and Black.

Within Job Manager, the desired User TRC can be applied to all pages within a job or to specified pages within the job

To Select a User TRC

1. Select the **Color** detail.

2. Select a **User TRC**.

3. Click **OK** to save your entries and return to the **Queue Status** window.

Using Pantone Color Processing

This feature adds flexibility when matching page level elements at the press.

Some job pages contain three types of object elements: images, graphics and text. In some cases, a shift in hue may be noticed between an image object (bitmap/TIFF/image-in-eps) and a graphic/ text object on a page. This shift in hue can occur when using Pantone colors where the graphic/text have formal Pantone calls, while the bitmap/image on the same page is not composed of a defined Pantone name/number. The bitmap/image contains a CMYK representation of a color and not a Pantone call. This difference in construction results in proper Pantone number rendering for the graphic/text element, but a second CMYK based rendering for the bitmap. As a result, slight hue changes between the bitmap and Pantone graphic/text are visible. By disabling Pantone processing, you can eliminate this problem.

To Use Pantone Color Processing

1. Select the **Color** detail.

2. From the **Pantone Color Processing** menu, select from:
   - **Printer Default**: The printer determines the setting of the given job. A job entering the queue that does not contain a value, is assigned the **Printer Default** value. To select a **Pantone Color Processing** value, **Printer Default** must be cleared.
   - **Off**: Pantone Color Processing is not used.
   - **On**: Pantone Color Processing is enabled.

3. Click **OK** to save your entries and return to the **Queue Status** window.

Using Clear Coat

Clear Coat is the use of a clear toner to apply to the print document. Applying clear toner can be applied to the entire page or selected portions of the page.

To Use Clear Coat

1. Select **Color** detail.

2. From the **Clear Coat** menu, select from:
   - **Off:** Clear Coat is not used
   - **Full Page Flood:** Clear Coat applied to the entire page.
   - **Selected Objects:** If Select Objects is selected additional options will be enabled. Select one or more of the options from below.
   - **Text:** Clear Coat applied to text.
   - **Images:** Clear Coat applied to images.
   - **Graphics:** Clear Coat applied to graphics

3. Click **OK** to save your entries and return to the **Queue Status** window.

Using Highlight Color

Highlight color is the use of black and one specified color to print documents. Black and white, highlight color, and full color documents can be printed black and white, or highlight color.

Consider the following when using highlight color options.

- The Highlight Color, Mapping Color, Mapping Algorithm, and Mismatch Action work together to produce the final printed result.

- If you want to change the highlight color used to print your document, set the highlight color option to the color you want, and set the color mismatch option to Operator Intervention.

- If you set the Highlight Printing Color to a color other than the color loaded at the printer and leave the default setting for Mismatch Action at Use Loaded Color, the document prints using the available toner.

NOTE: *The following data streams are supported: PS, PDF, PCL, TIFF, and ASCII.*

To Use Highlight Color

1. Select the **Color** detail.

NOTE: *To select Highlight Color values, Printer Default must be cleared.*

2. Select a **Highlight Color Mapping Algorithm**: These selections determine how full-color documents are mapped into highlight-color or monochrome.

3. Select a **Highlight Color Mapping Color**. This option allows you to specify which colored parts of the document are printed in the available Highlight Color.

4. Select a **Highlight Color Printing Color**. Loaded Color is the color loaded at the printer and is the default selection. If the toner color loaded at the printer is red and without setting the mapping color option (previous step) to a color other than red, only the red parts of the document print in red; the blue parts print in tints and shades of highlight color and gray. If the map color is changed to blue, the blue parts of the document print in the highlight color of red; other colors print in tints and shades of the highlight color and gray. However, for a monochrome mapping scheme, the entire document prints in shades of gray.

5. Select a **Highlight Color Mismatch Action**. This determines what action is taken when the loaded highlight color is not the same as the selected highlight color.

6. Click **OK** to save your entries and return to the **Queue Status** window.

NOTE: *Information is sent to the printer that supports the selected Highlight Color attributes (e.g., DocuPrint NPS). The printer performs the appropriate action.*

See Also

About Highlight Color Options

Highlight Color Mapping Algorithm Options

- **Printer Default**: This is a default selection and reflects the Default Printing Mode setting within System Preferences (Highlight Color or Monochrome). Jobs that are submitted without specifying a different Mapping Algorithm, are printed and/or saved with the System Specified setting (Highlight Color or Monochrome). System Specified is set when the job is scheduled.

  As an example, if the System Specified Default Printing Mode setting is Monochrome, and you do not change the Mapping Algorithm, the job prints in Monochrome. You can submit a job to print using highlight color by specifying any non-monochrome Mapping Algorithm setting, such as Color To Highlight, together with other highlight color attributes, if desired.

When a job with a Mapping Algorithm of System Specified is scheduled, the Controller uses a Mapping Algorithm of Monochrome if the Default Printing Mode setting is Monochrome. If the Default Printing Mode setting is Highlight Color, all printer queues are set to print in highlight color by default, using the Mapping Algorithm setting of Automatic.

Jobs that do not specify a Mapping Algorithm and are submitted to a print queue with a default Mapping Algorithm, are printed and/or saved in highlight color and monochrome, depending on the contents of the input document. If the Default Printing Mode setting is Highlight Color, you can submit a job with color content to print in black and white by specifying a job properties Mapping Algorithm of Monochrome.

- **Color To Highlight**: A full-color document is mapped to the highlight color properties you selected. Hue information is discarded, but saturation and brightness values are preserved.

- **Monochrome**: Produces black and white prints from highlight color or black and white documents.

- **Pictorial:** This setting is used to map the input color of an image object. An input color with a hue that matches the Highlight Mapping Color value is not changed. An input color with a hue that does not match the Highlight Mapping Color value is mapped such that the saturation of the highlight color decreases, and the saturation of black increases, continuously as the hue of the input color moves farther away from the value specified in Highlight Mapping Color.

- **Presentation**: This setting is used to map the input color of graphics or text. An input color with a hue that matches the Highlight Mapping Color value is not changed. Every fully saturated input color is mapped to a unique value in the highlight color space. Every non-gray input color is mapped to a non-gray value in the highlight color space.

- **Automatic**: This setting maps text and graphics using Presentation mapping, and images using Pictorial mapping.

Highlight Color Mapping Color Options

The Mapping Color determines which parts of the document print in color and which in shades of gray.

You can choose from Loaded Color (default), Black, Blue, Brown, Cardinal, Cyan, Green, Magenta, Red, Royal Blue, Ruby, Violet, Yellow, and Custom color.

NOTE: *Mapping Color is required only if you want the Mapping Color and Highlight Printing Color values to differ. By default, both Highlight Printing Color and Mapping Color are set to the loaded color. If Highlight Printing Color is specified but Mapping Color is not, Mapping Color is set to the loaded color; it is not changed to the specified Highlight Printing Color.*

Custom allows you to precisely specify the color to be used for highlight color mapping. If Custom is selected, you can enter sRGB or HSV values using the spin boxes. The sample color swatch displays the custom color.

- **sRGB**: Standard Red Green Blue color space model. An international standard color representation.

- **HSV**: Hue Saturation Value color space model.

  - Hue is the color type, such as red, blue or green.

  - Saturation is the amount of gray present in a color. The greater the saturation the more vibrant a color appears. Gray has zero saturation.

  - Value is the brightness of a color.

Black may be used as a highlight mapping color where the entire document is in black and the contents are to be mapped into the highlight color. However, if Black is used for a document containing color, the results may not meet expectations.

Highlight Color Mismatch Action Options

This determines what action is taken when the loaded highlight color is not the same as the selected highlight color.

- **Printer Default**

- **Use Loaded Color**: The job prints using the highlight color currently loaded at the printer.

- **Hold Job**: Holds the job if the highlight color specified is not loaded at the printer.

- **Cancel Job**: Cancels the job if the highlight color specified is not loaded at the printer.

- **Stop Printer**: Stops the printer if the highlight color specified is not loaded at the printer.

See Also

Using Trapping

Trapping is an image processing technique used to compensate for misregistration of color planes in a print engine or press. Misregistration results in white gaps and shifted hues.

Generally, a trapping zone above 4 pixels is visually obvious and not pleasing to the eye. A higher value should be considered carefully. The ability to set a higher trap zone has been included to give you control over individual images that have been poorly trapped individually.

TIP: Two direction parameters (height and width) are included because the feed direction has a marginal effect on image quality. However, in nearly all cases, you would set these two values the same.

To Use Trapping

1. Select the **Color** detail.

2. Trapping is applied to the edges of all text, graphics, images, and sweeps. If **Printer Default** for Trapping is cleared, the Height and Width fields become available.

3. Within the **Trapping** field, you may enter pixel values for the width and height parameters, from 1 to 20 pixels. The Feed Direction icon presents a visual representation of trapping adjustments.

   • Clear **Printer Default** to enter a **Cross Feed Direction (y)** value.

   • Clear **Printer Default** to enter a **Feed Direction (x)** value.

4. Click **OK** to save your entries and return to the **Queue Status** window.

   See Also

Using Lightness

Lightness controls the relative brightness of the color in the printer's gamut.

Increasing the lightness value causes the output to appear lighter and decreasing the lightness value causes the output to appear darker.

To Use Lightness

1. Select the **Color** detail.

2. Lightness can be set to the desired level +/-100 units. A lightness value of -100 will cause the output to appear black, and a lightness value of 100 will cause the output to appear white. Depending on the content of the original image, the output for a lightness value of 100 may be the same as the output for a lower lightness value, and the output for a lightness value of -100 may be the same as the output for a higher lightness value.

   NOTE: *To select a Lightness value, **Printer Default** must be cleared.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

Using Contrast

Contrast controls the difference of tonal gradation between the light and dark values within an image in the printer's gamut.

Increasing the contrast value increases the variation between light and dark areas of the printed document and decreasing the contrast value decreases the variation between light and dark areas of the printed document.

To Use Contrast

1. Select the **Color** detail.

2. Contrast can be set to the desired level +/-100 units. A contrast value of -100 causes the output to appear a solid midtone gray color, and a contrast value of 100 causes the output colors to either use full color (the maximum is restricted by the system ink limit) or no color for each of Cyan, Magenta, Yellow, and Black.

   NOTE: *To select a Contrast value, **Printer Default** must be cleared.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

Controlling Saturation

Saturation controls the strength or purity of the color in the printer's gamut. Increasing the saturation value causes the output to contain more vibrant colors, and decreasing the saturation value causes the output to contain more pastel and gray colors.

To Control Saturation

1. Select the **Color** detail.

2. Saturation can be set to the desired level +/-100 units. A saturation value of -100 causes the output to appear gray, and a saturation value of 100 causes the output to have all bright colors. Depending on the content of the original image and the gamut of the print engine, the output for a saturation value of 100 may be the same as the output for a lower saturation value, and the output for a saturation value of -100 may be the same as the output for a higher saturation value.

   NOTE: *To select a Saturation value, **Printer Default** must be cleared.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

Adjusting Color Cast

Color Cast adjustments provide you the ability to increase or decrease the amount of any single color. Increasing (+) the amount of one color decreases the amount of its complementary color.

To Adjust Color Cast

1. Select the **Color** detail.

   NOTE: *To select Color Cast values, **Printer Default** must be cleared.*

2. The color cast adjustments are:

   • **Cyan - Red**: The Cyan-Red color cast adjustment shifts the color towards cyan or red. Decreasing the value to -100 indicates the maximum cyan color cast supported by the system is applied to the document.   Increasing the value to 100 indicates the maximum red color cast supported by the system is applied to the document.

   • **Magenta - Green**: The Magenta-Green color cast adjustment shifts the color towards magenta or green. Decreasing the value to -100 indicates the maximum magenta color cast supported by the system is applied to the document. Increasing the value to 100 indicates the maximum green color cast supported by the system is applied to the document.

- **Yellow - Blue**: The Yellow-Blue color cast adjustment shifts the color towards yellow or blue. Decreasing the value to -100 indicates the maximum yellow color cast supported by the system is applied to the document. Increasing the value to 100 indicates the maximum blue color cast supported by the system is applied to the document.

3. Click **OK** to save your entries and return to the **Queue Status** window.

Source Color

Select Source Color settings for RGB Color Space, CMYK Color Space, and/or Gray Color Space. You may make separate Source Color assignments within each color space for the Images, Text and Graphics profile.

NOTE: *Available options depend on printer configuration.*

See Also

"RGB Color Space" on page 2–61

"CMYK Color Space" on page 2–62

"Gray Color Space" on page 2–62

RGB Color Space

Specifies the source color space profile to be used in the RGB color space for rendering graphics to only those parts of a document that have no defined color space translation profile.

1. Select the **Color** detail.

2. To select **RGB Color Space** options, **Printer Default** must be cleared. Select the following **RGB Color Space** options for **Images**, **Graphics** and **Text**:

   - **Printer Default**: In order to change a **Printer Default** setting, the Printer Default checkbox must be cleared. A **Printer Default** selection indicates that Output Manager does not support the feature. The feature is thus handled by the printer that receives the job, using the printer default behavior.

   - **sRGB:** sRGB mode according to the Default RGB color space as defined in [IEC 61966-2.1] - see "References" in Appendix A of CPSS Volume 1-Information Model.

   - **Xerox Consistent Color Mode:** Xerox Consistent Color mode for RGB color space.

   - **Xerox Consistent Color Mode RGB, Gamma=1:** Xerox Consistent Color mode for RGB with a gamma value of 1.

NOTE: *You may select a specific Profile for all data types, or you may select different Profiles for images, text and graphics.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

CMYK Color Space

Specifies the source color space profile to be used in the CMYK color space for rendering graphics to only those parts of a document that have no defined color space translation profile.

1. Select the **Color** detail.

2. To select **CMYK Color Space** options, **Printer Default** must be cleared. Select the following **CMYK Color Space** options for:

   • **Native CMYK**: The CMYK color space of the target color printer.

   • **SWOP:** Emulates The CMYK SWOP (i.e., Standard for Web Offset Press) ink color gamut when printed on coated media.

   • **Euroscale**: Emulates the European ink color gamut standard for offset presses when printed on coated media.

   • **Japan Color**: Emulates the color gamut of the combined/common Dinippon and Toyo Inks standard when printed on coated media.

   • **Enhanced SWOP**: Emulates a more saturated version of the CMYK SWOP color gamut when printed on coated media.

   • **Euroscale Matte**: Emulates the color gamut of European inks placed on matte finish media.

   • **Euroscale Uncoated**: Emulates the color gamut of European inks placed on uncoated media.

NOTE: *You may select a specific Profile for all data types, or you may select different Profiles for images, text and graphics.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

Gray Color Space

Specifies the symbolic name of the source color space profile that will be used to translate grayscale data to L* intensity values for rendering graphics to only those parts of a document that have no defined color space translation profile.

1. Select the **Color** menu.

2. To select **Gray Color Space** options, **Printer Default** must be cleared. Select the following **Gray Color Space** options for:

   • **Images**

   • **Graphics**

   • **Text**

NOTE: *You may select a specific Profile for all data types, or you may select different Profiles for images, text and graphics.*

3. Click **OK** to save your entries and return to the **Queue Status** window.

Output Color

Select Output Color settings for **Front Setup**, **Back Setup**, **Emulation** and **Rendering**. You may make separate output color rendering assignments for images, text, and graphics.

• Destination profile (contains Emulation settings)

• Rendering

Destination profile

1. Select the **Color** detail.

2. Select a **Front Destination Profile**. This specifies the color space profile to be used on the front side of the output media both single-sided and double-sided documents.

   • **System Specified**

   • **Values from Printer**

3. Select a **Back Destination Profile**. This specifies the color space profile to be used on the back side of the output media.

   • **System Specified**

   • **Values from Printer**

4. Select an **Emulation** value. This selection causes the printer to emulate the output of a different color-printing device.

   • **Printer Default**: In order to change a **Printer Default** setting, the Printer Default checkbox must be cleared. A **Printer Default** selection indicates that the feature is handled by the printer that receives the job, using the printer default behavior.

   • **None**: No emulation is applied at the printer; the printer's native color information is used.

   • **SWOP**: Emulates the CMYK SWOP (i.e., Standard for Web Offset Press) ink color gamut when printed on coated media.

   • **Enhanced SWOP**: Emulates a more saturated version of the CMYK SWOP color gamut when printed on coated media.

- **Euroscale**: Emulates the European ink color gamut standard for offset presses when printed on coated media.

- **Euroscale Matte**: Emulates the color gamut of European inks placed on matte finish media.

- **Euroscale Uncoated**: Emulates the color gamut of European inks placed on uncoated media.

- **Japan Color**: Emulates the color gamut of the combined/ common Dinippon and Toyo Inks standard when printed on coated media.

5. Click **OK** to save your entries and return to the **Queue Status** window.

Rendering

Occasionally, the requested colors in an image are outside a given printer's gamut and cannot be exactly reproduced. Rendering provides color mapping between the image's source gamut and the printer's own gamut.

1. Select the **Color** detail.

2. You can choose different rendering options for images, text, and graphics. For instance, you might choose Perceptual for the images, Pure for the text, and Relative Colorimetric for the graphics, in order to optimize each output type appropriately. Select Rendering for Images, Graphics and Text:

- **Printer Default**: In order to change a **Printer Default** setting, the Printer Default checkbox must be cleared. A **Printer Default** selection indicates that Output Manager does not support the feature. The feature is thus handled by the printer that receives the job, using the printer default behavior.

- **Automatic**: The printer determines the selection of an appropriate rendering intent for each of the objects in the job, using the rendering intents available in the selected ICC profile(s).

- **Saturation**: Optimizes the rendering of business graphics, such as charts and graphs.

- **Perceptual**: Optimizes the rendering of photographic images.

- **Relative Colorimetric**: Also optimized for rendering of spot color and logos. This transformation, however, uses additional information, such as hue and saturation, specified in the source profile to select the most appropriate value within the printer gamut.

- **Absolute Colorimetric**: Optimized for rendering to spot color and logos by identifying the closest value within the printer gamut.

- **Pure Text**: Optimized for rendering of text and line art. The "Pure" intent attempts to subdue halftone textures, thus increasing the visibility of small text.

- **Blended Pictorial and Graphics**: This rendering intent is appropriate for mixed content page images consisting of pictorial and graphic objects.

3. Click **OK** to save your entries and return to the **Queue Status** window.

Using the Job Notes and Accounting Detail

The available options within the **Job Notes and Accounting** detail are determined by the system administrator.

All Job Notes and Accounting detail selections are accessed by using the following procedure:

1. Open **Queue Manager**.

2. Select the queue(s) you want to access.

3. Select **Edit Queue Properties**.

NOTE: *The **Supported** checkbox within each menu option must be marked in order to use and access individual options.*

See Also

"Using Job Notes"

"Accounting Options"

Using Job Notes

Job Notes fields:

- **Banner Page Message**: Information you want to be printed on the banner page of the print job. You can type up to 1000 characters in this field.

- **Special Instructions**: Allows the job submitter to enter any additional job instructions, up to 127 characters.

- **Message from Operator**: Additional information pertinent to a particular job. You can type up to 127 characters in this field.

- **Deliver To**: Allows the job submitter to enter the name of the person who receives the job, or other pertinent information.

Accounting Options

Accounting fields:

• **Account**: This field can contain an internal billing number, a credit card number, or other tracking or billing numbers.

• **Account User ID***:* The number identifier of the job sender.

• **Additional Accounting Data:** Can contain any additional account information.

Using the Multifunction Device Setup Detail

The Multifunction Device Setup detail is used to configure a queue to receive jobs from a Multifunction Device.

1. Open **Queue Manager**.

2. Select the queue(s) you want to access.

3. Select **Edit Queue Properties**.

4. The following attributes shall be displayed as the Job Template Description on the Multifunction Device. The Output Manager operator should select the default values for these attributes. Otherwise, they will have "Print Default" as the values and will not be meaningful to the walkup users.

   • Color detail > Print Color As area: select a color option

   • Output Format detail > Sides Imaged area: select a sides imaged option

   • Output Format detail > Finishing area: select a finishing option.

   • Output Format detail > Slip Sheets area: select a slip sheet option.

   • Paper Stock detail > Stock Name area: enter a paper stock name.

   • Paper Stock detail > Width/Height area: enter a paper stock width and height.

   • Paper Stock detail > Color area: select a paper stock color.

   • Paper Stock detail > Weight area: enter a paper stock weight.

   • Paper Stock detail > Type area: select a paper stock type.

   • Special Pages detail > Covers button: select cover options.

5. Select the **Multifunction Device Input Client Setup** heading to open that panel.

6. Next to the **Accept Jobs from Multifunction Devices** heading, select the **Enable** radio button.

7. In the **Queue Name Displayed at Device** text box, enter name that will appear on the Multifunction Device interface. This name will appear in the Job Template list of the Multifunction Device.

8. Select **Apply** at the top of the page to save all changes before continuing. Otherwise, all changes will be lost if the user navigates off the page by selecting Edit Values

9. Verify that the items in the **Queue Values Displayed at Device** list are the items you want displayed at the Multifunction Device.

   NOTE: *When values are not specified at the Multifunction Device, the job will inherit the default value settings of the queue.*

   • If there are values listed you want to remove, or missing values, select the **Edit Values** button. To add a value, place a check mark in the box to the left of the value. To remove a value, clear the check mark. Click **OK**.

10. Next to the **Provide Output Controls at Device** heading, select the **Enable** radio button if you want to enable 2-sided, paper, and output finishing controls at the Multifunction Device.

    • If you select **Disabled**, the walk up user may not change the printing options (2-sided, paper, and output finishing). The 2-sided values affect both scanning options as well as printing options. For example, 1 > 2 means scan as 1-side and print as 2-sided. When this control is disabled, only scanning options are available.

11. In the **Present This Queue at** list, select the check boxes to the left of the Multifunction devices that you want to make the queue available. Click the **Apply All Settings and Make Queue Available to Devices** button. The queue will appear in the selected devices Job Template list.

12. Click **OK** to save your entries and return to the **Queue Status** window.

See Also

"Using the Basic Properties Detail"

"Using the Job Processing Options Detail"

"Using the Queue Manager Settings Detail"

"Using the Paper Stocks Detail"

"Using the Output Format Detail"

"Using the Image Adjustments Detail"

"Using the Color Detail"

"Using the Job Notes and Accounting Detail"

"Using the Special Pages Detail"

Using the Special Pages Detail

The **Special Pages** detail contains features that enable you to manage cover pages, and page inserts. The Summary of Defaults list shows the sequential sequence of Special Pages that are set to be placed on jobs entering the queue. As an example, the front cover would be the first entry, followed by any inserts and then ending with the back cover entry.

NOTE: *Only Inserts and Covers can be set at the queue level. Exception Pages are set at the job level.*

The available options within the **Special Pages** detail are determined by the system administrator.

To Use the Special Pages Detail

1. Open **Queue Manager**.
2. Select the queue(s) you want to access.
3. Select **Edit Queue Properties.**

See Also

"Using Exception Pages"

"Using Covers"

"Using Inserts"

"Using the Special Pages Detail"

A

Using Exception Pages

Defaults cannot be set for **Exception Pages** at the queue level.

NOTE: *If Exception Pages is supported on the queue, the job level Exception Pages dialog is available in both View or Edit mode. If Exception Pages is not supported on the queue, the job level Exception Pages dialog is available in only View mode, with job ticket values displayed.*

To Use Exception Pages

1. Select the **Special Pages** detail.
2. Defaults cannot be set for **Exception Pages** at the queue level. If Exception Pages are not supported, the selection is grayed out.

See Also

"Using Exception Pages"

Using Covers

Covers add a finished appearance to jobs and are typically used for bound, stapled, or stitched jobs. Covers are programmed as part of a print job. Therefore, any printing required on the cover pages must be submitted as part of the job.

NOTE: *If Covers is supported on the queue, the job level Covers dialog is available in both View or Edit mode. If Covers is not supported on the queue, the job level Covers dialog is available in only View mode, with job ticket values displayed.*

To Use Covers

1. Select the **Special Pages** detail.
2. If **Supported** is not selected, the **Covers** button cannot be used.
3. If default values have been entered, the Supported option cannot be cleared. You must delete the **Cover** defaults before **Supported** can be cleared.
4. Click the **Covers** button. The Queue Name is displayed at the top of the menu.
5. Select a **Covers** option.
6. Select a **Print On** option.
   - **Side 1 Only**: Cover placement is on the front of the stock.
   - **Side 2 Only**: Cover placement is on the back of the paper stock.

- **Side 1 and 2**: Cover placement is on the front and back of the paper stock.
- **None**: A cover is added but nothing is printed on the cover page.

7. You can select stock by stock name or properties. If **Name** is selected, you can select a stock from the Stock Name menu. Or, select **Properties** and choose individual stock characteristics.

   NOTE: *Be sure the attributes you select are supported on the printing system.*

8. To set the same characteristics on the back cover as the front cover, select **Same Defaults as Front Cover.** You can set different characteristics for the back cover by clearing **Same Defaults as Front Cover.**

9. Click **OK** to save your entries and return to the **Special Pages** section of the Edit Queue Properties window.

Using Inserts

Job inserts differ from slip sheets in that they separate pages of a job while slip sheets separate one job from another. Inserts may also be preprinted stock or forms.

NOTE: *When two or more special pages are programmed (covers, inserts, or exception pages) image ordering conflicts may occur. Verify that programmed options do not conflict.*

To Use Inserts

1. Select the **Special Pages** detail.

2. If **Supported** is not selected, the **Inserts** button cannot be used.

3. If default values have been entered, the **Supported** option cannot be cleared. You must delete the **Insert** defaults before **Supported** can be cleared.

4. Click the **Inserts** button. The Queue Name is displayed at the top of the menu.

5. From the **Insert Location** menu, select from:
   - **Insert as Page 1**: The insert is placed as Page 1 of the job.
   - **Insert After Page**: Enter the page number after which you want the insert placed.

6. Within the **Quantity** field, enter the number of insert pages you want to place in that location.

7. You can select stock by stock name or properties. If **Name** is selected, you can select a stock from the **Stock Name** menu. Or, select **Properties** and choose individual stock characteristics.

NOTE: *Be sure the attributes you select are supported on the printing system.*

8. Click **OK** to save your entries and return to the **Edit Queue Properties** window.

Deleting Special Pages

To Delete Special Pages

1. Select the **Special Pages** menu.
2. Select the checkbox for each Special Page that you want to delete.
3. Click **Delete.**
4. Confirm your intention to remove the selected Special Pages from the system**.**

Managing Queues

In addition to creating and modifying queue properties, you can also perform global operations when working with the queue list.

See Also

"Selecting Queues"

"Deleting a Queue"

"Enabling a Queue to Accept Jobs"

"Preventing a Queue from Accepting Jobs"

"Releasing Jobs from the Queue"

"Setting a Queue to Hold Jobs"

"Purging Jobs"

"Updating Printer Values"

Selecting Queues

You can select queues to View and Edit Queue Properties and when selecting an option from the Queue Options pull-down menu.

You can select queues individually or in groups:

- *To select queues individually*: Select each queue by marking the associated checkbox, which is located on the left side of the queue status table.

- *Selecting all queues*: Click the **Select All** icon at the top of the column to select all queues. Click again to clear the selection. If you select all queues, you can then clear individual queues by clearing the appropriate checkbox.

Deleting a Queue

If you no longer need a particular queue, you can delete it from the queue list.

NOTE: *Jobs within the queue must be in a Completed or Aborted state before the queue can be deleted. Also the queue should not be in 'Accepting jobs' mode while deleting.*

To a Delete a Queue from the Queue List

1. Open **Queue Manager**.

2. Select the checkbox of each queue to be deleted.

3. Select **Do Not Accept Jobs**.

4. Select **Do Not Release Jobs**.

5. From the **Queue Options** list, select **Delete**.

6. Click **Yes** to confirm. The queue is removed from the queue list.

Enabling a Queue to Accept Jobs

Jobs cannot flow through a queue unless the queue is set to accept jobs.

To Enable a Queue to Accept Jobs

1. Open **Queue Manager**.

2. Select each queue that you want to enable to accept jobs.

3. Click **Accept Jobs**. The Accepting status in the queue list changes from **No** to **Yes**. The queue is now enabled to accept jobs.

Preventing a Queue from Accepting Jobs

If you need to prevent jobs from processing through a particular queue, you can set the queue to not accept jobs.

To Prevent a Queue from Accepting Jobs

1. Open **Queue Manager**.
2. Select each queue that you want to prevent from accepting jobs.
3. Click **Do Not Accept Jobs**. The Accepting status in the queue list changes from **Yes** to **No.** The queue is now prevented from accepting jobs.

Setting a Queue to Release Jobs

A queue must be set to release jobs in order for jobs to be sent to the printer. Although a queue may accept jobs for processing, the jobs will not print unless the queue is set to release jobs. If the queue is not set to release jobs then jobs would have to be released by moving it to a queue that is enabled to release jobs.

You can set queues to release jobs immediately or at a specific time. Available options depend on system configuration.

NOTE: *A queue should be attached to at least one printer to set it to release jobs.*

To Set a Queue to Release Jobs

1. Open **Queue Manager**.
2. Select each queue that you want to allow to release jobs.
3. To release jobs immediately:
   a. Click **Release Jobs**. The Releasing status in the queue list changes from **No** to **Yes**. This process does not release jobs that are being held individually.
   b. Or, if jobs were held using the **Hold New Jobs** selection, then select **Release Held New Jobs** from the **Queue Options** list.
4. To release jobs at a special time:
   a. Select **Release Jobs At** from the **Queue Options** list.
   b. Select a date and time from the pop-up dialog. All jobs sent to the queue release at the selected date and time.

Setting a Queue to Hold Jobs

To control the process flow of jobs through a queue, you can set the queue to hold jobs until they are individually released for print. You can set a queue to hold current jobs that are in the system, or new jobs that enter the system.

To Set a Queue to Hold Jobs

1. Open **Queue Manager**.
2. Select the checkbox of each queue that you want to set to hold jobs.
3. To hold incoming jobs entering the queue: Select **Hold New Jobs** from the **Queue Options** list.
4. To release jobs, select **Release Jobs**, or **Release Held New Jobs** from the **Queue Options** list.

Purging Jobs

Purging jobs deletes all the jobs in the queue regardless of the state of the job. This feature is available to system administrator's and Operator 1 only.

To Purge Jobs

1. Open **Queue Manager**.
2. Select the checkbox of each queue that you want to set to purge jobs.
3. Select **Purge Jobs** from the **Queue Options** list.

   NOTE: *New jobs can enter the queue while executing the Purge Jobs command. The new jobs entering the queue are not purged.*

4. Click **OK** to confirm. All jobs are deleted from the selected queues.

Updating Printer Values

The Update Values menu allows you to:
- Append or overwrite printer values. '
- Append Values from file(.xcp)
- Overwrite Values from file(.xcp)
- Export Values to file(.xcp)

Before you perform this procedure, check the **Overwrite and Append Behaviors** information below.

1. Open **Queue Manager**.

2. Select each queue that you want to access. If you select multiple queues, the properties for each selected queue can be accessed using the **Queue Name** list within the Printer Properties window.

3. Select **Edit Queue Properties.**

4. From the **Value Options** menu select from:

    • **Append Values from Printers**: Adds only the new values found on the printers.

    • **Overwrite Values from Printers**: Replaces the entire set of values. To overwrite values select **Yes** at the prompt.

    • **Append Values from File (.xcp)...**: Adds only the new values found in the file. You can click the **Browse** button to locate the file.

    • **Overwrite Values from File (.xcp)...**: Replaces the entire set of values. You can click the **Browse** button to locate the file. To overwrite values select **Yes** at the prompt.

    • **Export Values to File (.xcp)...**: Exports the entire set of values to a file. You can click the **Browse** button to set the file location.

Append and Overwrite behaviors

FreeFlow Output Manager provides two options for updating queue supported values: Append and Overwrite. Both options result in a set of values that include at least all supported values from the sources. Append includes the current set of values as one of the sources, while Overwrite does not.

NOTE: *If you have previously removed values that are supported by one or more printers, neither option preserves these deletions.*

When values are merged from two or more sources, the following behaviors may be observed:

• An attribute that displays a value of "supported", "yes" or "no" will be set to "yes" or "supported" if any of the sources contain this value, and the "no" or "supported" check box is not selected.

• An attribute that displays one or more integer values will contain the union of all integer values from the sources (with no duplications).

- An attribute that displays a set of values will contain the union of all values from the sources (with no duplications).

- An attribute that displays as a number range will have its lower limit set to the minimum of all lower limits from the sources, and its upper limit set to the maximum of all the upper limits from the sources.

    NOTE: *It is possible that the resulting range will include values that no source actually includes if some of those ranges were disjoint. For example, a range of 10-20 and a range of 15-25 is combined to a single range of 10-25.*

- An attribute that displays as one or more ranges will include all ranges from the sources. Overlapping ranges will be combined into a single range so that the result will be a set of disjoint ranges. For example, a range of 10-20 and a range of 15-25, 30-40 are combined to form 10-25, 30-40.

3. Printer Manager

Printer Manager allows you to connect Output Manager to the printers on your network, establish the properties and capabilities of those printers, and monitor their status.

Output Manager determines which job can be sent to a selection of printers based on the capabilities of the printer. When there are multiple printers that can print the job, Output Manager uses either the round-robin or least- busy printer to assign the job to the printer.

A device represents a printer and a port on that printer (for example, a specific IPP port/virtual printer on a FreeFlow Print Server controller). It is possible to have more than one device that addresses the same printer.

NOTE: *The options that are available to you within Printer Manager will depend on your Output Manager access rights.*

NOTE: *Using the cursor to rollover icons displays information tips following a one to two second delay.*

See Also

Printer Manager Main Window

The Printer Manager main window displays the following printer information:

Printer Status

- **Printers Selected**: Indicates the total number of printers selected in the status table below.

- **Total printers listed**: Indicates the total number of printers seen in the status table.

- **Status**: Presents printer information.

Status Menu

The **Status** menu allows you to filter the list of printers by the current states of the printers.

- **View All**: This is the default selection that lists all the printers in the Output Management system.

- **Running**: Indicates currently processing jobs.

- **Ready**: Indicates that the device is not printing a job, but could print a job, if sent one.

- **Stopped**: Indicates that the printer is not printing a job due to an internal condition, such as a paper jam.

NOTE: *If the printer is an iGen4 220 Perfecting Press and in "Pass-thru" mode where only one controller is active, an icon will be displayed and a pop-up message will appear when the mouse is moved over the status of the printer. The message displays the status of the two controllers.*

Automatic Update Menu

The **Automatic Update** menu allows you to set the interval at which the printer list is updated. If the **Update Now** button is clicked, the printer list is immediately refreshed regardless of the Automatic Update setting.

The Printer List

The printer list displays all of the printers in the system. Each row represents a printer and contains information about that printer.

All columns can be sorted by clicking the column header. The sort arrow shows which column is sorted and whether it is in ascending or descending order.

You can manage printer list selections from the **Status** menu.

Selecting Printers

Selecting the checkbox next to a printer name selects that printer. Clearing the checkbox next to a printer name cancels the selection of that printer.

Selecting the checkbox in the column header selects all printers in the list. Likewise, clearing the checkbox in the column header cancels the selection of all the printers in the list.

Printer Name

The **Printer Name** column displays the user-designated name of each printer assigned when that device was added to Output Manager.

Printer Status

The **Status** column displays the current states of the printers connected to Output Manager.

- • **Printing**: Indicates currently processing jobs.
- • **Ready**: Indicates that the device is not printing a job, but could print a job, if sent one.
- • **Stopped**: Indicates that the printer is not printing a job due to an internal condition, such as a paper jam.
- • **No Report**: Indicates that no information can be retrieved from the printer.

NOTE: *You can filter* printer *states displayed on the printer list by using the* **Status** *menu.*

Accept Jobs

The **Accept Jobs** column will either display **Yes** or **No** for each printer. If **Yes** is displayed the printer is accepting new jobs for printing. If **No** is displayed the printer is not accepting new jobs.

Jobs

The **Jobs** column indicates the number of jobs currently residing at the printer.

Maximum Jobs

The **Maximum Jobs** column displays the maximum number of jobs that each printer is set to accept. If a printer reaches the maximum number of jobs allowed, the printer is not assigned additional jobs until the number of pending jobs is less than the maximum number of jobs allowed for the printer. An icon is displayed when maximum number of jobs limit is reached at the printer.

Printer job limits are determined by the administrator.

See Also

Location

The **Location** column displays the physical location of the printer, as described within Printer Properties.

Printer Model

The **Printer Model** column displays the brand and type of each printer, as described within Printer Properties.

Controller/Server Type

The **Controller/Server Type** column displays software controlling the printer, as described within Printer Properties.

Pages

The **Pages** column displays the number of pages that are in the document.

Printer Manager Detail Screens

Printer Manager contains detail screens designed to adjust printer properties and expedite printing. This section describes the detail screens available when you select either **View Printer Properties** or **Edit Printer Properties.**

- Basic Properties
- Job Processing Options
- Settings
- Paper Stocks
- Output Format
- Color
- Job Notes and Accounting

NOTE: *Using the cursor to rollover icons displays information tips following a one to two second delay.*

Basic Properties

The **Basic Properties** menu provides information about the selected printer including: printer name, make and model, VI Normalization, associated queue, color, interposer, high security, controller and controller version, network address, and More Information.

Job Processing Options

The **Job Processing Options** menu enables you to define job acceptance levels for the number of jobs, the pages per job, and job proof support.

Settings

The printer settings within this menu Include the page range,

document format, font selections, Quantity, VI Container Type, OPI (Open PrePress Interface: Image Substitution, Settings), and resources (Pre-Scan Action, Retention After Job Completion).

Paper Stocks

The **Paper Stocks** menu enables you to view and define stock attributes. Settings include Stock Name, Width, Height, Color, Type, Pre-Printed, Order, Holes, Weight (gsm), Front Coating, Back Coating, Grain and Tooth.

Output Format

The **Output Format** menu enables you to select orientation, layout (N-up), sides imaged, collation, output location, slip sheets, Force Page to Side One, Page Delivery, Offset, Sample Delivery, and finishing options.

Color

The **Color** menu provides you with an expansive palette of color management tools of varying complexity including Trapping, Color Cast, Print Color As, Black Overprint, PANTONE Color Processing, User TRC, Highlight Color (Mapping Algorithm, Mapping Color, Printing Color, Mismatch Action) Source Color (RGB, CMYK, GRAY Color Space for Items Images, Graphics & Text), Output Color (Destination Profile, Emulation, & Rendering options)

Job Notes and Accounting

The **Job Notes and Accounting** menu allows you to enter information that should be sent along with the printed job including banner pages and accounting information.

Special Pages

Contains features that enable you to manage exception pages, cover pages, and page inserts.

Printer Properties Window

The Printer Properties window contains the following:

- Printer Properties navigation bar
- Printer Name
- View Button Menu
- Update Values Menu

- Command Buttons

NOTE: *Using the cursor to rollover icons displays information tips following a one to two second delay.*

Printer Properties navigation bar

The **Printer Properties** navigation bar lets you navigate back to the Printer Status screen, or display the properties for each printer in the list of printers using the Previous Printer and Next Printer links.

Printer Name

The **Printer Name** menu is available from within the **View** or **Edit Printer Properties** menu. The menu displays the name of the selected printer. If more than one printer is chosen, they are listed within the pull-down menu. Each printer that is selected from the pull-down menu displays the properties pertaining to that printer.

Update Values Menu

The **Update Values** menu allows you to overwrite or append the properties for the printer.

Command Buttons

- **Reset All:** Returns queue properties to values set before any changes were attempted.

- **Apply**: Saves all property changes to the selected queue without closing the window. You do not need to select Apply before selecting **OK** to save changes.

- **OK**: Saves all property changes to the selected printer. The dialog changes to the one viewed previously.

- **Back to Printer Status**: Returns to the main Printer Manager window.

- **Previous Printer/Next Printer**: Displays the View or Edit mode properties page of the previous or next printer in the printer list.

CAUTION: *Do not use the browser Back or Forward navigation buttons to return to previously viewed pages. This action will require you to refresh the browser window or re-login to FreeFlow Output Manager.*

Adding or Removing a Printer

You may want to create a new printer to handle specific job requirements, or to have a printer available for a particular group of people to use.

The FreeFlow Printer Registration Tool is used to add printers and edit printer settings. The printer list created by the registration tool can be local to the Output Manager software, or located on a remote PC. The Printer List Locator tool is used to specify a local or remote printer list.

Use the Printer Registration Tool and Printer List Locator tools to add and setup printer for FreeFlow Output Manager. Use the online help for those applications for instruction in how to use those applications.

To access the list of available printers and add or remove printers

1. Open **Printer Manager**.

2. Select the **Change Printer List ...** button. The Add/Remove Printer list window opens. The printers that are available for Output Manager have check marks to the left of their name or IP address.

3. Perform one or both of the following:

    • Select the check box to the left of the printer name or IP Address for those printers you want to add.

    • De-select the check box to the left of the printer name or IP Address for those printers you want to remove.

4. Click **Next** to open the Confirm Changes screen.

5. The printers that have been added as well as removed will be displayed on the confirmation screen. Perform one of the following:

    • Click **Next** to go to the Update Properties screen. A progress indicator will appear as the printer properties are loaded.

    • Click **Back** to return to the Add/Remove Printer List screen and make additional changes.

6. Perform one of the following.

    • You can edit the printer properties by clicking the **Edit Printer Properties** button.

    • Click **Done** to return to the Printer Status screen.

NOTE: *If a deleted printer has jobs pending, a status message will appear in the status message area notifying the user that the printer will be removed when all jobs have been completed.*

See Also

Editing or Viewing Printer Properties

Once a new printer is created, most printer properties can be modified.

The Printer Properties window enables you to view and specify attributes that are used as default settings to process jobs submitted to the printer. Administrator, Operator 1, and Operator 2 can view printer properties, while only Administrator and Operator 1 can edit printer properties.

NOTE: *Some menu selections contain an + Add New Value designation.*

NOTE: *Only the attributes that are supported by the printer will be displayed.*

To Edit or View Printer Properties

1. Open **Printer Manager**.

2. Select each printer that you want to access. If you select multiple printers, the properties for each selected printer can be accessed using the **Printer Name** list within the Printer Properties window.

3. Click **View Printer Properties** or **Edit Printer Properties**.

See Also

Selecting Supported Attributes

Features with multiple options

Click the **Supported** button, which is located at the top of menu options with multiple selections within **Queue Manager** and **Printer Manager**, to select all the values within a particular menu.

Some **Supported** features are automatically enabled when the queue is created and then associated with printers. Once menu options are selected, the value is supported and can be selected when editing job properties.

For example, if you want to select all the **Layout** options, click the **Supported** button. If you want one of the layout options to be the default selection, select that option on the default list.

Single feature options

The **Supported** checkbox within single choice menu options must be selected in order to access option controls. Some supported features are automatically selected when the queue is created and then associated with printers.

For example, if you want to use **Job Proofing** on the queue/printer, the **Job Proof** checkbox must be selected. This action activates the **Default** field and you can then enter a Job Proof **Default** value.

NOTE: *Be sure to select options that are supported by the printer. If you select a feature that is not supported by the printer, the job may be faulted or marked ineligible when received by the printer.*

View Button Menu

The **View** button menu button enables you to select printer properties, and menus that you want to display. The following display options are available:

- **View or Edit Printer Properties**: If you opened the **View** menu from within the **View Printer Properties** window, the **Edit Printer Properties** selection is available and vise-versa.

- **Expand All/Collapse All**: You can choose which printer menus are opened when viewing or editing printer properties. Regardless of which selection you make, all menus can be opened or closed manually by clicking on the menu bar title.

  – **Collapse All**: Only the **Basic Properties** menu will open expanded, while the other menus remain collapsed.

  – **Expand All**: All menus expand when viewing or editing printer properties.

Using the Basic Properties Detail

This detail screen displays general printer properties.

To use the Basic Properties detail

1. Open **Printer Manager**.

2. Select the checkbox for each printer that you want to access. If you select multiple printers, the properties for each selected printer can be accessed using the **Printer Name** list within the Printer Properties window.

3. Select **View Printer Properties** or **Edit Printer Properties**.

4. Select the **Basic Properties** detail.

Basic Properties Fields

The following fields become read only after the printer is created. All fields are used during printer creation.

If the printer is an iGen4™ 220 Perfecting Press, the fields "Print Engine Controller 1" and "Print Engine Controller 2" are displayed.

- **Printer Name or IP Address:** The name or IP address of the printer selected. This field is read only. You can access all the printers that you selected by using the **Printer Name** menu.

- **Printer Model:** This read only field describes the printer make and model as entered during printer creation.

- **Controller/Server Type:** This read only field describes the controller software and its version number as entered during printer creation.

- **High Security:** If your controller software is FreeFlow® Print Server 4.1 or later versions, this selection is available. See the *FreeFlow® Print Server System Administrator's Guide* for additional details.

- **Printer:** This read only field identifies the printer location on the Internet or intranet.

- **Queue Name at Printer:** This read only field displays the queue name that is associated with the printer.

- **Print Engine Controller 1**: This read only field describes the primary controller's Printer name or IP address and associated Queue Name at Printer as entered during printer creation.

- **Print Engine Controller 2:** This read only field describes the secondary controller's Printer name or IP address and associated Queue Name at Printer as entered during printer creation.

The following fields are editable

- **Color:** You can select this option if the printer supports

color printing.

- **Interposer**: You can select this option if the printer supports an interposer.

- **Location:** Type additional printer location information in this text box, using up to 127 characters.

- **More Information:** Type additional printer information in this text box, using up to 127 characters.

Using the Job Processing Options Detail

This detail screen allows you to set job acceptance limits and to enable job proofing.

To Use the Job Processing Options Detail

1. Open **Printer Manager**.

2. Select the checkbox for each printer that you want to access. If you select multiple printers, the properties for each selected printer can be accessed using the **Printer Name** list within the Printer Properties window.

3. Select or **Edit Printer Properties**.

See Also

"Limiting the Number of Jobs at the Printer" on page 3–12

"Setting the Pages per Job" on page 3–13

"Enabling Proof Jobs at the Printer" on page 3–13

Limiting the Number of Jobs at the Printer

You can limit the number of jobs that can be sent to the printer. This process is also known as High/Low Watermark.

To Limit the Number of Jobs at the Printer

1. Select the **Job Processing Options** detail.

2. If you want no limit to the amount of jobs that you can submit, select **No Limit**. Performance may be impacted if you submit too many jobs.

3. If you want a maximum limit on the number of jobs, select **Maximum**.

   a. Enter the maximum number of jobs that you want the printer to accept.

   b. The printer can then be set to resume accepting jobs. Type a number in the **Resume Accepting Jobs At** box.

4. Click **OK** to save your entries and return to the **Printer Status**

window.

See Also

"Limiting the Number of Jobs at the Printer" on page 3–12

"Setting the Pages per Job" on page 3–13

"Enabling Proof Jobs at the Printer" on page 3–13

Setting the Pages per Job

The system administrator sets the job size (pages) supported for the printer.

To Set the Pages per Job

1. Select the **Job Processing Options** detail.

2. Select from the following:

   • **No Limit**: There is no limit to the size of the job that can be submitted to the printer.

   • Select **Minimum** to enter the minimum and maximum pages per job that can be submitted to the printer.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

"Limiting the Number of Jobs at the Printer" on page 3–12

"Setting the Pages per Job" on page 3–13

"Enabling Proof Jobs at the Printer" on page 3–13

Enabling Proof Jobs at the Printer

You can enable the printer to print a proof copy of a multi-copy job while eliminating the need to resubmit the job to print once the content and/or layout have been verified.

To Enable Proof Jobs at the Printer

1. Select the **Job Processing Options** detail.

2. Select **Supported** to enable **Job Proof**.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

"Limiting the Number of Jobs at the Printer" on page 3–12

"Setting the Pages per Job" on page 3–13

"Enabling Proof Jobs at the Printer" on page 3–13

Using the Printer Manager Settings Detail

The printer settings within this menu Include the page range, document format, font selections, OPI (Open PrePress Interface), and resources.

To Access the Printer Manager Settings Detail

1. Open **Printer Manager**.

2. Select the checkbox for each printer that you want to access. If you select multiple printers, the properties for each selected printer can be accessed using the **Printer Name** list within the Printer Properties window.

3. Select **Edit Printer Properties**.

   NOTE: *Some menu selections contain an + Add New Value designation. To add a new value to the printer, see:*

See Also

Enabling Job Quantity and Page Range Options

You can set the maximum and minimum number of copies that can be printed. Page Range allows you to set a page range for printing jobs at the printer.

To Enable Job Quantity and Page Range Options

1. Select the **Settings** detail.

2. If the feature is supported, perform the following:

   • Enter a minimum and maximum number of copies that you want to print.

   • **Page Range** allows you to set the page range of the job you want to print.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Selecting the Document Format

You can change the format of a document after it has been submitted to the controller. For example, a change from PostScript to ASCII may be desired in order to print the PostScript commands.

To Select the Document Format

1. Select the **Settings** detail.

2. Select from the following document formats:

   • **Unknown**:

   • **ASCII**: The American (National) Standard Code for Information Interchange, is a standard character-to-number encoding widely used in the computer industry.

   • **JPEG**: The Joint Photographic Experts Group standard algorithm for compressed digital images.

   • **PostScript**: A page description language developed by Adobe Systems, Inc. It supports graphics, text, and images with a wide variety of fonts. It is designed to be printer independent.

   • **PCL**: A file format that provides a set of instructions to the printer describing the appearance of a page or pages.

   • **PDF**: Portable Document Format. A file format developed by Adobe Systems, Inc.

   • **TIFF**: A common image format developed by Aldus and Microsoft for scanned color and black and white images. It is a versatile, reliable, and widely supported bitmap format designed for exchanging digital information.

   • **VI Container**: (Variable Information) Containers are specialized files containing a collection of components that are bundled into a single file called a "container." Output Manager will forward VI container jobs to printers that support this format. Supported VI Container formats include PPML, VIPP, and VIPP Database Mode. The VI Container format needs to be enabled manually because printer will not export it automatically.

   NOTE: *PPML, VIPP and VI Database Mode can be set if the version of FreeFlow Print Server is version 5.0 or later. Only PPML is set if the FreeFlow Print Server version is 4.2.*

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Selecting Font Options

A font name can be specified if the document data is in a format that does not have inherent font information (e.g., 'text/plain'). If font information is supplied with the job, this selection is ignored.

To Select Font Options

1. Select the **Settings** detail.
2. If supported, select a minimum and maximum font size. The available **Font Size** range for the printer is displayed above the entry field.
3. Select supported **Font Names**.
4. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Setting OPI Options

This attribute indicates the type of OPI image insertion to be performed by the printer.

Open PrePress Interface is used to replace low-resolution proxy images with high-resolution images when the job is decomposed. This is useful because low-resolution images transmit much quicker than high-resolution jobs from the client to the controller. Once received, the controller can then access the high-resolution image during decomposition to be used for print.

OPI options are available for only PostScript or PDF jobs.

To Set OPI Options

1. Select the **Settings** detail.

2. Image Substitution determines the type of OPI image insertion that is performed by the printer. Select an **Image Substitution**:

   • **On**: OPI images referenced in the document file are retrieved, manipulated as specified, and inserted or substituted for those referenced in the document.

   • **Off**: OPI images referenced in the document are not retrieved, inserted or substituted for those in the document. The printer ignores all OPI image insertion references.

3. The **Setting** options determine whether the printer pre-scans the document data in order to validate that OPI images referenced within the document are accessible and, optionally, to send them to the Printer, before processing the job. From the **Setting** menu, select from:

   • **None**: A PreScan is not performed on the job.

   • **Pre-Scan**: Before processing the job, pre-scan the document data and validate that each OPI image exists and is accessible.

   • **Pre-Scan & Gather**: Pre-scan the document data and retrieve the referenced OPI images prior to processing the job. This maximizes processing performance on the job.

4. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Enabling Printer Resources

Resource selections are available for all document formats.

To Enable Printer Resources

1. Select the **Settings** detail.

2. From the **Pre-Scan Action** menu, select from:
   - **None**: A PreScan is not performed on the job.
   - **Pre-Scan**: Before processing the job, pre-scan the document data and validate that each OPI image exists and is accessible.
   - **Pre-Scan & Gather**: Pre-scan the document data and retrieve the referenced OPI images prior to processing the job. This maximizes processing performance on the job.

3. Click **OK** to save your entries and return to the **Printer Status** window.

Setting Retention After Job Completion

This feature allows you to keep or delete a job following the completion of job processing and printing.

When you keep a job, all the document data and instructions required to reprint the job are retained so the job can be reprocessed. When the job retention period expires, all traces of the job are removed from the system.

To Set Retention After Job Completion

1. Select the **Settings** detail.

2. Select a supported **Retention After Job Completion** option.
   - **Keep**: All the document data and instructions required to reprint the job are retained so the job can be reprocessed.
   - **Delete**: When the job retention period expires, all traces of the job are removed from the system.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

"Enabling Job Quantity and Page Range Options" on page 3–14

"Selecting the Document Format" on page 3–15

"Selecting Font Options" on page 3–17

"Setting OPI Options" on page 3–17

Using the Paper Stocks Detail

Features within the **Paper Stocks** detail enable you to set up a stock to be used for jobs sent to the printer.

The **Paper Stocks** menu allows you to specify a paper stock for a printer by selecting the color, size, type, and weight of the stock to be used. Be sure the attributes you select are supported on the printing system.

NOTE: *Some menu selections contain an + Add New Value designation.*

See Also

Selecting a Stock

You can select a default stock used by the printer by either selecting individual stock properties or by selecting a predefined named stock.

To Select a Stock

1. Open **Printer Manager**.

2. Select each printer that you want to access. If you select multiple printers, the properties for each selected printer can be accessed using the **Printer Name** list within the Printer Properties window.

3. Select **Edit Printer Properties**.

4. Select the **Paper Stocks** detail.

5. Select a supported stock name and/or stock characteristic option.

6. Click **OK** to save your entries and return to the **Printer Status** window.

Using the Output Format Detail

The available options within the **Output Format** menu are determined by the system administrator.

The **Output Format** menu contains features used for determining output options that are processed through the selected printer.

NOTE: *Some menu selections contain an + Add New Value designation.*

To Use the Output Format Detail

1. Open **Printer Manager**.

2. Select the printer(s) you want to access.

3. Select **Edit Printer Properties**.

See Also

Setting Page Orientation

Orientation describes the position of the page image relative to the actual page and whether the printed image is parallel to the long side of the paper (landscape orientation) or to the short side of the paper (portrait orientation).

To Set Page Orientation

1. Select the **Output Format** detail.

2. Select a supported orientation:

   • **Portrait**: The printed page image is taller than it is wide. When you view a page printed with a portrait orientation, you hold it with the long edges to the side.

   • **Landscape**: The printed page image is wider than it is tall. When you view a page printed with a landscape orientation, you hold it with the short edges to the side

   • **Reverse Portrait:** The image is rotated 180 degrees with respect to the medium from the portrait orientation.

   • **Reverse Landscape:** The image is rotated -90 degrees with respect to the medium from the portrait orientation.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Selecting Layout Styles

The Layout feature enables you to control the placement, rotation, cropping, and scaling of source document pages onto the printed output. This process is commonly known as Imposition.

To Select Layout Styles

1. Select the **Output Format** detail.
2. Enter a supported layout: For a description of each layout option, see "About Layout Options" on page 4-29.
3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Setting the Sides Imaged

Use the Sides Imaged option to select whether the job prints on one or both sides of a page.

To Set the Sides Imaged

1. Select the **Output Format** detail.
2. Select a supported sides imaged option:
   - **1 Sided**
   - **2 Sided, Flip on Long Edge**
   - **2 Sided, Flip on Short Edge**
3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

"Setting Page Orientation" on page 3–21

"Selecting Layout Styles" on page 3–22

"Setting Collation Options" on page 3–24

"Selecting Output Location" on page 3–25

"Selecting Page Delivery Options" on page 3–26

"Enabling Slip Sheets" on page 3–27

"Setting Offset Options" on page 3–28

"Using Transparency Interleaving" on page 3-29

"Setting Finishing Selections" on page 3–30

Forcing Pages

This attribute forces selected pages to be imaged on the front side of a sheet in the printed document. This attribute is typically used to start a new chapter or section of a document.

The pages you want to force to side one must be specified by page number.

If Forcing Pages is supported, the **Supported** checkbox is selected.

Setting Collation Options

Collation controls the sequence in which pages in a job print.

To Set Collation Options

1. Select the **Output Format** detail.
2. Select a supported collation option:
    *   **Collated**: Documents are printed in sequential page order and delivered as separate document sets. For example, if you print three sets of a 3-page document, the output is grouped in the following page order: 1,2,3 1,2,3 1,2,3.
    *   **Uncollated**: Documents are printed in separate sets of each page. If you print 3 copies of a 2-page document, the output is grouped with three copies of page 1 followed by three copies of page 2.
3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Selecting Output Location

The Output Location selection determines where the print job is delivered.

To Select Output Location

1. Select the **Output Format** detail.
2. Select a supported **Output Location** option:
   - **Automatic**: This is the default selection. The printer determines the most appropriate destination of the given job.
   - **Catch Tray (top)**: Used for simpler jobs that do not require finishing or collated stacking.
   - **Stacker**: Used for most jobs that require stacking or stapling.
   - **Stacker-N**: Choose from the list of available stackers.
3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

"Setting Page Orientation" on page 3–21

"Selecting Layout Styles" on page 3–22

"Setting the Sides Imaged" on page 3–23

"Setting Collation Options" on page 3–24

"Selecting Page Delivery Options" on page 3–26

"Enabling Slip Sheets" on page 3–27

"Setting Offset Options" on page 3–28

"Using Transparency Interleaving" on page 3-29

"Setting Finishing Selections" on page 3–30

Selecting Page Delivery Options

Page Delivery determines whether the prints are delivered face up or face down and the order in which the printed pages are delivered to an output device, either first to last or last to first. Specifying the page delivery is important for certain types of finishing.

To Select Page Delivery Options

1. Select the **Output Format** detail.
2. Select a supported **Page Delivery** option:
   - **Printer Default**: This is the default selection. The printer determines the page delivery of the given job.
   - **Face Up; 1-N**: Printed pages are delivered face up, first to last with the last page on top (ascending).
   - **Face Up; N-1**: Printed pages are delivered face up, last to first with the first page on top (descending).
   - **Face Down; 1-N**: Printed pages are delivered face down, first to last with the last page on top (ascending).
   - **Face Down; N-1**: Printed pages are delivered face down, last to first with the first page on top (descending).
3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Enabling Slip Sheets

Slip Sheets are pieces of paper or other media that are inserted between document sets in a print job. Slip Sheets differ from job inserts in that slip sheets separate one job from another, while job inserts separate pages of a job.

To Enable Slip Sheets

1. Select the **Output Format** detail.

2. Select a supported slip sheets option:

    • **Off**: Slip sheets are not included with the job.

    • **On**: Slip sheets are included with the job.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Setting Offset Options

This feature allows you to offset stacks of output.

To Set Offset Options

1. Select the **Output Format** detail.
2. Select **On** from the Offset pull-down.
3. Select from the supported offset options:
   - **Off**: The feature is disabled.
   - **Between Jobs**: The offset occurs between each job printed.
   - **Between Sets**: The offset occurs between each job set printed.
   - **Between Subsets**: inserts an offset within a stack (uncollated set) after each specified page number.
4. Select the **Pages per Subset** check box to enable that option.
5. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Using Transparency Interleaving

Specifies that the printer is to insert interleaved sheets into the document. The numbering of pages in the document must not be affected by the interleaved sheets.

To set Transparency Interleaving

1. Select the **Output Format** detail.

2. Select a supported interleaved sheets option:

   • **Off**: Interleaved sheets are not included with the job.

   • **On**: Interleaved sheets are included with the job.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Setting Sample Delivery

Sample delivery allows you to select from collated sets or uncollated sheets.

To Set Sample Delivery

1. Select the **Output Format** detail.

2. If Sample Delivery is supported, the following Sample Delivery options are available.

   • **Printer Default**: This is the default selection. The printer determines the Sample Delivery of the given job.

   • **Every**: Enter a numeric value for the amount of Uncollated Sheets or Collated Sets that you want to print.

3. The available Sample Delivery option depends on your collation selection. The **Collated Sets** option is available for collated jobs and the **Uncollated Sheets** option is available for uncollated jobs. You can change the active selection by changing the job collation option.

   • **Uncollated Sheets***: Documents are printed in separate sets of each page. If you print 3 copies of a 2-page document, the output is grouped with three copies of page 1 followed by three copies of page 2.

   • **Collated Sets***: Documents are printed in sequential page order and delivered as separate document sets. For example, if you print three sets of a 3-page document, the output is grouped in the following page order: 1,2,3 1,2,3 1,2,3.

4. Click **OK** to save your entries and return to the **Printer Status** window.

Setting Finishing Selections

Finishing is a general term referring to the processes, such as stapling, binding, stitching, folding, and hole-punching, that are typically performed on a job after it has finished printing.

To Set Finishing Selections

1. Select the **Output Format** detail.

2. Select a supported finishing option from those available in the Finishing list.

   • **Custom Template**: Activates the **Custom Template** menu where you can enter custom template information.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

"Setting Page Orientation" on page 3–21

"Selecting Layout Styles" on page 3–22

"Setting the Sides Imaged" on page 3–23

"Setting Collation Options" on page 3–24

"Selecting Output Location" on page 3–25

"Selecting Page Delivery Options" on page 3–26

"Enabling Slip Sheets" on page 3–27

"Setting Offset Options" on page 3–28

"Using Transparency Interleaving" on page 3-29

Using the Image Adjustments Detail

The available options within the **Image Adjustments** menu are determined by the system administrator.

The **Image Adjustments** menu contains controls that allow you to make image quality adjustments including: darkness, toner saver, halftone, and image shift. To see a description of each field select from the following links:

Select a supported **Image Adjustments** option by selecting a radio button.

To Use the Image Adjustments Detail

1. Open **Printer Manager**.

2. Select the printer(s) you want to access.

3. Select **Edit Printer Properties**.

NOTE: *Some menu selections contain an Add New Value "+" designation. To add a new value to the printer, see:*

See Also

"Setting Rotation" on page 3–32

"Using Anti-aliasing" on page 3–33

"Using Resolution" on page 3–34

"Using Halftone" on page 3–34

"About Print Darkness" on page 3–36

"Enabling Toner Saver" on page 3–38

"Selecting Image Resample Methods" on page 3–39

"Using Image Shifts" on page 3–40

"Using Background Forms" on page 3-41

Setting Rotation

Use rotation to turn a page image 180 degrees from its current position (0 degrees represents no rotation). You may need to rotate a page image so that it prints properly when processed by a finishing device (for example, to allow for right-side stitching or binding).

To Set Rotation

1. Select the **Image Adjustments** detail.

2. Select from the supported **Rotation** options:

   • **Printer Default**: This is the default selection. The printer determines the Rotation of the given job. A job entering the queue that does not contain a rotation value, is assigned the Default rotation value.

   • **None**: Rotation is not performed.

   • **90 Degrees**

   • **180 Degrees**

   • **270 Degrees**

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

"Using Anti-aliasing" on page 3–33

"Using Resolution" on page 3–34

"Using Halftone" on page 3–34

"About Print Darkness" on page 3–36

"Enabling Toner Saver" on page 3–38

"Selecting Image Resample Methods" on page 3–39

"Using Image Shifts" on page 3–40

Using Anti-aliasing

Anti-Aliasing is a method for reducing the jagged appearance (caused by rasterization) of curves and diagonal lines. Anti-Aliasing enhances the smoothness of such curves and lines.

To Use Anti-aliasing

1. Select the **Image Adjustments** detail.

2. Select from the following Anti-aliasing options:

   • **Printer Default**: This is the default selection. The printer determines anti-aliasing for the given job. A job entering the queue that does not contain an anti-aliasing value, is assigned the Default anti-aliasing value.

   • **Off**: does not apply the anti-aliasing algorithm

   • **On**: applies the anti-aliasing algorithm

   • **K100% High Resolution:** applies high resolution algorithm

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Using Resolution

Use the resolution option to achieve better performance for jobs that were saved, or scanned (if your system features a scanner). Resolutions vary from printer to printer, and not all resolutions print exactly as expected.

To Use Resolution

1. Select the **Image Adjustments** detail.
2. Select a supported option from the **Resolution** menu.
3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Using Halftone

Halftone allows you to adjust the pattern of dots or lines of varying sizes applied to an image of varying tones, or same sized dots applied to a tint of color.

To Use Halftone

1. Select the **Image Adjustments** detail.
2. **Halftone** can be applied to the following:
   - **Images**: Specifies how the halftone screens are used by the printer to render image objects within color or black and white documents.
   - **Graphics**: Specifies how the halftone screens are used by the Printer to render graphic objects within color or black and white documents.
   - **Text**: Specifies how the halftone screens are used by the printer to render text objects within color or black and white documents.

3. Select from the supported **Halftone** options:

- **Printer Default**: This is the default selection. The printer determines the halftone of the given job. A job entering the queue that does not contain a halftone value, is assigned the **Default** halftone value.

- **None**: No halftone is applied to graphic, image or text objects. This is provided to enable you to override a Printer Default value in situations where no halftoning is desired.

- **LPI** selections: Applies lines per inch halftoning.

- **DPI** selections: Applies dots per inch halftoning.

- **Stochastic**: Applies a halftone screen that uses random spot densities to render objects.

4. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

"Setting Rotation" on page 3–32

"Using Anti-aliasing" on page 3–33

"Using Resolution" on page 3–34

"About Print Darkness" on page 3–36

"Enabling Toner Saver" on page 3–38

"Selecting Image Resample Methods" on page 3–39

"Using Image Shifts" on page 3–40

About Print Darkness

The Darkness options allow to adjust print darkness, mode, and toner settings when using monochrome printers.

The following darkness controls are available:

NOTE: *The key to making adjustments to any of the image quality controls is to do so in small increments. Making large adjustments can actually create image quality problems.*

See Also

Controlling Print Darkness

The Print Darkness control makes all pixels lighter or darker.

1. Select the **Image Adjustments** detail.

2. If **Print Darkness** is supported, use the slide bar or enter a value in the spin box. Increasing **Darkness** (-) moves all pixels in the image toward black. Decreasing **Darkness** (+) moves all pixels toward white.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Selecting a Darkness Mode

The Darkness Mode allows you to select a print quality:

1. Select the **Image Adjustments** detail.

2. Select a supported **Darkness Mode** option:

    • **Normal Darkness**: Specifies that the ability to adjust print darkness on this printer is enabled.

    • **DocuTech 135**: This setting prints output that is similar in appearance to that of a DocuTech 135 printer.

    • **DocuTech 135 with Darkness Adjustments**: Specifies that the print darkness applied should attempt to match that used on DocuTech 135, and the light/dark value can be supplied as well.

    • **DocuTech 6180**: This setting prints output that is similar in appearance to that of a DocuTech 180 printer.

    • **DocuTech 6180 with Darkness Adjustments**: Specifies that the print darkness applied should attempt to match that used on DocuTech 180, and the light/dark value can be supplied as well.

    • **Native**: Specifies the neutral or nominal darkness setting native to the printer.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Enabling Toner Saver

Enabling Toner Saver uses less toner and is therefore more economical than the full-quality setting (Off). You may want to use the Off setting when printing proof documents.

To Enable Toner Saver

1. Select the **Image Adjustments** detail.
2. Select a Toner Saver setting:
    *   **Off**: Toner Saver is not enabled.
    *   **On**: Toner Saver is enabled.
3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

"Setting Rotation" on page 3–32

"Using Anti-aliasing" on page 3–33

"Using Resolution" on page 3–34

"Using Halftone" on page 3–34

"About Print Darkness" on page 3–36

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"Selecting Image Resample Methods" on page 3–39

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Selecting Image Resample Methods

Use Image Resample to select an interpolation method. This option provides the you with the ability to select an interpolation, or image resample, method in order to achieve maximum Image Quality at the desired RIP performance. Interpolation is defined as the process of estimating a value of a function between two known values. In the Image Interpolation context, the function of known values is the input image, and the estimated values are the values calculated for the output image. Image interpolation attempts to produce a smooth transition between adjacent samples rather than simply replicating pixels (which would result in "blocky" images).

The interpolation methods that may be selected (in addition to the system specified setting) include:

To Select Image Resample Methods

1. Open the **Image Adjustments** detail.

2. Select a supported **Image Resample** option:

    *   **System Specified**: The printer determines the image scaling of the given job. A job entering the queue that does not contain a value, is assigned the **Default** value.

    *   **Bi-Linear**: A method used to scale image data (pixels) from one resolution to another. The replacement pixel in the scaled image is calculated using a weighted sum of the four nearest pixel values in the source image. This method offers higher quality than Nearest Neighbor Interpolation.

    *   **Nearest Neighbor**: A method used to scale image data (pixels) from one resolution to another. The output pixel value is simply the value of the input pixel closest to the output location.

    *   **Smart**: A method used to scale image data (pixels) from one resolution to another. This interpolation method automatically chooses between interpolations based on the input image characteristics.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Using Image Shifts

Use Image Shifts to adjust the location on a page where printing occurs. The procedure to shift an image varies based on whether you are printing on a one-sided or two-sided page.

To Use Image Shifts

1. Open the **Image Adjustments** menu.
2. From the **Image Shifts** field, select a unit of measure.
3. Select the option that is supported by the printer. Examples include: Sides 1 and 2 - Same: X/Y, Side 1: X/Y and Side 2: X/Y.
4. Adjust the **X:** and **Y:** axis fields:
   - When selecting the horizontal (**X**) image shift, enter a positive number to move the image away from the left side of the paper. Enter a negative number to move the image away from the right side of the paper.
   - When selecting the vertical (**Y**) image shift, enter a positive number to move the image upward or a negative number to move the image down.
5. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Using Background Forms

The Background Forms field is a read-only field in Printer Manager. The support status for this feature is retrieved from the printer. If the printer supports this feature, it will be indicated in this field.

See for information on enabling this feature at a queue.

Using the Printer Manager Color Detail

Color features are used to assist with matching color for printing. Color Quality features can include hardware devices such as spectrophotometers and colorimeters, and software such as color profiles, tonal reproduction curves (TRCs), and color space transformations.

Devices such as the spectrophotometer measure the printed output of a printer; this data is then used to calibrate the printer and/or create appropriate TRCs which can adjust for any color matching problems caused by the printer itself.

Color matching software is used to convert between device dependant RGB and CMYK color spaces to a device independent color space in order to match colors by adjusting for differences between device color gamuts.

To Access the Color Menu

1. Open **Printer Manager**.
2. Select the printer(s) you want to access.
3. Select **Edit Printer Properties**.

See Also

Selecting a Print Color Option

If enabled by the administrator, this feature enables the printer to render a color document in full color or use an algorithm that maps the full range of colors to alternate values, such as gray scale or monochrome. If enabled, you can override the color attributes of a job to create a monochrome output.

To Select a Print Color Option

1. Select the **Color** detail.
2. From the **Print Color As** menu, select from:
   - **Full Color**
   - **Highlight Color**
   - **Black and White**
3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Selecting a User TRC

You can select Tonal Reproduction Curves (TRC) to achieve desired, repeatable results from specified paper stocks. The TRC is a graphical representation of 4 curves, one each for Cyan, Magenta, Yellow, and Black.

Within Job Manager, the desired User TRC can be applied to all pages within a job or to specified pages within the job.

To Select a User TRC

1. Select the **Color** menu.
2. From the **User TRC** menu, select a value.
3. Click **OK** to save your entries and return to the **Printer Status** window.

Using PANTONE Color Processing

This feature adds flexibility when matching page level elements at the press.

Some job pages contain three types of object elements: images, graphics and text. In some cases, a shift in hue may be noticed between an image object (bitmap/TIFF/image-in-eps) and a graphic/ text object on a page. This shift in hue can occur when using PANTONE colors where the graphic/text have formal PANTONE calls, while the bitmap/image on the same page is not composed of a defined PANTONE name/number. The bitmap/ image contains a CMYK representation of a color and not a PANTONE call. This difference in construction results in proper PANTONE number rendering for the graphic/text element, but a second CMYK based rendering for the bitmap. As a result, slight hue changes between the bitmap and PANTONE graphic/text are visible. By disabling PANTONE processing, you can eliminate this problem.

To Use PANTONE Color Processing

1. Select the **Color** detail.
2. From the **PANTONE Color Processing** menu, select from:
   - **Off**: PANTONE Color Processing is not used.
   - **On**: PANTONE Color Processing is enabled.
   - Click OK to save your entries and return to the **Printer Status** window.

Using Clear Coat

Clear Coat is the use of a clear toner to apply to the print document. Applying clear toner can be applied to the entire page or selected portions of the page.

1. Open **Job Manager.**
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the Job ID/Name menu within the Job Properties window.
3. Click **Edit Job Properties**.
4. Select the **Color** detail.
5. Select a Clear Coat option. The options are Off, Full Page Flood and Select Objects. If Select Objects is selected additional options will be enabled. Select one or more of the options.

To Use Clear Coat

You can submit your job or continue editing job properties.

6. Select **Color** detail.

7. From the Clear Coat menu, select from:

    • **Off:** Clear Coat is not used

    • **Full Page Flood:** Clear Coat applied to the entire page.

    • **Selected Objects:** If Select Objects is selected additional options will be enabled. Select one or more of the options from below.

    • **Text:** Clear Coat applied to text.

    • **Images:** Clear Coat applied to images.

    • **Graphics:** Clear Coat applied to graphics

8. Click **OK** to save your entries and return to the Printer Status window.

Using Highlight Color

Highlight color is the use of black and one specified color to print documents. Black and white, highlight color, and full color documents can be printed black and white, or highlight color.

Consider the following when using highlight color options.

- The Highlight Color, Mapping Color, Mapping Algorithm, and Mismatch Action work together to produce the final printed result.

- If you want to change the highlight color used to print your document, set the highlight color option to the color you want, and set the color mismatch option to Operator Intervention.

- If you set the Highlight Printing Color to a color other than the color loaded at the printer and leave the default setting for Mismatch Action at Use Loaded Color, the document prints using the available toner.

To Use Highlight Color

1. Select the **Color** detail.

2. Select a **Highlight Color Mapping Algorithm**: These selections determine how full-color documents are mapped into highlight-color or monochrome.

3. Select a **Highlight Color Mapping Color**. This option allows you to specify which colored parts of the document are printed in the available Highlight Color. The Mapping Color determines which parts of the document print in color and which in shades of gray.

4. Select a **Highlight Color Printing Color**.

5. Select a **Highlight Color Mismatch Action**. This determines what action is taken when the loaded highlight color is not the same as the selected highlight color.

6. Click **OK** to save your entries and return to the **Printer Status** window.

NOTE: *Information is sent to the printer that supports the selected Highlight Color attributes (e.g., DocuPrint NPS). The printer performs the appropriate action.*

See Also

Using Trapping

Trapping is an image processing technique used to compensate for misregistration of color planes in a print engine or press. Misregistration results in white gaps and shifted hues.

To Use Trapping

1. Select the **Color** detail.

2. Trapping is applied to the edges of all text, graphics, images, and sweeps.

KEY POINT: Generally, a trapping zone above 4 pixels is visually obvious and not pleasing to the eye. A higher value should be considered carefully. However, the ability to set a higher trap zone has been included to give you control over individual images that have been poorly trapped individually.

KEY POINT: Two direction parameters are included because the feed direction has a marginal effect on image quality. However, in nearly all cases, you would set these two values the same.

3. Within the **Trapping** field, you may enter pixel values for the width and height parameters, from 1 to 20 pixels. The Feed Direction icon presents a visual representation of trapping adjustments.

   • Clear **Printer Default** to enter a **Cross Feed Direction (y)** value.

   • Clear **Printer Default** to enter a **Feed Direction (x)** value.

4. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Using Lightness

Lightness controls the relative brightness of the color in the printer's gamut.

Increasing the lightness value causes the output to appear lighter and decreasing the lightness value causes the output to appear darker.

To Use Lightness

1. Select the **Color** detail.

2. Lightness can be set to the desired level +/-100 units. A lightness value of -100 will cause the output to appear black, and a lightness value of 100 will cause the output to appear white. Depending on the content of the original image, the output for a lightness value of 100 may be the same as the output for a lower lightness value, and the output for a lightness value of -100 may be the same as the output for a higher lightness value.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Using Contrast

Contrast controls the difference of tonal gradation between the light and dark values within an image in the printer's gamut.

Increasing the contrast value increases the variation between light and dark areas of the printed document and decreasing the contrast value decreases the variation between light and dark areas of the printed document.

To Use Contrast

1. Select the **Color** detail.

2. Contrast can be set to the desired level +/-100 units. A contrast value of -100 causes the output to appear a solid midtone gray color, and a contrast value of 100 causes the output colors to either use full color (the maximum is restricted by the system ink limit) or no color for each of Cyan, Magenta, Yellow, and Black.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Using Saturation

Saturation controls the strength or purity of the color in the printer's gamut. Increasing the saturation value causes the output to contain more vibrant colors, and decreasing the saturation value causes the output to contain more pastel and gray colors.

To Use Saturation

1. Select the **Color** detail.

2. Saturation can be set to the desired level +/-100 units. A saturation value of -100 causes the output to appear gray, and a saturation value of 100 causes the output to have all bright colors. Depending on the content of the original image and the gamut of the print engine, the output for a saturation value of 100 may be the same as the output for a lower saturation value, and the output for a saturation value of -100 may be the same as the output for a higher saturation value.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Using Color Cast

Color Cast adjustments provide you the ability to increase or decrease the amount of any single color. Increasing (+) the amount of one color decreases the amount of its complementary color.

To Use Color Cast

1. Select the **Color** detail.

2. The color cast adjustments are:

   • **Cyan - Red**: The Cyan-Red color cast adjustment shifts the color towards cyan or red. Decreasing the value to -100 indicates the maximum cyan color cast supported by the system is applied to the document.   Increasing the value to 100 indicates the maximum red color cast supported by the system is applied to the document.

   • **Magenta - Green**: The Magenta-Green color cast adjustment shifts the color towards magenta or green. Decreasing the value to -100 indicates the maximum magenta color cast supported by the system is applied to the document. Increasing the value to 100 indicates the maximum green color cast supported by the system is applied to the document.

   • **Yellow - Blue**: The Yellow-Blue color cast adjustment shifts the color towards yellow or blue. Decreasing the value to   -100 indicates the maximum yellow color cast supported by the system is applied to the document. Increasing the value to 100 indicates the maximum blue color cast supported by the system is applied to the document.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Source Color

Select Source Color settings for RGB Color Space, CMYK Color Space, and/or Gray Color Space. You may make separate Source Color assignments within each color space for the Images, Text and Graphics profile.

NOTE: *Available options depend on printer configuration.*

RGB Color Space

CMYK Color Space

Gray Color Space

RGB Color Space

Specifies the source color space profile to be used in the RGB color space for rendering graphics to only those parts of a document that have no defined color space translation profile.

1. Select the **Color** detail.

2. To select **RGB Color Space** options, **Printer Default** must be cleared. Select the following **RGB Color Space** options for **Images**, **Graphics** and **Text**:

   • **Printer Default**: In order to change a **Printer Default** setting, the Printer Default checkbox must be cleared. A **Printer Default** selection indicates that Output Manager does not support the feature. The feature is thus handled by the printer that receives the job, using the printer default behavior.

   • **sRGB:** sRGB mode according to the Default RGB color space as defined in [IEC 61966-2.1]. See: *"References" in Appendix A of CPSS Volume 1-Information Model.*

   • **Xerox Consistent Color Mode:** Xerox Consistent Color mode for RGB color space.

   • **Xerox Consistent Color Mode RGB, Gamma=1:** Xerox Consistent Color mode for RGB with a gamma value of 1.

   NOTE: *You may select a specific Profile for all data types, or you may select different Profiles for images, text and graphics.*

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

"Selecting a Print Color Option" on page 3–42

"Using Highlight Color" on page 3–46

"Using Trapping" on page 3–47

"Using Lightness" on page 3–48

"Using Contrast" on page 3–49

"Using Saturation" on page 3–50

"Using Color Cast" on page 3–51

"CMYK Color Space" on page 3–54

"Gray Color Space" on page 3–55

"Selecting a Destination Profile" on page 3–56

"Using Rendering" on page 3–57

CMYK Color Space

Specifies the source color space profile to be used in the CMYK color space for rendering graphics to only those parts of a document that have no defined color space translation profile.

1. Select the **Color** detail.

2. To select **CMYK Color Space** options, **Printer Default** must be cleared. Select the following **CMYK Color Space** options for:

   • **Native CMYK**: The CMYK color space of the target color printer.

   • **SWOP:** Emulates The CMYK SWOP (i.e., Standard for Web Offset Press) ink color gamut when printed on coated media.

   • **Euroscale**: Emulates the European ink color gamut standard for offset presses when printed on coated media.

   • **Japan Color**: Emulates the color gamut of the combined/ common Dinippon and Toyo Inks standard when printed on coated media.

   • **Enhanced SWOP**: Emulates a more saturated version of the CMYK SWOP color gamut when printed on coated media.

   • **Euroscale Matte**: Emulates the color gamut of European inks placed on matte finish media.

   • **Euroscale Uncoated**: Emulates the color gamut of European inks placed on uncoated media.

NOTE: *You may select a specific Profile for all data types, or you may select different Profiles for images, text and graphics.*

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Gray Color Space

Specifies the symbolic name of the source color space profile that will be used to translate grayscale data to L* intensity values for rendering graphics to only those parts of a document that have no defined color space translation profile.

1. Select the **Color** detail.

2. Select the following **Gray Color Space** options for:

   • **Images**

   • **Graphics**

   • **Text**

NOTE: *You may select a specific Profile for all data types, or you may select different Profiles for images, text and graphics.*

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

"Selecting a Print Color Option" on page 3–42

"Using Highlight Color" on page 3–46

"Using Trapping" on page 3–47

"Using Lightness" on page 3–48

"Using Contrast" on page 3–49

"Using Saturation" on page 3–50

"Using Color Cast" on page 3–51

"RGB Color Space" on page 3–53

"CMYK Color Space" on page 3–54

"Selecting a Destination Profile" on page 3–56

"Using Rendering" on page 3–57

Output Color

Select Output Color settings for **Front Setup**, **Back Setup**, **Emulation** and **Rendering**. You may make separate output color rendering assignments for images, text, and graphics.

"Selecting a Destination Profile" on page 3-56

"Using Rendering" on page 3-57

Selecting a Destination Profile

To Select a Destination Profile

1. Select the **Color** detail.

2. Select a **Front Destination Profile**. This specifies the color space profile to be used on the back side of the output media both single-sided and double-sided documents.

   • **System Specified**

   • **Values from Printer**

3. Select a **Back Destination Profile**. This specifies the color space profile to be used on the back side of the output media.

   • **System Specified**

   • **Values from Printer**

4. Select an **Emulation** value. This selection causes the printer to emulate the output of a different color-printing device.

   • **Printer Default**: In order to change a **Printer Default** setting, the Printer Default checkbox must be cleared. A **Printer Default** selection indicates that Output Manager does not support the feature. The feature is thus handled by the printer that receives the job, using the printer default behavior.

   • **None**: No emulation is applied at the printer; the printer's native color information is used.

   • **SWOP**: Emulates the CMYK SWOP (i.e., Standard for Web Offset Press) ink color gamut when printed on coated media.

   • **Enhanced SWOP**: Emulates a more saturated version of the CMYK SWOP color gamut when printed on coated media.

   • **Euroscale**: Emulates the European ink color gamut standard for offset presses when printed on coated media

   • **Euroscale Matte**: Emulates the color gamut of European inks placed on matte finish media

   • **Euroscale Uncoated**: Emulates the color gamut of European inks placed on uncoated media

   • **Japan Color**: Emulates the color gamut of the combined/common Dinippon and Toyo Inks standard when printed on coated media

5. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Using Rendering

Occasionally, the requested colors in an image are outside a given printer's gamut and cannot be exactly reproduced. Rendering provides color mapping between the image's source gamut and the printer's own gamut.

To Use Rendering

1. Select the **Color** detail.

2. You can choose different rendering options for images, text, and graphics. For instance, you might choose Perceptual for the images, Pure for the text, and Relative Colorimetric for the graphics, in order to optimize each output type appropriately. Select Rendering for Images, Graphics and Text:

   - **Automatic**: The printer determines the selection of an appropriate rendering intent for each of the objects in the job, using the rendering intents available in the selected ICC profile(s).

   - **Saturation**: Optimizes the rendering of business graphics, such as charts and graphs.

   - **Perceptual**: Optimizes the rendering of photographic images.

   - **Relative Colorimetric**: Also optimized for rendering of spot color and logos. This transformation, however, uses additional information, such as hue and saturation, specified in the source profile to select the most appropriate value within the printer gamut.

- **Absolute Colorimetric**: Optimized for rendering to spot color and logos by identifying the closest value within the printer gamut.

- **Pure Text**: Optimized for rendering of text and line art. The "Pure" intent attempts to subdue halftone textures, thus increasing the visibility of small text.

- **Blended Pictorial and Graphics**: This rendering intent is appropriate for mixed content page images consisting of pictorial and graphic objects.

3. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Using the Job Notes & Accounting Menu

The available options within the **Job Notes and Accounting** menu are determined by the system administrator.

To Use the Job Notes & Accounting Menu

1. Open **Printer Manager**.
2. Select the printer(s) you want to access.
3. Select **Edit Printer Properties**.

NOTE: *The **Supported** checkbox within each menu option must be marked in order to use and access individual options.*

See Also

Using Job Notes

Job Notes fields:

- **Banner Page Message**: Information you want to be printed on the banner page of the print job. You can type up to 1000 characters in this field.
- **Special Instructions**: Allows the job submitter to enter any additional job instructions, up to 127 characters.
- **Message from Operator**: Additional information pertinent to a particular job. You can type up to 127 characters in this field.
- **Deliver To**: Allows the job submitter to enter the name of the person who receives the job, or other pertinent information.

See Also

Accounting Options

Accounting fields:

- **Account**: This field can contain an internal billing number, a credit card number, or other tracking or billing numbers.
- **Account User ID***:* The number identifier of the job sender.
- **Additional Accounting Data:** Can contain any additional account information.

See Also

"Using Job Notes" on page 3–59

Configuring Job Cover Pages

The Covers menu contains features that enable you to manage Covers only. Exception Pages and Inserts are configured using the Queue Manager and Job Manager menus.

The available options within the Special Pages menu are determined by the system administrator.

To Configure Job Cover Pages

1. Open **Printer Manager**.
2. Select a printer or printers to access.
3. Select **Edit Printer Properties.**
4. Select the **Special Pages** menu.
5. The **Covers** button is not available if the **Supported** option is not selected. Make sure **Supported** is selected before continuing.
6. Click the **Covers** button.
7. Select a **Covers** option:
   - **Front Cover**
   - **Back Cover**

8. Select a **Print On** option.

- **Side 1 Only**: Cover placement is on the front of the stock.
- **Side 2 Only**: Cover placement is on the back of the paper stock.
- **Both Sides**: Cover placement is on the front and back of the paper stock. Select **Both Sides** if you need to program the same characteristics for both the front and back covers. Otherwise, sides printed characteristics must be independently programmed for each cover within the job.
- **None**: A cover is not added to the printer.

9. Click **OK** to save your entries and return to the **Printer Status** window.

See Also

Controlling Printer Behavior

Printer behavior is managed form the various menus within the Printer Manager status window.

Managing Printers

The following tasks can be performed at the printer level:

"Updating the Printer Manager window" on page 3-62

"Enabling or Disabling Job Limits" on page 3-62

"Sorting Printers by Status" on page 3-64

"Accepting/Not Accepting Jobs at the Printer" on page 3-64

"Updating Printer Values" on page 3-65

Updating the Printer Manager window

This feature allows you to set the interval at which each Printer Manager window is updated. You can set each Printer Manager window to have the same or different update intervals. Update the display using a time interval that reflects your job processing needs.

To Update the Printer Manager Window

1. Open **Printer Manager**.
2. If desired, you can select printers according to status by using the **Status** menu.
3. Select an option from the **Automatic Update** menu. If **Update Now** is selected, the Job Manager window is immediately refreshed regardless of the Update setting.

Enabling or Disabling Job Limits

The **Maximum Jobs** column displays the maximum number of jobs that each printer is set to accept. If a printer reaches the maximum number of jobs allowed, the printer is not assigned additional jobs until the number of pending jobs is less than the minimum number of jobs allowed for the printer. An icon is displayed until a sufficient number of jobs print.

You can enable and disable the high water mark for the printer. A checkmark indicates that the high water mark limits are enabled.

To Enable or Disable Job Limits

Before you perform this procedure, the limits has to be set on Printer. See "Limiting the Number of Jobs at the Printer" on

1. Open **Printer Manager**.

2. Right-click the printer(s) you want to enable or disable the high water mark.

3. Select **Enable Limits on Number of Jobs Accepted** or **Disable Limits on Number of Jobs Accepted**.

NOTE: *If a printer reaches the high watermark and the disable Limits on Number of Jobs Accepts option is selected, jobs are immediately sent to the printer.*

Sorting Printers by Status

This menu allows you to filter the displayed printer list.

To Sort Printers by Status

1. Open **Printer Manager**.
2. From the Status menu select from:
    - **View All**: this is the default selection that lists all the printers in the Output Management system.
    - **Running**: indicates currently processing jobs.
    - **Ready**: indicates that the device is not printing a job, but could print a job, if sent one.
    - **Stopped**: indicates that the printer is not printing a job due to an internal condition, such as a paper jam.
    - **No Report**: Indicates that no information can be retrieved from the printer.

Accepting/Not Accepting Jobs at the Printer

Jobs cannot flow through a printer unless the printer is set to accept jobs.

To Accept or Not Accept Jobs at the Printer

1. Open **Printer Manager**.
2. The **Accept Jobs** column will either display **Yes** or **No** for each printer. If **Yes** is displayed the printer is accepting new jobs for printing. If **No** is displayed the printer is not accepting new jobs.
3. Select the printer(s) you want to have accept or not accept jobs.
4. Select either the **Accept Jobs** or **Do Not Accept Jobs** icon. The selected printers Accept Jobs status changes to either **Yes** (accepting jobs) or **No** (not accepting jobs).

Updating Printer Values

The Update Values menu allows you to append or overwrite printer values.

Before you perform this procedure, check the **Overwrite and Append Behaviors** information below.

To Update Printer Values

1. Open **Printer Manager**.
2. Select the checkbox for each printer that you want to access. If you select multiple printers, the properties for each selected printer can be accessed using the **Printer Name** list within the Printer Properties window.
1. Select **Edit Printer Properties**.
2. From the **Update Values** menu select from:
    - **Append Values from Device**: adds only the new values found on the printer.
    - **Overwrite Values from Device**: replaces the entire set of values. To overwrite values select **Yes** at the prompt.
    - **Append Values from File (.xcp)...**: Adds only the new values found in the file. You can click the **Browse** button to locate the file.
    - **Overwrite Values from File (.xcp)...**: Replaces the entire set of values. You can click the **Browse** button to locate the file. To overwrite values select **Yes** at the prompt.
    - **Export Values to File (.xcp)...**: Exports the entire set of values to a file. You can click the **Browse** button to set the file location.

Append and Overwrite behaviors

FreeFlow Output Manager provides two options for updating printer supported values: Append and Overwrite. Both options result in a set of values that include at least all supported values from the sources. Append includes the current set of values as one of the sources, while Overwrite does not.

NOTE: *If you have previously removed values that are supported by one or more printers, neither option preserves these deletions.*

When values are merged from two or more sources, the following behaviors may be observed:

• An attribute that displays a value of "supported", "yes" or "no" will be set to "yes" or "supported" if any of the sources contain this value, and the "no" or "supported" check box is not selected.

• An attribute that displays one or more integer values will contain the union of all integer values from the sources (with no duplications).

• An attribute that displays a set of values will contain the union of all values from the sources (with no duplications).

• An attribute that displays as a number range will have its lower limit set to the minimum of all lower limits from the sources, and its upper limit set to the maximum of all the upper limits from the sources.

NOTE: *It is possible that the resulting range will include values that no source actually includes if some of those ranges were disjoint. For example, a range of 10-20 and a range of 15-25 is combined to a single range of 10-25.*

• An attribute that displays as one or more ranges will include all ranges from the sources. Overlapping ranges will be combined into a single range so that the result will be a set of disjoint ranges. For example, a range of 10-20 and a range of 15-25, 30-40 are combined to form 10-25, 30-40.

4. Job Manager

Job Manager allows you to perform job management tasks including: printing, previewing jobs, job submission, view printing conflicts, scheduling jobs, delaying jobs, reprinting jobs, proofing, splitting documents using different printers, tracking job status, and changing job properties.

The job object is the managed unit of work, comprised of one or more documents and the information about those documents.

The document object represents the content that is to be printed and internal formatting information about that content.

NOTE: *The options that are available to you within Job Manager will depend on your Output Manager access rights.*

See Also

"Using Exception Pages" on page 4–57

"Creating Covers" on page 4–58

"Configuring Job Cover Pages" on page 3–60

Differences Between Jobs, Documents, and Split Jobs

The following terms will help you understand how Output Manager processes your print requests.

- **Document**: a single file to be printed. The document represents the data that will be printed and how that data prints. For additional document information, see: "Document Properties" on page 4-61

- **Job**: a collection of one or more documents that are printed as a unit. A job contains instructions for printing (such as paper size) and for notifying you of conditions affecting printing. For additional job information, see: "Editing or Viewing Job Properties" on page 4-12

- **Split jobs**: an entire job that is split in order to balance printer loads, or to spread a large job across two or more printers. Job splitting can also be used for combining multiple documents into one job or diverting specialty portions of a job to printers suited for particular tasks.For additional split job information, see: "Job Split Methods" on page 4-18

NOTE: *When a job containing one or more documents is sent to a printer and is not split, Output Manager will send each document as a separate print job to the printer.*

NOTE: *Editing the properties of a job which has multiple documents sets the properties for each of the documents.*

See Also

The Job Manager Window

The Job Manager window contains a **Job Status** list. From this list you can manage or monitor the jobs submitted or created in Output Manager.

Submit Job... button

Opens the Submit Job dialog where you can enter data to submit the job for printing.

Queue & Status Filter menu

The content of the **Job Status** menu is determined by your selections from the **Queue** and **Status** filter menu. The **Queue** filter lets you view all queues, some queues or choose individual queues.

NOTE: *If the Custom View Group feature has been enabled, the queues in the pull-down list will be limited to those that the logged on user has been granted access.*

To view selected queues, select **View Multiple...** from the Queue pull-down menu and mark the check boxes for the queues you wish to view. Click **OK** to update the **Job Status** list.

The **Status** filter menu lets you view all jobs in the queue selected or restricts the list of jobs by state:

- Active
  - Pending
  - Held
    - Held, preprocessing
    - Held, resources not supported
    - Held, until specified time
    - Held, proofing complete

- Pending
- Processing
- Printing
- Queued at Printer
- Inactive
  - Completed...
    - Completed, successfully
    - Completed, with warnings
    - Completed, with errors
  - Sending
  - Sent to Printer, progress unknown
  - Waiting for Printer
  - Printer Stopped
  - Canceled

Show Job Splits/Hide Job Splits button

This button toggles whether jobs splits are displayed or not. When enabled, Job Split details are shown in expanded mode.

Automatic Update options

The **Automatic Update** feature pull-down menu lets you select how often the **Job Status** list is updated. You can force an immediate update by clicking **Update Now**.

Below the **Job Status** list are controls for managing individual jobs selected from the Status list.

View and Edit Job Properties buttons

These buttons open a dialog box displaying the settings for the job and controls for changing them. Many job management tasks are performed by modifying the job properties.

Hold button

If a print job is pending, and you wish to delay printing of the job, you can place the job on hold.

You can also hold a job until a selected time and/or date by selecting **Hold Job Until...** from the **Job Options** button menu.

Release button

Allows the selected Held job to be printed. The job is placed immediately after all printing or pending jobs.

Cancel button

Terminates printing of the selected job and retains the job in the system based on the retention setting for the job. Canceled jobs

can be resubmitted for printing.

Move

Allows you to move a job to another queue in the system.

Copy

Allows you to make a copy of the selected job to the queue selected in the list.

Request Printer

Allows you to request a specific printer to print the job. All the printers associated with the queue are listed.

View Conflicts

Displays the details of the conflicts found on each printer associated with the queue of the job.

Job Options

Contains additional menu options including:

- **Preview Job**: Allows you to preview the pages of PDF, PostScript and VIPP Job files before printing.

- **Proof Job**: Allows you to print a job proof to a queue associated with the selected printer. The quantity of proofs can be set.

- **Save Job**: Allows you to save a job to a local folder or a document repository.

- **Delete Job**: Eliminates all traces of the job from the system.

- **Hold Job Until**: Allows you to set a time when held jobs are released.

- **Reprint Job**: Places a job back in the queue where the job originated. Prints the job again with no property changes.

- **Resubmit Job**: Places a job back in the queue where the job originated, in a held state

- **Change Quantity**: Allows you to change the quantity of the job.

- **Change Priority**: Allows you to change the priority of the job.

See Also

Job Manager

The Job Status List

From the Job Status list you can manage or monitor the jobs submitted or created in Output Manager. Each row represents a job and contains information about that job.

The columns can be sorted by clicking the column header. The sort arrow shows which column is sorted and whether it is in ascending or descending order.

The Job Status list has the following columns:

- **Checkboxes**: Used to select jobs.
- **Job ID**: The number identifier of the job assigned by the system when the job is received.
- **Job Split Detail**: Indicates if a job is split and by what method (the type of split) and in what manner (the attributes of the split).
- **Job Name**: The file name of the submitted job.
- **Status**: Shows the current state of the job.
- **Queue**: Indicates the queue that the job is assigned.
- **Printer/Job ID**: Indicates the printer that the job is assigned, or the requested printer (indicated by an asterisk). If the job is split, the parent job printer name will be designated as (Multiple). If the job ID at the printer has been assigned, it will be displayed.

  NOTE: *If the job is sent to an iGen4 220 Perfecting Press printer, the job id is from the first controller. To display Printer/Job ID values from both controllers, mouse over the Printer/Job ID value. A pop-up message will appear displaying 2 printer/job id values.*

  If the printer is in Pass-through mode, the job will be forwarded only to the active controller and reflected in the Printer/Job ID vallue.

- **Printer/Queue Access Group**: Indicates the group name that the queue that the job has been submitted to belongs. This column will appear when the administrator is logged on to the system.
- **Pages**: The total number of pages in the job is indicated.
- **Sender**: The logon user name of the person who sent the job from the client or host.
- **Priority**: The priority set on the job either by the queue default or as set by the user. The priority informs the system the order in which the jobs should be processed. A job's priority setting can be set between 1 (lowest priority) and 100 (highest priority). The default priority setting is 50.

See Also

Job Status Icons

The Job Status list uses the icons in the table below to indicate the status of jobs.

Table 4-1. Job Status list icons

icon	explanation
	Job is Held
	Job Held because resources are not supported
	Job Held until a specified time
	Job Held because the queue is set to hold jobs
	Job Held because the split failed
	Job Held because it was rejected by the printer
	Job is proofing
	Job Held because proofing failed
	Job Held. Proofing is complete
	Job Held because printer resources are not ready
	Job Held because the printer is stopped

Table 4-1. Job Status list icons

icon	explanation
	Job Held because preprocessing failed
	Post-processing failed
	Post-processing was successful
	Job Completed successfully
	Job Completed with warnings
	Job Completed with errors
	Job Held due to invalid attribute
	Job waiting due to Background Form being blocked.

Job Split Icons

This table shows icons used to indicate Job Split status in the Job Status list.

Table 4-2. Job Split icons from the Job Status list

icon	explanation
	Split Job (collapsed)
	Split Job (expanded)
	Multiple document job
	A proof of this job has been created
	Split by quantity
	Split by page range
	Split by document
	Split by color
	Split by document set

Monitoring Job Status

The Job Status list lets you monitor jobs created in or submitted to Output Manager.

To Monitor Job Status

1. Open **Job Manager**.

2. The Job Status screen is displayed.

3. To view jobs by Queue assignment, select the desired Queue or Queues from the **Queue** menu.

   NOTE: *If the Custom View Group feature has been enabled, the queues in the pull-down list will be limited to those that the logged on user has been granted access.*

4. To view jobs by status, select the desired status from the **Status** filter menu.

5. To sort the Job Status display by any one category, click that category heading. To view in descending order, click the category heading a second time.

Updating The Job Manager Window

This feature allows you to set the interval at which each Job Manager window is refreshed. Update the job status display using a time interval that reflects your job processing needs.

To Update The Job Manager Window

1. Select **Job Manager**.

2. If desired, you can select jobs within a particular queue by using the **Queue** list menu.

3. Select an option from the **Automatic Update** menu. If **Update Now** is selected, the Job Manager window is immediately refreshed regardless of the Update setting.

The Job Properties Window

Information within the Job Properties Window is available regardless of whether you select View or Edit Job Properties.

To Access the Job Properties Window

1. Open **Job Manager**.

2. Select a job.

3. Select **Edit Job Properties.**

The following fields and menus are available:

- **Status**: Indicates if the job is Processing, Pending, Held, Cancelled, or Completed.

- **Quantity**: Indicates the number of job copies scheduled for printing.

- **View or Edit Job Properties...**: A page opens in either View mode or Edit mode. As an example, if you are currently using the *Edit Job Properties* dialog, *View Job Properties* becomes the available selection.

- **Previous Job/Next Job**: Allows you to access the next or previous job from the group of jobs available in the **Job ID/ Name** menu.

- **Back to Job Status**: Closes the Job Properties dialog window and returns you to the Job Status tab of Job Manager.

- **Document Details...**: Presents document property selections for multi-document jobs.

- **Apply**: Saves all job property changes and comes back to the Job Properties Window/Page. You do not need to select **Apply** before selecting **OK** to save changes.

- **Reset All**: Returns job properties to values set before any changes were attempted.

- **OK**: Saves all job property changes and closes the currently viewed dialog. Your view returns to the Job Status window.

CAUTION: *Do not use the browser Back or Forward navigation buttons to return to previously viewed pages, or the Refresh button. This action may cause unpredictable behavior.*

Editing or Viewing Job Properties

The Job Properties window contains a series of detail screens that display all of the current settings for the job. Many job management tasks are performed by modifying the job properties. All users can view job properties, but only Administrators, Operator 1, and Operator 2 users can edit job properties.

Changing job properties depends on whether the configuration/ property is supported by the queue to which the job is submitted.

Bypass Queues

If a job is sent through a Bypass queue, you can set the following four properties for the job:

- **Schedule Jobs at Printer > By Priority** (Job Priority)
- **Keep Completed Jobs** (Job Retention Period)
- **Post-processing Program**
- **Printer Requested** (Output Device)

To Edit or View Job Properties

You can view and modify the properties of jobs submitted to the controller by performing the following:

1. Open **Job Manager**.

2. Select each job that you want to access. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Select either **View Job Properties** or **Edit Job Properties**. The Job Properties dialog window opens.

4. If you selected more than one job, you can switch between them by selecting a job from the **Job ID/Name** menu.

See Also

Using the Basic Properties Detail

This detail displays general job properties.

To Use the Basic Properties Detail

1. Open **Job Manager.**

2. Select each job that you want to access. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **View Job Properties** or **Edit Job Properties**.

4. Select the **Basic Properties** detail to view job information. The available information depends on the system configuration and job status.

   • **Job ID**: The number identifier of the job assigned by the system when the job is received.

   • **Job Name***:* The file name of the job. If a job name is not assigned to the job by the submitter, the system generates a name for the job automatically.

   • **Queue**: The name of the queue that is assigned to process the job request.

   • **Reprocessed Job IDs**: A number identifier of a job that has been reprocessed.

   • **Client Job ID**: The number identifier of the job when using the LPR IBS protocol. LPR IBS uses this attribute to map the RFC 1179 ID to the internal ID.

   • **Printer Job ID**: The ID of the job on the actual printer.

   NOTE: *If the job was submitted to an iGen4 220 Perfecting Press printer, Printer Job ID will be replaced with two fields, Print Controller/Job ID 1 and Print Controller/Job ID 2.*

   • **Print Controller/Job ID1:** The IP address or printer name and job ID on the first controller.

   • **Print Controller/Job ID2:** The IP address or printer nameand job ID on the second controller. If the printer is in Pass-through mode, only the Print Controller/Job ID receiving the job will be displayed.

   • **Host Name**: The name of the host computer that submitted the job.

   • **Size**: Indicated the size of the file.

   • **Pages**: Indicates the number of pages the job contains.

   • **Pages Printed**: Indicated the total number of pages printed.

Using the Job Processing Options Detail

Properties within the **Job Processing Options** detail screen can be edited with the exception of **Processing by System**, which is set by the system administrator at the queue. Available options depend on queue configuration.

NOTE: *The **Processing by System** designation is read-only, since it is set at the queue. If a job is in a Bypass queue, some menu options are not available and are grayed out.*

See Also

Requesting a Printer

Allows you to select a printer that is associated with the queue to print the job.

To Request a Printer

1. Open **Job Manager**.
2. Select each job that you want to access. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. To choose a printer, select **Request Printer**.
4. Select a printer from the drop-down list of printers associated with the job's queue.

NOTE: *If you plan to split jobs, the Request Printer selection must be **Assigned by Queue**.*

5. You can submit your job or continue setting job properties.

Selecting Pre- and Postprocessing Programs

Preprocessing

Output Manager provides a predefined preprocessing program called "xompdlana.bat". The preprocessor performs the following:

- determines the job PDL (that is, PostScript, PCL, TIFF, PDF).
- determines if the file has color content (Color or Monochrome) for PDF and PostScript files only.
- estimates the number of pages in the job (PostScript, PDF, PCL files only).

Postprocessing

The system administrator sets postprocessing attributes. After a job completes printing, a specific program or script is used that can perform job tasks such as sending an email notification that the job is complete, or writing job/document attributes to a file to perform simple job accounting.

NOTE: *Pre processing or post processing programs/scripts are executable on the FFOM OS platform. Scripts have to be placed in the directory <Install Directory>\scripts to be visible.*

To Select Preprocessing Programs

1. Open **Job Manager**.
2. Select each job that you want to access. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/ Name** menu within the Job Properties window.
3. Click **Edit Job Properties**.
4. Select the **Job Processing Options** detail.
5. Select a **Preprocessing Program**.
6. You can save the job properties or continue setting job properties.

Setting Job Properties Match

You can allow job property substitutions when submitting a job to a queue.

To Set Job Properties Match

1. Open **Job Manager**.
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties**.
4. Select the **Job Processing Options** detail.
5. Select from the following for **Job Properties Match**:
   - **Allow Substitutions**: The queue schedules the job to a device that best supports job properties.
   - **Honor All Job Properties**: The queue will not schedule the job to any device that does not support all job properties.
6. You can submit your job or continue setting job properties.

See Also

"Job Scheduling and Load Balancing" on page 1-16

Proof Quantity

This feature allows you to print a proof copy of a multi-copy job while eliminating the need to resubmit the job to print once the content and/or layout have been verified.

The printed proof will have a banner page with this message: "Proof copy of job <job number>.'

Setting a Proof Quantity

1. Open **Job Manager**.
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties.**
4. Select the **Job Processing Options** menu.
5. Enter a **Proof Quantity** in the field provided.

NOTE: *The Proof Quantity must be set to 0 (zero) for split jobs.*

6. You can submit your job or continue setting job properties.

See Also

"Splitting Jobs" on page 4-68

Job Split Methods

Job splitting can be used to balance printer loads, spreading a large job across two or more printers. Splitting can also be used for diverting specialty portions of a job to printers suited for particular tasks.

Selecting a Job Split Method

1. Open **Job Manager**.
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties**.
4. Select the **Job Processing Options** detail.
5. Select a job splitting method from the **Job Split Method** pull-down menu. The available selections depend on your system configuration.
6. You can submit your job or continue setting job properties.

See Also

"Splitting Jobs" on page 4-68

Setting Job Priority

Each job can be assigned a priority. The priority informs the system the order in which the job should be processed.

NOTE: *This selection is only available if the queue is set to schedule jobs by priority and not First In, First Out.*

To Set the Job Priority

1. Open **Job Manager**.
2. Select each job you wish to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties**.
4. Select the **Job Processing Options** detail.
5. Enter a value in the **Priority** field. The job priority setting can be set between 1 (lowest priority) and 100 (highest priority). The default priority setting is 50.
6. You can submit your job or continue setting job properties.

See Also

Using Hold Job Until

You can set a time at which a job's state is automatically changed from held to pending. The default date and time for the calendar is the current day at 12:00 PM.

To Use Hold Job Until

1. Open **Job Manager**.
2. Select each job you wish to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties**.
4. Select the **Job Processing Options** detail.
5. You can clear any date and time information already entered by clicking the **Clear Date/Time** arrow button.
6. Select a date by performing the following:
    *   Select the calendar icon to choose a date. Use the left and right facing arrows on the month/year banner page to select other months.
    *   Select a time from the drop-down menu.
7. You can submit your job or continue setting job properties.

Keeping Completed Jobs

Specifies the period of time following the completion of job processing and printing that the system retains the job.

When a job is retained, all the document data and instructions required to reprint the job are retained so the job can be reprocessed. When the job's retention period expires, all traces of the job are removed from the system.

To Keep Completed Job

1. Open **Job Manager**.
2. Select each job you wish to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties**.
4. Select the **Job Processing Options** detail.
5. Select the amount of time to want the job to be retained in the system.
6. You can submit your job or continue setting job properties.

Using the Settings Detail

The Settings detail screen allows you to set the number of copies and range of pages to print, select document format and font information, and the fate of the job after printing.

See Also

Setting Job Quantity

Allows you to enter number of job copies to be printed.

To Set Job Quantity

1. Open **Job Manager**.
2. Select each job you wish to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties**.
4. Select the **Settings** detail.
5. Enter a value in the **Quantity** field. The minimum and maximum values of the queue are displayed above the **Quantity** field.
6. You can submit your job or continue setting job properties.

Setting Page Range

Allows you to set the page range you want to print.

To Set the Page Range

1. Open **Job Manager**.
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties.**
4. Select the **Settings** detail.
5. Set the page range you want to print by selecting one of the following:
    - **All**: prints all job pages.
    - **Pages**: enter the range of pages you want to print in the Pages text box.
6. You can submit your job or continue setting job properties.

Selecting Color Contents

Determines if the job has color content.

To Select Color Contents

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Settings** detail.

5. Select from the following Color Contents drop-down items:

   • **Printer Default**

   • **Yes** [full color]

   • **No** [monochrome-grayscale]

   • **Unknown**

6. You can submit your job or continue setting job properties.

Selecting the Document Format

If supported by the printer, you can change the format of a document after it has been submitted to the controller. For example, a change from PostScript to ASCII may be desired in order to print the PostScript commands.

To Select the Document Format

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Settings** detail.

5. From the **Document Format** menu, select from the following:

   • **Unknown**: Cannot be determined by the system

   • **ASCII**: The American (National) Standard Code for Information Interchange, is a standard character-to-number encoding widely used in the computer industry.

   • **PostScript**: A page description language developed by Adobe Systems, Inc. It supports graphics, text, and images with a wide variety of fonts. It is designed to be printer independent.

- **PCL**: (Printer Control Language) A Page Description Language developed by Hewlett-Packard.

- **PDF**: (Portable Document Format) A file format developed by Adobe Systems, Inc.

- **TIFF**: A common image format developed by Aldus and Microsoft for scanned color and black and white images. It is a versatile, reliable, and widely supported bitmap format designed for exchanging digital information.

- **VI Container**: (Variable Information Container) Containers are specialized files containing a collection of components that are bundled into a single file called a "container." Output Manager will forward VI container jobs to printers that support this format. Supported VI Container formats include PPML, VIPP and VIPP Database Mode. The VI Container format needs to be enabled manually because printer will not export it automatically.

NOTE: *PPML, VIPP and VI Database Mode can be set if the version of FreeFlow Print Server is version 5.0 or later. Only PPML is set if the FreeFlow Print Server version is 4.2.*

6. You can submit your job or continue setting job properties.

Selecting Font Options

If the job that you are printing is an ASCII job, you can select the font used to print this job before printing can occur. The font name and size can be selected.

To Select Font Options

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Settings** detail.

NOTE: *The Font Name and Font Size menus are available only if the Document Format selection is ASCII.*

5. Select a **Font Name** from the menu.

6. Type a **Font Size** in the box. The available Font Size range for the queue is displayed above the entry field.

7. You can submit your job or continue setting job properties.

Selecting Open PrePress Interface (OPI) Options

This attribute indicates the type of OPI image insertion to be performed by the printer.

Open PrePress Interface is used to replace low-resolution proxy images with high-resolution images when the job is decomposed. This is useful because low-resolution images transmit much quicker than high-resolution jobs from the client to the controller. Once received, the controller can then access the high-resolution image during decomposition to be used for print.

To Select OPI Options

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Settings** detail.

5. Image Substitution determines the type of OPI image insertion that is performed by the printer. Select an **Image Substitution**:

    • **On**: OPI images referenced in the document file are retrieved, manipulated as specified, and inserted or substituted for those referenced in the document.

    • **Off**: OPI images referenced in the document are not retrieved, inserted or substituted for those in the document. The printer ignores all OPI image insertion references.

6. The **Setting** options determine whether the printer pre-scans the document data in order to validate that OPI images referenced within the document are accessible and, optionally, to send them to the Printer, before processing the job. From the **Setting** menu, select from:

    • **None**: A PreScan is not performed on the job.

    • **Pre-Scan**: Before processing the job, pre-scan the document data and validate that each OPI image exists and is accessible.

    • **Pre-Scan and Gather**: Pre-scan the document data and retrieve the referenced OPI images prior to processing the job. This maximizes processing performance on the job.

7. You can submit your job or continue setting job properties.

Selecting Job Resources

Resource selections are made available for PostScript or PDF jobs only.

To Select Job Resources

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Settings** detail.

5. From the **Pre-Scan Action** menu, select from:
   - **None**: A PreScan is not performed on the job.
   - **Pre-Scan**: Before processing the job, pre-scan the document data and validate that each OPI image exists and is accessible.
   - **Pre-Scan and Gather**: Pre-scan the document data and retrieve the referenced OPI images prior to processing the job. This maximizes processing performance on the job.

6. Select an option from the **Retention After Job Completion** drop-down menu. Options include:
   - **Keep**: All the document data and instructions required to reprint the job are retained so the job can be reprocessed.
   - **Delete**: When the job retention period expires, all traces of the job are removed from the system.

7. You can submit your job or continue setting job properties.

Setting VI Container settings

Allows you to enter VI Container type, and specify all or a range of document sets to be printed. The VI Container format needs to be enabled manually because printer will not export it automatically.

NOTE: *PPML, VIPP and VI Database Mode can be set if the version of FreeFlow Print Server is version 5.0 or later. Only PPML is set if the FreeFlow Print Server version is 4.2.*

NOTE: *For the VI Container settings to be available, the VI Container option must be enabled as a Document Format*

To Set VI Container settings

1. Open **Job Manager**.

2. Select each job you wish to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties**.

4. Select the **Settings** detail.

5. Select the container database type from the Container Type drop-down menu. options include VIPP, VIPP Database Mode and PPML.

6. Select the Document Sets to be printed using the following options:

   • **All**: Select this option to print all the document sets in the file.

   • **Range**: Select this option to specify the range of document sets to be printed.

7. You can submit your job or continue setting job properties.

The Paper Stocks Detail

The **Paper Stocks** detail screen allows you to specify a paper stock for a job.

To Select Paper Stock Options

1. Open **Job Manager**.
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties.**
4. Select the **Paper Stocks** detail.
5. Select stock by selecting one of the following **Specify By** options:
    *   **Name**: Activates the Stock Name field only. Select a predefined named stock from the menu list.
    *   **Properties**: Allows you to select individual stock characteristics. All field are activated except for Stock Name.
6. You can submit your job or continue setting job properties.

Using the Output Format Detail

The **Output Format** detail screen allows you to set output options for a particular job. You can set the following output options:

*   Setting Orientation
*   Setting Layout Options
*   Selecting The Number of Sides Imaged
*   Forcing Pages
*   Setting Collation Options
*   Selecting the Output location
*   Setting Page Delivery Options
*   Using Slip Sheets
*   Setting Offset options
*   Using Transparency Interleaving
*   Setting Sample Delivery Options
*   Setting Finishing Options

Setting Orientation

Orientation describes the position of the page image relative to the actual page and whether the printed image is parallel to the long side of the paper (landscape orientation) or to the short side of the paper (portrait orientation).

To Set Orientation

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Output Format** detail.

5. Select from the following orientation options:

   • **Portrait**: The printed page image is taller than it is wide. When you view a page printed with a portrait orientation, you hold it with the long edges to the side.

   • **Landscape**: The printed page image is wider than it is tall. When you view a page printed with a landscape orientation, you hold it with the short edges to the side

6. You can submit your job or continue editing job properties.

Setting Layout Options

The Layout feature enables you to control the placement, rotation, cropping, and scaling of source document pages onto the printed output. This process is commonly known as Imposition.

To Set Layout Options

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Output Format** detail.

5. Select an option from the **Layout (N up)** menu:

6. You can submit your job or continue editing job properties.

See Also

About Layout Options

The following layout options are available:

- **1 Up**: The 1 Up Layout Style centers the image on the output sheet.

- **2 Up**: The 2 Up Layout Style places two images on a single page. You can impose page 1 and 2 on one sheet of paper or you can impose two of the same images on one sheet. The output can be single-sided or double-sided.

- **4 Up**: The 4 Up Layout Style places four images on a single page. You can impose pages 1-4 on one sheet of paper, or you can impose four of the same images on one sheet of paper. The output can be single-sided or double-sided.

- **8 Up**: The 8 Up Layout Style places eight images on a single page. You can impose pages 1-8 on one sheet of paper, or you can impose eight of the same images on one sheet of paper. The output can be single-sided or double-sided.

- **9 Up**: The 9 Up Layout Style places nine images on a single page. You can impose pages 1-9 on one sheet of paper, or you can impose nine of the same images on one sheet of paper. The output can be single-sided or double-sided.

- **16 Up**: The 16 Up Layout Style places sixteen images on a single page. You can impose pages 1-16 on one sheet of paper, or you can impose sixteen of the same images on one sheet of paper. The output can be single-sided or double-sided.

See Also

"Setting Layout Options" on page 4–29

Selecting The Number of Sides Imaged

Use the Sides Imaged option to select whether the job prints on one or both sides of a page.

To Select the Number of Sides Imaged

1. Open **Job Manager**.
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties.**
4. Select the **Output Format** detail.
5. Select from the following **Sides Imaged** options:
   - **1 Sided**
   - **2 Sided**
   - **2 Sided, Rotate Side 2**
6. You can submit your job or continue editing job properties.

Forcing Pages

This attribute forces selected pages to be imaged on the front side of a sheet in the printed document. This attribute is typically used to start a new chapter or section of a document.

The pages you want to force to side one must be specified by page number.

To Force Pages

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Output Format** detail.

5. Select **Force Page to Side One** to enable forcing pages. The pages you want to force to side one must be specified by page number.

6. You can submit your job or continue editing job properties.

Setting Collation Options

Collation controls the sequence in which pages in a job print.

To Set Collation Options

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Output Format** detail.

5. Select a **Collation** option:

    • **Collated**: Documents are printed in sequential page order and delivered as separate document sets. For example, if you print three sets of a 3-page document, the output is grouped in the following page order: 1,2,3 1,2,3 1,2,3.

    • **Uncollated**: Documents are printed in separate sets of each page. If you print 3 copies of a 2-page document, the output is grouped with three copies of page 1 followed by three copies of page 2.

6. You can submit your job or continue editing job properties.

Selecting the Output location

The Output Location selection determines where the print job is delivered.

To Select the Output Location

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Output Format** detail.

5. Select an **Output Location** option:

   • **Automatic**: This is the default selection. The system determines the most appropriate destination of the given job.

   • **Catch Tray (top)**: Used for simpler jobs that do not require finishing or collated stacking.

   • **Stacker**: Used for most jobs that require stacking or stapling.

   • **Stacker-N**: Choose from the list of available stackers.

6. You can submit your job or continue editing job properties.

Setting Page Delivery Options

Page Delivery determines whether the prints are delivered face up or face down and the order in which the printed pages are delivered to an output device, either first to last or last to first. Specifying the page delivery is important for certain types of finishing.

To Set Page Delivery Options

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Output Format** detail.

5. Select from the following **Page Delivery** options:

   • **Printer Default**: This is the default selection. The system determines the page delivery of the given job.

   • **Face Up; 1-N**: Printed pages are delivered face up, first to last with the last page on top (ascending).

   • **Face Up; N-1**: Printed pages are delivered face up, last to first with the first page on top (descending).

   • **Face Down; 1-N**: Printed pages are delivered face down, first to last with the last page on top (ascending).

   • **Face Down; N-1**: Printed pages are delivered face down, last to first with the first page on top (descending).

6. You can submit your job or continue editing job properties.

Using Slip Sheets

Slip Sheets are pieces of paper or other media that are inserted between document sets in a print job. Slip Sheets differ from job inserts in that they separate one job set from another, while job inserts separate pages of a job.

To Use Slip Sheets

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Output Format** detail.

5. From the **Slip Sheets** list menu, select from including (**On**) or excluding (**Off**) slip sheets.

6. You can submit your job or continue editing job properties.

Setting Offset options

Allows you to offset stacks of output.

To Set Offset Options

1. Open **Job Manager.**

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Output Format** detail.

5. Select **On** from the Offset pull-down.

6. Select from the supported offset options:

   • **Between Jobs**: The offset occurs between each job printed.

   • **Between Sets**: The offset occurs between each job set printed.

   • **Between Subsets**: inserts an offset within a stack (uncollated set) after each specified page number. Select **Between Subsets** and set the **Pages per Subset** value.

7. You can submit your job or continue editing job properties.

Using Transparency Interleaving

Specifies that the printer is to insert interleaved sheets into the document. The numbering of pages in the document must not be affected by the interleaved sheets.

To set Transparency Interleaving

1. Select the **Output Format** detail.

2. Select a supported interleaved sheets option:

   • **Off**: Interleaved sheets are not included with the job.

   • **On**: Interleaved sheets are included with the job.

3. Select a paper stock for the interleaved sheet from the list.

4. Click **OK** to save your entries and return to the **Queue Status** window.

Setting Sample Delivery Options

Sample delivery allows you to select from collated sets or uncollated sheets.

To Set Sample Delivery Options

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Output Format** detail.

5. The following **Sample Delivery** options are available.

   • **Printer Default**: This is the default selection. The system determines the Sample Delivery of the given job.

   • **Every**: Enter a numeric value for the amount of Uncollated Sheets or Collated Sets that you want to print.

6. The available Sample Delivery option depends on your collation selection. The **Collated Sets** option is available for collated jobs and the **Uncollated Sheets** option is available for uncollated jobs. You can change the active selection by changing the job collation option.

   • **Uncollated Sheets***: Documents are printed in separate sets of each page. If you print 3 copies of a 2-page document, the output is grouped with three copies of page 1 followed by three copies of page 2.

   • **Collated Sets***: Documents are printed in sequential page order and delivered as separate document sets. For example, if you print three sets of a 3-page document, the output is grouped in the following page order: 1,2,3 1,2,3 1,2,3.

7. You can submit your job or continue editing job properties.

See Also

Setting Finishing Options

Finishing is a general term referring to the processes, such as stapling, binding, stitching, folding, and hole-punching, that are typically performed on a job after it has finished printing.

To Set Finishing Options

1. Open **Job Manager.**

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Output Format** detail.

5. From the **Finishing** list, select the check box for the desired finishing type and then select a detailed option from the drop-down menu below the radio button.

   NOTE: *If the printer supports multiple finishing options, you can select more than one finishing type.*

6. You can submit your job or continue editing job properties.

The Image Adjustments Detail

The **Image Adjustments** detail screen allows you to make image quality adjustments including: darkness, toner saver, halftone screen, and image shift.

TIP: Make image quality adjustments in small increments. Making large adjustments can actually create image quality problems.

See Also

Setting Page Rotation

You may need to rotate a page image so that it prints properly when processed by a finishing device (for example, to allow for right-side stitching or binding).

To Set Page Rotation

1. Open **Job Manager.**
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties.**
4. Select the **Image Adjustments** detail.
5. Select a **Rotation** option.
6. You can submit your job or continue editing job properties.

Setting Anti-aliasing Options

Anti-aliasing is a method for reducing the jagged appearance (caused by rasterization) of curves and diagonal lines. Anti-aliasing enhances the smoothness of such curves and lines.

To Set Anti-Aliasing Options

1. Open **Job Manager**.
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties.**
4. Select the **Image Adjustments** detail.
5. Select from the following Anti-aliasing options:
   - **Off**: does not apply the anti-aliasing algorithm
   - **On**: applies the anti-aliasing algorithm
   - **K100% High Resolution:** applies high resolution algorithm
6. You can submit your job or continue editing job properties.

Setting Resolution

Use the resolution option to achieve better performance for jobs that were saved, or scanned (if your system features a scanner).

NOTE: *Resolutions vary from printer to printer, and not all resolutions print exactly as expected.*

To Set Resolution

1. Open **Job Manager**.
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties.**
4. Select the **Image Adjustments** detail.
5. Select an option from the **Resolution** pull-down menu.
6. You can submit your job or continue editing job properties.

Setting Halftone Options

Halftone allows you to adjust the pattern of dots or lines of varying sizes applied to an image of varying tones, or same sized dots applied to a tint of color.

To Set Halftone Options

1. Open **Job Manager.**
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties.**
4. Select the **Image Adjustments** detail.
5. Select a **Halftone** screen option from the pull-down menu.

NOTE: *The option selected in the Halftone pull-down menu will be applied equally to image objects, graphics objects, and text objects.*

6. You can submit your job or continue editing job properties.

Darkness Options

The Darkness options allow to adjust print darkness, mode, and toner settings when using monochrome printers.

The following darkness controls are available:

- Controlling Print Darkness
- Selecting a Darkness Mode

NOTE: *The key to making adjustments to any of the image quality controls is to do so in small increments. Making large adjustments can actually create image quality problems.*

Controlling Print Darkness

The Print Darkness control makes all pixels lighter or darker.

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Image Adjustments** detail.

5. The following **Print Darkness** options are available:

   - **Printer Default**: This is the default selection. The system determines the darkness of the given job.

   - Enabling the **Print Darkness** control:

     – Clear the **Printer Default** option.

     – Use the slide bar or enter a value using the spin box. Increasing Darkness (-) moves all pixels in the image toward black. Decreasing Darkness (+) moves all pixels toward white.

6. You can submit your job or continue editing job properties.

Selecting a Darkness Mode

The Darkness Mode allows you to select a print quality:

1. Open **Job Manager.**

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Image Adjustments** detail.

5. The following **Darkness Mode** options are available:

    • **Normal Darkness**: Specifies that the ability to adjust print darkness on this printer is enabled.

    • **DocuTech 135**: This setting prints output that is similar in appearance to that of a DocuTech 135 printer.

    • **DocuTech 135 with Darkness Adjustments**: Specifies that the print darkness applied should attempt to match that used on DocuTech 135, and the light/dark value can be supplied as well.

    • **DocuTech 6180**: This setting prints output that is similar in appearance to that of a DocuTech 180 printer.

    • **DocuTech 6180 with Darkness Adjustments**: Specifies that the print darkness applied should attempt to match that used on DocuTech 180, and the light/dark value can be supplied as well.

    • **Native**: Specifies the neutral or nominal darkness setting native to the printer.

6. You can submit your job or continue editing job properties.

Toner Saver

Enabling Toner Saver uses less toner and is therefore more economical than the full-quality setting (Off). You may want to use the On setting when printing proof documents.

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Image Adjustments** detail.

5. The following **Toner Saver** options are available:

   • **Printer Default:** This is the default selection. The system determines the toner saver setting.

   • **Off**: Toner Saver is not enabled.

   • **On**: Toner Saver is enabled.

6. You can submit your job or continue editing job properties.

Image Resample Methods

Use Image Resample to select an interpolation method. Output Manager provides the you with the ability to select an interpolation, or image resample, method in order to achieve maximum Image Quality at the desired RIP performance. Interpolation is defined as the process of estimating a value of a function between two known values. In the Image Interpolation context, the function of known values is the input image, and the estimated values are the values calculated for the output image. Image interpolation attempts to produce a smooth transition between adjacent samples rather than simply replicating pixels (which would result in "blocky" images).

The interpolation methods that may be selected are:

   • **Printer Default**: The feature is handled by the printer that receives the job, using the printer default behavior

   • **Bi-Linear**: A method used to scale image data (pixels) from one resolution to another. The replacement pixel in the scaled image is calculated using a weighted sum of the four nearest pixel values in the source image. This method offers higher quality than Nearest Neighbor Interpolation.

   • **Nearest Neighbor**: A method used to scale image data (pixels) from one resolution to another. The output pixel value is simply the value of the input pixel closest to the output location.

   • **Smart**: A method used to scale image data (pixels) from one resolution to another. This interpolation method automatically chooses between interpolations based on the input image characteristics.

Shifting the Image

Use Image Shift to adjust the location on a page where printing occurs. The procedure to shift an image varies based on whether you are printing on a one-sided or two-sided page.

To Shift the Image

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Image Adjustments** detail.

5. From the **Image Shifts** field, select a unit of measure.

6. Select an image shift from the **Set Shifts On** pull-down menu. Your selection activates the appropriate adjustment fields. Options include:

   • Side 1 Only

   • Side 2 Only

   • Side 1 and 2 - Same

   • Side 1 and 2 - Different

7. Adjust the **X** and **Y** axis fields:

   • When selecting the horizontal (X) image shift, enter a positive number to move the image away from the left side of the paper. Enter a negative number to move the image away from the right side of the paper.

   • When selecting the vertical (Y) image shift, enter a positive number to move the image upward or a negative number to move the image down.

8. You can submit your job or continue editing job properties.

Using a VIPP Initialization File

A user defined initialization file can be specified. The file is located on the FreeFlow Print Server.

To use a VIPP Initialization File

1. Open the **Image Adjustments** detail.

2. Select **User Defined** from the VIPP Initialization File pull-down menu.

3. Type the file name for the file into the text box.

Using Background Forms

The **Background Forms File Name** field is a read-only field in Job Manager. This field displays the name of the background form file associated with the job. If the queue that the job is sent to is configured to schedule jobs with background forms, the file can be printed. If the queue is not configured to schedule these jobs, it will be placed in a held state.

See for "Using Background Forms" on page 2-49 more information on enabling queues to schedule jobs with background forms.

The Color Detail

Color features are used to assist with matching color for printing. Color Quality features can include hardware devices such as spectrophotometers and colorimeters, and software such as color profiles, tonal reproduction curves (TRCs), and color space transformations.

Devices such as the spectrophotometer measure the printed output of a printer; this data is then used to calibrate the printer and/or create appropriate TRCs which can adjust for any color matching problems caused by the printer itself.

Color matching software is used to convert between device dependent RGB and CMYK color spaces to a device independent color space in order to match colors by adjusting for differences between device color gamuts.

See Also

Selecting Print Color

If enabled by the system administrator, this feature enables the printer to render a color document in full color or use an algorithm that maps the full range of colors to alternate values, such as gray scale or monochrome. If enabled, you can override the color attributes of a job to create a monochrome output.

To Select Print Color

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties**.

4. Select the **Color** detail.

5. From the **Print Color As** menu, select from:

   • **Full Color**

   • **Highlight Color**

   • **Black and White**

6. You can submit your job or continue editing job properties.

Setting Black Overprint

Black Overprint is an image quality enhancement process performed during RIP that prevents the background of a black object from being removed. With the black being printed over the other color layers, any misregistration in the print engine or press will not result in white gaps. Black overprinting may be affected by the under-colors.

To Set Black Overprint

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties**.

4. Select the **Color** detail.

5. From the **Black Overprint** pull-down menu, select from:

   • **Off**: does not print black on top of color.

   • **On**: prints black on top of color.

6. You can submit your job or continue editing job properties.

User TRC

You can select Tonal Reproduction Curves (TRC) to achieve desired, repeatable results from specified paper stocks. The TRC is a graphical representation of four curves, one each for Cyan, Magenta, Yellow, and Black.

Within Job Manager, the desired User TRC can be applied to all pages within a job or to a specified page range within the job.

Setting User TRC

1. Open **Job Manager.**

2. Select each job you wish to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Select **Edit Job Properties**.

4. Select the **Color** detail.

5. Select the **User TRC** from the pull-down menu.

6. You can submit your job or continue editing job properties.

Pantone Color Processing

This feature adds flexibility when matching page level elements at the press.

Some job pages contain three types of object elements: images, graphics and text. In some cases, a shift in hue may be noticed between an image object (bitmap/TIFF/image-in-eps) and a graphic/ text object on a page.

This shift in hue can occur when using Pantone colors where the graphic/text have formal Pantone calls, while the bitmap/image on the same page is not composed of a defined Pantone name/ number. The bitmap/image contains a CMYK representation of a color and not a Pantone call. This difference in construction results in proper Pantone number rendering for the graphic/text element, but a second CMYK based rendering for the bitmap. As a result, slight hue changes between the bitmap and Pantone graphic/text are visible.

By disabling Pantone processing, you can eliminate this problem.

Selecting Pantone Color Processing

1. Open **Job Manager.**

2. Select each job you wish to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties.**

4. Select the **Color** detail.

5. Select a **Pantone Color Processing** option.

6. You can submit your job or continue editing job properties.

Using Clear Coat

Clear Coat is the use of a clear toner to apply to the print document. Applying clear toner can be applied to the entire page or selected portions of the page.

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the Job ID/Name menu within the Job Properties window.

3. Click **Edit Job Properties**.

4. Select the **Color** detail.

5. Select a **Clear Coat** option. The options are Off, Full Page Flood and Select Objects. If Select Objects is selected additional options will be enabled. Select one or more of the options.

6. You can submit your job or continue editing job properties.

Using Highlight Color

Highlight color is the use of black and one specified color to print documents. Black and white, highlight color, and full color documents can be printed black and white, or highlight color.

Consider the following when using highlight color options.

- The Highlight Color, Mapping Color, Mapping Algorithm, and Mismatch Action work together to produce the final printed result.

- If you want to change the highlight color used to print your document, set the highlight color option to the color you want, and set the color mismatch option to Operator Intervention.

- If you set the Highlight Printing Color to a color other than the color loaded at the printer and leave the default setting for Mismatch Action at Use Loaded Color, the document prints using the available toner.

To Use Highlight Color

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties**.

4. Select the **Color** detail.

5. Select a **Highlight Color Mapping Algorithm**: These selections determine how full-color documents are mapped into highlight-color or monochrome.

6. Select a **Highlight Color Mapping Color**. This option allows you to specify which colored parts of the document are printed in the available Highlight Color. The Mapping Color determines which parts of the document print in color and which in shades of gray.

7. Select a **Highlight Color Printing Color**. Loaded Color is the color loaded at the printer and is the default selection. If the toner color loaded at the printer is red and without setting the mapping color option (next step) to a color other than red, only the red parts of the document print in red; the blue parts print in tints and shades of highlight color and gray. If the map color is changed to blue, the blue parts of the document print in the highlight color of red; other colors print in tints and shades of the highlight color and gray. However, for a monochrome mapping scheme, the entire document prints in shades of gray.

8. Select a **Highlight Color Mismatch Action**. This determines what action is taken when the loaded highlight color is not the same as the selected highlight color.

9. You can submit your job or continue editing job properties.

   NOTE: *Information is sent to the printer that supports the selected Highlight Color attributes (e.g., DocuPrint NPS). The printer performs the appropriate action.*

See Also

Adjusting Lightness

Lightness controls the relative brightness of the color in the printer's gamut.

Increasing the lightness value causes the output to appear lighter and decreasing the lightness value causes the output to appear darker.

To Adjust Lightness

1. Select **Job Manager**.
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties**.
4. Select the **Color** detail.
5. **Lightness** can be set to the desired level +/-100 units. A lightness value of -100 will cause the output to appear black, and a lightness value of 100 will cause the output to appear white. Depending on the content of the original image, the output for a lightness value of 100 may be the same as the output for a lower lightness value, and the output for a lightness value of -100 may be the same as the output for a higher lightness value.
6. You can submit your job or continue editing job properties.

Adjusting Contrast

Contrast controls the difference of tonal gradation between the light and dark values within an image in the printer's gamut.

Increasing the contrast value increases the variation between light and dark areas of the printed document and decreasing the contrast value decreases the variation between light and dark areas of the printed document.

To Adjust Contrast

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties**.

4. Select the **Color** detail.

5. **Contrast** can be set to the desired level +/-100 units. A contrast value of -100 causes the output to appear a solid midtone gray color, and a contrast value of 100 causes the output colors to either use full color (the maximum is restricted by the system ink limit) or no color for each of Cyan, Magenta, Yellow, and Black.

6. You can submit your job or continue editing job properties.

Adjusting Saturation

Saturation controls the strength or purity of the color in the printer's gamut. Increasing the saturation value causes the output to contain more vibrant colors, and decreasing the saturation value causes the output to contain more pastel and gray colors.

To Adjust Saturation

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties**.

4. Select the **Color** detail.

5. **Saturation** can be set to the desired level +/-100 units. A saturation value of -100 causes the output to appear gray, and a saturation value of 100 causes the output to have all bright colors. Depending on the content of the original image and the gamut of the print engine, the output for a saturation value of 100 may be the same as the output for a lower saturation value, and the output for a saturation value of -100 may be the same as the output for a higher saturation value.

6. You can submit your job or continue editing job properties.

Adjusting Color Cast

Color Cast adjustments provide you the ability to increase or decrease the amount of any single color. Increasing (+) the amount of one color decreases the amount of its complementary color.

To Adjust Color Cast

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties**.

4. Select the **Color** detail.

5. The **Color Cast** adjustments are:

   • **Cyan - Red**: The Cyan-Red color cast adjustment shifts the color towards cyan or red. Decreasing the value to -100 indicates the maximum cyan color cast supported by the system is applied to the document. Increasing the value to 100 indicates the maximum red color cast supported by the system is applied to the document.

   • **Magenta - Green**: The Magenta-Green color cast adjustment shifts the color towards magenta or green. Decreasing the value to -100 indicates the maximum magenta color cast supported by the system is applied to the document. Increasing the value to 100 indicates the maximum green color cast supported by the system is applied to the document.

   • **Yellow - Blue**: The Yellow-Blue color cast adjustment shifts the color towards yellow or blue. Decreasing the value to -100 indicates the maximum yellow color cast supported by the system is applied to the document. Increasing the value to 100 indicates the maximum blue color cast supported by the system is applied to the document.

6. You can submit your job or continue editing job properties.

Setting Trapping

Trapping is an image processing technique used to compensate for misregistration of color planes in a print engine or press. Misregistration results in white gaps and shifted hues.

Usage Advice

- Generally, a trapping zone above 4 pixels is visually obvious and not pleasing to the eye. A higher value should be considered carefully; however, the ability to set a higher trap zone has been included to give you control over individual images that have been poorly trapped individually.

- Two direction parameters are included because the feed direction has a marginal effect on image quality. However, in nearly all cases, you would set these two values the same.

To Set Trapping

1. Open **Job Manager**.
2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.
3. Click **Edit Job Properties**.
4. Select the **Color** detail.
5. Trapping is applied to the edges of all text, graphics, images, and sweeps. If **Printer Default** for **Trapping** is cleared, the **Cross Feed Direction** and **Feed Direction** fields become available.
6. Within the **Trapping** field, you may enter pixel values for the width and height parameters, from 1 to 20 pixels. The Feed Direction icon presents a visual representation of trapping adjustments.
   - Clear **Printer Default for Cross Feed Direction** to enter a value.
   - Clear **Printer Default for Feed Direction** to enter a value.
7. You can submit your job or continue editing job properties.

Source Color Options

Select Source Color settings for RGB Color Space, CMYK Color Space, and/or Gray Color Space. You may make separate Source Color assignments within each color space for the Images, Text and Graphics profile.

Source Color options are accessed by performing the following:

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties**.

4. Select the **Color** detail.

   • RGB Color Space

   • CMYK Color Space

   • Gray Color Space

RGB Color Space

Specifies the source color space profile to be used in the RGB color space for rendering graphics to only those parts of a document that have no defined color space translation profile.

1. Select the **Color** detail.

2. To select **RGB Color Space** options, select the following **RGB Color Space** options for **Images**, **Graphics** and **Text**:

   • **Printer Default**: Indicates no value is set and that Output Manager intends the DFE/Controller to decide the value.

   • **SRGB:** SRGB mode according to the Default RGB color space as defined in [IEC 61966-2.1]. See: *"References" in Appendix A of CPSS Volume 1-Information Model.*

   • **Xerox Consistent Color Mode RGB:** Xerox Consistent Color mode for RGB color space.

   • **Xerox Consistent Color Mode RGB, Gamma=1:** Xerox Consistent Color mode for RGB with a gamma value of 1.

NOTE: *You may select a specific Profile for all data types, or you may select different Profiles for images, text and graphics.*

3. You can submit your job or continue editing job properties.

CMYK Color Space

Specifies the source color space profile to be used in the CMYK color space for rendering graphics to only those parts of a document that have no defined color space translation profile.

1. Select the **Color** detail.

NOTE: *You may select a specific Profile for all data types, or you may select different Profiles for images, text and graphics.*

2. To select **CMYK Color Space** options, **Printer Default** must be cleared. Select the following **CMYK Color Space** options:

   • **Native CMYK**: The CMYK color space of the target color printer.

   • **SWOP:** Emulates the CMYK SWOP (i.e., Standard for Web Offset Press) ink color gamut when printed on coated media.

   • **Euroscale**: Emulates the European ink color gamut standard for offset presses when printed on coated media.

   • **Japan Color**: Emulates the color gamut of the combined/common Dinippon and Toyo Inks standard when printed on coated media.

   • **Enhanced SWOP**: Emulates a more saturated version of the CMYK SWOP color gamut when printed on coated media.

   • **Euroscale Matte**: Emulates the color gamut of European inks placed on matte finish media.

   • **Euroscale Uncoated**: Emulates the color gamut of European inks placed on uncoated media.

3. You can submit your job or continue editing job properties.

Gray Color Space

Specifies the symbolic name of the source color space profile that will be used to translate grayscale data to L* intensity values for rendering graphics to only those parts of a document that have no defined color space translation profile.

1. Select the **Color** detail.

2. To select **Gray Color Space** options, **Printer Default** must be cleared. Select the following **Gray Color Space** options for:

   • **Images**

   • **Graphics**

   • **Text**

3. You can submit your job or continue editing job properties.

Output Color Options

Select Output Color settings for **Front Setup**, **Back Setup**, **Emulation** and **Rendering**. You may make separate output color rendering assignments for images, text, and graphics.

- Destination Profile
- Rendering

Destination Profile

Specifies the color space profile to be used in the document.

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties**.

4. Select the **Color** detail.

5. Select a **Front Destination Profile**. This specifies the color space profile to be used on the front side of the output media both single-sided and double-sided documents.

   - **System Specified**

   - **Values from Printer** (e.g., Xerox DC2000, Monochrome CMYK)

6. Select a **Back Destination Profile**. This specifies the color space profile to be used on the back side of the output media.

   - **System Specified**

   - **Values from Printer** (e.g., Xerox DC2000, Monochrome CMYK)

7. Select an **Emulation** value. This selection causes the printer to emulate the output of a different color-printing device.

   - **Printer Default**: A **Printer Default** selection indicates that Output Manager does not support the feature. The feature is thus handled by the printer that receives the job, using the printer default behavior.

   - **None**: No emulation is applied at the printer; the printer's native color information is used.

   - **SWOP**: Emulates the CMYK SWOP (i.e., Standard for Web Offset Press) ink color gamut when printed on coated media.

- **Enhanced SWOP**: Emulates a more saturated version of the CMYK SWOP color gamut when printed on coated media.

- **Euroscale**: Emulates the European ink color gamut standard for offset presses when printed on coated media

- **Euroscale Matte**: Emulates the color gamut of European inks placed on matte finish media

- **Euroscale Uncoated**: Emulates the color gamut of European inks placed on uncoated media

- **Japan Color**: Emulates the color gamut of the combined/common Dainippon and Toyo Inks standard when printed on coated media

8. You can submit your job or continue editing job properties.

Rendering

Occasionally, the requested colors in an image are outside a given printer's "gamut" and cannot be exactly reproduced. Rendering provides color mapping between the image's "Source" gamut and the printer's own gamut.

1. Open **Job Manager**.

2. Select each job that you want to edit. If you select multiple jobs, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

3. Click **Edit Job Properties**.

4. Select the **Color** detail.

5. You can choose different rendering options for images, text, and graphics. For instance, you might choose Perceptual for the images, Pure for the text, and Relative Colorimetric for the graphics, in order to optimize each output type appropriately. Select Rendering for Images, Graphics and Text:

   - **Printer Default**: A **Printer Default** selection indicates that Output Manager does not support the feature. The feature is thus handled by the printer that receives the job, using the printer default behavior.

   - **Automatic**: The printer determines the selection of an appropriate rendering intent for each of the objects in the job, using the rendering intents available in the selected ICC profile(s).

   - **Saturation**: Optimizes the rendering of business graphics, such as charts and graphs.

   - **Perceptual**: Optimizes the rendering of photographic images.

- **Relative Colorimetric**: Also optimized for rendering of spot color and logos. This transformation, however, uses additional information, such as hue and saturation, specified in the source profile to select the most appropriate value within the printer gamut.

- **Absolute Colorimetric**: Optimized for rendering to spot color and logos by identifying the closest value within the printer gamut.

- **Pure (for Text):** Optimized for rendering of text and line art. The "Pure" intent attempts to subdue halftone textures, thus increasing the visibility of small text.

- **Blended Pictorial and Graphics**: This rendering intent is appropriate for mixed content page images consisting of pictorial and graphic objects.

6. You can submit your job or continue editing job properties.

The Job Notes and Accounting Detail

The **Job Notes and Accounting** detail presents information that is sent along with the printed job. The following fields are displayed:

Job Notes fields:

- **Banner Page Message**: Information you want to be printed on the banner page of the print job. You can type up to 1000 characters in this field.

- **Special Instructions**: Any additional job instructions. You can type up to 1000 characters in this field.

- **Deliver To**: The name of the person who receives the job. If you don't know the name, you may enter a recipient location or other pertinent job information.

Accounting fields:

- **Sender**: The logon user name of the person who sent the job from the client or host. This field is read only.

- **Account**: This field can contain an internal billing number, a credit card number, or other tracking or billing numbers.

- **Account User ID***:* The number identifier of the job sender.

- **Additional Accounting Data:** Can contain any additional account information.

Using the Special Pages Detail

The **Special Pages** detail screen contains features that enable you to manage exception pages, cover pages, and page inserts. Use the following links to see a description of each special page.

- Using Exception Pages: Exception pages enable you to set special characteristics for specific pages within a job.

- Creating Covers: Cover pages add a finished appearance to jobs and are typically used for bound, stapled, or stitched jobs.

- Using Inserts: A page insert is a blank piece of paper, or other media, that is inserted between printed pages in a job.

Using Exception Pages

Exception pages enable you to set special characteristics for specific pages within a job. Most menu selections within the **Exception Pages** detail are the same as those in Job Manager. Menu differences are explained, but similar features contain links to Job Manager definitions.

NOTE: *If Exception Pages is supported on the queue, the job level Exception Pages dialog is available in both View or Edit mode. If Exception Pages is not supported on the queue, the job level Exception Pages dialog is available in only View mode, with job ticket values displayed.*

To Create Exception Pages

1. Open **Job Manager**.
2. Select the job.
3. Click **Edit Job Properties**.
4. Select the **Special Pages** detail.
5. Select the **Exception Pages** button. The Job Name and Job ID are displayed at the top of the menu.
6. Enter a page range for the exception pages. If you want the Exception Pages placed from page 12 through page 16, enter 12 - 16 in the **Page Range** field. Enter 27, 33 for individual page locations.

NOTE: *When creating more than one exception page for a job, be sure that the page ranges do not conflict.*

7. You can select paper stock by stock name or properties:

- If **Name** is selected, you can select a stock from the **Stock Name** pull-down menu.

Or,

- Select **Properties** and choose individual stock characteristics.

NOTE: *Be sure the attributes you select are supported on the printing system.*

8. Set **Image Adjustments** options.

9. Set **Color** options.

10. Click **OK** to save your entries and return to the **Special Pages** menu, where the exception page is listed.

See Also

Creating Covers

Covers add a finished appearance to jobs and are typically used for bound, stapled, or stitched jobs. Covers are programmed as part of a print job; therefore, any printing required on the cover pages must be submitted as part of the job.

NOTE: *If Covers is supported on the queue, the job level Covers dialog is available in both View or Edit mode. If Covers is not supported on the queue, the job level Covers dialog is available in only View mode, with job ticket values displayed.*

NOTE: *Do not specify the page/color splitting with Covers as the results may be undesirable*

To Create Covers

1. Open **Job Manager**.

2. Select the job.

3. Select **Edit Job Properties**.

4. Select the **Special Pages** detail.

5. Click the **Covers** button. The **Job Name** and **Job ID** are displayed at the top of the menu.

6. Choose a cover placement from the Print On menu:

   • **Side 1 Only**: Cover placement is on the front of the stock.

   • **Side 2 Only**: Cover placement is on the back of the paper stock.

   • **Both Sides**: Cover placement is on the front and back of the paper stock. Select **Both Sides** if you need to program the same characteristics for both the front and back covers. Otherwise, the paper stock and sides printed characteristics must be independently programmed for each cover within the job.

7. You can select stock by stock name or properties:

   • If **Name** is selected, you can select a stock from the Stock Name pull-down menu.

   Or,

   • Select **Properties** and choose individual stock characteristics.

   NOTE: *Be sure the attributes you select are supported on the printing system.*

   For additional stock information, see: The Paper Stocks Detail

8. Click **OK** to save your entries and return to the **Special Pages** detail, where the covers are listed.

See Also

"Using Exception Pages" on page 4–57

"Configuring Job Cover Pages" on page 3–60

"Using Inserts" on page 4–60

Using Inserts

Job inserts differ from slip sheets in that they separate pages of a job while slip sheets separate one job from another. Inserts may also be preprinted stock or forms.

NOTE: *When two or more special pages are programmed (covers, inserts, or exception pages) image ordering conflicts may occur. Verify that programmed options do not conflict.*

To Create Inserts

1. Open **Job Manager**.
2. Select the job.
3. Select **Edit Job Properties**.
4. Select the **Special Pages** detail.
5. Click the **Inserts** button. The **Job Name** and **Job ID** are displayed at the top of the menu.
6. From the **Insert Location** menu, select from:
   - **Insert as Page 1**: The insert is placed as Page 1 of the job.
   - **Insert After Page**: Enter the page number where you want the insert placed.
7. Within the **Quantity** field, enter the number of insert pages you want to place in that location.
8. You can select stock by stock name or properties:
   - If **Name** is selected, you can select a stock from the **Stock Name** pull-down menu.

   Or,

   - Select **Properties** and choose individual stock characteristics.

   NOTE: *Be sure the attributes you select are supported on the printing system.*

   For additional stock information, see: The Paper Stocks Detail
9. Click **OK** to save your entries and return to the **Special Pages** detail, where the inserts are listed.

Document Properties

A job consists of one or more documents. When you submit a file to print, it becomes a job containing one document. When creating a job with multiple documents, you can control the job and it's documents as a unit. As an example, you can you can think of a job as a book with chapters, with each chapter being a document. When viewing a Job containing multiple documents, you can also:

- view each document
- reorder the printing sequence of documents
- cancel and delete individual documents.

When a multiple document job is printed, each document is sent as a separate job to the printer.

When using job-splitting by documents, the documents are distributed amongst the available printers that meet the document's print requirements.

Multiple document jobs are created using the Command Line Interface (CLI).

xomprijob -q <queue> file1 file2 file3 file4

Alternatively, you can submit a job in the Held state and then add documents using CLI.

xomprijob -q <queue> -k file1

xomadddoc <jobid> file2

xomadddoc <jobid> file3

Documents differ from jobs in the following manner:

- **Document**: a single file to be printed. The document represents the data that will be printed and how that data prints.

- **Job**: a collection of one or more documents that are printed as a unit. A job contains instructions for printing (such as paper size) and for notifying you of conditions affecting printing.

The section, Viewing or Editing Document Properties, pertains to multiple document jobs that have already been sent to Output Manager via CLI.

See Also

"Deleting a Document" on page 4-63

"Changing the Printing Sequence of Documents" on page 4-63

Viewing or Editing Document Properties

The Document Properties window contains the same menu selections as those in Job Manager, except for the following:

- The **Basic Properties** menu contains read only information.
- There is no **Job Processing Options** menu. Job Processing options are placed on the job level.

To View or Edit Document Properties

1. Open **Job Manager**.

2. Select the checkbox for the job containing the document properties that you want to access.

3. Select from **View Job Properties...** or **Edit Job Properties...**. The Job Properties dialog window opens.

4. Select **Document Details**. Only jobs containing documents will display this menu selection. The Document Details or Document Status window opens.

5. Select one or more documents and click on Edit/View document properties button.

6. Select a document from **Document Sequence/Name** pull-down menu.

7. The property changes made apply only to the selected document. Adjust settings using the menus.

   NOTE: *Any attribute changes at the job level will apply to all of the documents in the job.*

8. To save your document property changes, select **Apply** before going to another document. If you do not want to apply your changes, select **Reset All** and then click **OK**.

9. Select additional documents as needed using the **Document Sequence/Name** menu.

See Also

"Using the Settings Detail" on page 4-20

"The Paper Stocks Detail" on page 4-27

"Using the Output Format Detail" on page 4-27

"The Image Adjustments Detail" on page 4-36

"The Color Detail" on page 4-43

"The Job Notes and Accounting Detail" on page 4-56

"Using the Special Pages Detail" on page 4-57

Deleting a Document

NOTE: *A document cannot be deleted if there is only one document defined in a job, or it is the last non-cancelled document within a job.*

To Delete a Document

1. Open **Job Manager**.

2. Select the checkbox for the job containing the document that you want to delete.

3. Click **View Job Properties**. The Job Properties dialog window opens.

4. Click **Document Details**. Only jobs containing documents will display this menu selection. The Document Details window opens.

5. Select the documents that you want to delete.

6. Select **Delete** and confirm your action. The document is removed from the list.

Changing the Printing Sequence of Documents

You can change the order in which documents are printed.

To Change the Printing Sequence of Documents

1. Open **Job Manager**.

2. Select the checkbox for the job containing the document properties that you want to access.

3. Click **View Job Properties**. The Job Properties dialog window opens.

4. Click **Document Details**. Only jobs containing documents will display this menu selection. The Document Details window opens.

5. Select the document that you want to move up or down in the printing order.

6. Select **Move Up** or **Move Down**.

Printing and Managing Jobs

Job Manager is designed to give you easy access to printing and managing jobs.

You can perform the following tasks within Job Manager:

- Selecting jobs
- Previewing PDF, PostScript and VIPP Jobs
- Submitting a Job to Print
- Saving a Job
- Splitting Jobs
- Holding a Print Job
- Releasing a Held Job to Print
- Resubmitting a Job
- Reprinting a Job
- Deleting a Job
- Canceling a Job
- Moving a Job to Another Queue
- Copying a Job to Another Queue
- Printing a Proof Job
- Viewing Printer Conflicts

Selecting jobs

You can select jobs to View and Edit Job Properties, when selecting an option from the **Job Options** pull-down menu and to submit jobs for printing.

You can select jobs individually or in groups:

- *Selecting jobs individually*: Select each job by selecting the associated checkbox, which is located on the left side of the job status list. You can then deselect any selected job.

- *Selecting all jobs*: clicking the icon in the column header selects or deselects all listed jobs. If you select all jobs, you can then deselect individual jobs by selecting the appropriate checkbox.

- *Selecting groups of jobs*: Select the first job in the group. Hold down the SHIFT key and select the last job in the group. The jobs between the first and last job in the group will all be selected.

Previewing PDF, PostScript and VIPP Jobs

A job containing PDF, PostScript or VIPP Job files can be previewed before printing to ensure that the correct job has been selected and that all the pages are present.

The Job Preview page displays up to ten thumbnail images at a time. Each thumbnail corresponds to a document page.

To preview PDF or PostScript pages

1. Open Job Manager.

2. Select the PDF, PostScript or VIPP job or jobs you want to preview.

3. From the **Job Options** pull-down menu, select **Preview Job...**. The Job Preview page opens.

4. The first page will be displayed on the right. Use the scrollbars to display portions of the page not visible. To view a particular page, perform the following:

   • Click the thumbnail image of the page you wish to view.

      If the thumbnail is not part of the currently displayed group of 10 images, click the **Next 10 Pages** or **Previous 10 Pages** button to bring the thumbnail into view.

   • Enter the page number for the page you wish to view into the **View Page** text box. Click **Redisplay**.

   NOTE: *If the file being previewed is a VIPP file, the* **VIPP Details** *button invokes a dialog containing details about the job.*

5. If the Job contains more than one file, select another file to preview using the **Document Sequence/Name** pull-down menu.

6. If you selected more than one job to preview, select another job using the **Job ID/Name** pull-down menu.

7. Select **Back to Job Status** to return to the Job Manager window.

Submitting a Job to Print

Output Manager allows you to submit and print jobs found in a local file system or document repository.

To Submit a Single Job to Print

1. Open **Job Manager**.

2. If desired, select the queue that you want to use to print the selected job by using the **Queue** menu.

3. Select **Submit Job** button.

NOTE: *If the job has been submitted, select the job in* **Job Manager**, *click* **Edit Job Properties**, *then go to Step 7.*

4. Perform one of the following:

   • Select the **Local File System** radio option to submit a job from the server hard drive or from a networked drive.

   • Select the **Repository** radio option to submit a job from a document repository database.

5. Enter the path to the job location or click **Browse** to locate the job you want to submit.

6. Enter a **Job Name** in the field provided.

7. Select a queue from the **Queue** pull-down menu.

8. If desired, select **Submit Job in Held State**.

9. If desired, select **Bypass Processing in System**.

10. Perform one of the following:

   • Click the **Submit** button to submit the job. You will be returned to the Job Status window.

   • Click the down arrow on the **Submit** button and select **Submit and Create Another Job** to submit the job. The window settings will be cleared so another job can be submitted.

   • Click the down arrow on the **Submit** button and select **Submit and Edit Job Properties** to modify the job properties. The Job properties window will open.

Saving a Job

If your system configuration is designed to save jobs, you can save your job and then print it again at a later time. The document data is stored in a local directory of the Output Manager server specified by the system administrator in XPIF format, or to a connected document repository. Each document of a multi-document job must be saved individually.

To Save a Job

NOTE: *You cannot save to the local file system if the browser used to view the Output Manager web page is remote to the Output manager server. Saving to a repository is available if the browser is local or remote.*

1. Open **Job Manager**.

2. Select each job that you want to save.

3. From the **Job Options** pull-down menu, select **Save Job...**. The Save Job dialog window opens. The Save Job status presents pertinent job/document information. Each document of a multi document job must be saved individually.

4. If you are saving a multi-document job, the document title displays in the **Document Sequence/Name** field. You can select a different document by performing one of the following:

    • Select a document form the **Document Sequence/Name** pull-down menu.

    • Select **Skip to Next** to access the next document in the job.

5. You can save the job with the associated document attributes by selecting **Save with Job Ticket (Job Properties)**.

6. Enter a job or document name in the **Save As:** field or retain the filename specified by the system.

7. Perform one of the following:

    • Select the **Local File System** radio option to save the job to the server hard drive or to a networked drive.

    • Select the **Repository** radio option to save the job to a document repository database. You will need to supply a valid username, password and possibly a Domain to log in to the repository when you click the **Browse** button.

8. Enter the path to the save job location or click **Browse** to locate the save job location.

9. Once all the job save information has been entered, select from the following:

    - **Save and Go to Next Job** or **Save and Go to Next Document:** Clicking the down arrow button reveals the options to save the job and then opens another Save Job screen for the next job or document selected.

    - **Save**: Saves and sends you back to the Job Status dialog.

    - **Reset**: Click this button to clear the Save Job fields of any entered data.

10. Select **Back to Job Status** to return to the Job Manager window.

Splitting Jobs

Job splitting can be used to balance printer loads, spreading a large job across two or more printers. Splitting can also be used for combining multiple documents into one job or diverting specialty portions of a job to printers suited for particular tasks.

For example, a mostly black and white job with a color section could be split so that just the color section is sent to a color printer and the rest of the job is printed on a monochrome printer. In this way, you could avoid using your color printer to print black and white jobs.

Job splitting options are set by the administrator.

NOTE: *If the System determines the job cannot be split, it allows you to either hold the job or send the job to a single printer based on the setting available on the queue.*

NOTE: *A Bypass queue cannot be used when splitting jobs.*

NOTE: *If finishing is present in the job, it cannot be split.*

NOTE: *The Proof Quantity must be set to 0 (zero) for split jobs.*

Topics include:

- "Available Job Split Methods" on page 4-69
- "Printer Selection Methods" on page 4-71
- "Creating Split Jobs" on page 4-71
- "Viewing Job Split Details" on page 4-72
- "Converting a Split Job to a normal Job" on page 4-74

Available Job Split Methods

By Best Method

The system selects the job splitting method from: Quantity, Document, Document Sets or Pages. In determining the job splitting method to use, the job scheduler uses the following hierarchy: Document, Quantity, Document Sets and Pages. Splitting jobs by Color is not applicable to the Best-fit option.

By Document

If the job contains more than one document, the **By Document** model is used. A job submitted with more than one document is split across the available and acceptable printers associated with the selected queue. Each document is assigned to a printer that can print the document. If only one printer meets the criteria required to print the job, then the entire job prints using that one printer.

This comment appears on the banner page: "Document number X of <number of documents in job> from job <job number>."

By Quantity

If the job request is a single document with multiple copies, the **By Quantity** model is used. A job submitted with multiple copies is split across the available and acceptable printers associated with the selected queue. Job copies are split as evenly as possible across those particular printers. If only one printer meets the criteria required to print the job, then the entire job prints using that one printer.

NOTE: *Jobs can only be split if the job's attribute value for quantity is equal to or larger than the value specified in minimum-quantity-per-split.*

NOTE: *Multi-document jobs are not supported using the By Quantity method.*

This comment appears on the banner page: "Copy set X of <number of copy sets> from job <job number>."

By Pages

Allows a single document job to be split across the available and acceptable printers associated with the selected queue. The job's pages are split as evenly as possible across those particular printers.

There are certain caveats and limitations when using the split-job Pages model:

• Jobs can only be split if the number of pages is equal to or larger than the value specified in **minimum-pages-per-split**.

• If the number of pages is unknown, the job is sent to a single printer.

• Page-range job splitting is ignored if the job contains a finishing attribute.

• If only one printer is available, it prints the entire job.

• The printer must support page-range printing.

NOTE: *If none of the above listed job attributes are used, the job is not split and it is sent to a single printer or held as the routing mechanism can be round-robin.*

This comment appears on the banner page: "Pages from X to Y from job <job number>" where X and Y is the page range of the job printed."

By Color

A job is split by color content only if the Color job split option is specified on the job or as a queue default. A single document PDF job containing color and black and white pages is split across the available and acceptable printers associated with the selected queue. The black and white pages are sent to a monochrome printer and the color pages are sent to a color printer. For information on additional color split options, see "Color Splitting Job Options" on page 2-21.

NOTE: *The Color job-split option is not available when using the Best-Fit method.*

There are certain caveats and limitations when using the split-job Color model:

• If only a color printer is available, it prints the entire job.

• If an interposer is present, integration of black and white and color pages can occur automatically via the interposer media track. If no interposer is present, the black and white printer that the job is submitted to must support exception pages. The color pages are represented in the black and white job as exception pages. An alternate paper color is used for the color exception pages. When the job is completed, the pages printed on the color printer are manually inserted into the black and white printed job, replacing the exception pages.

- If finishing is specified in the job, no splitting occurs.

- If only a monochrome printer is available, you are alerted that the job cannot be scheduled.

- In order for a job to be split using this method, it must be in PDF format

The color pages have this comment on the banner page: "Color pages from job <job number>."

The monochrome pages have this comment on the banner page: "Black/White pages from job <job number>."

By Document Sets

If the documents submitted are part of a VI container, it is possible to load balance the document sets within the container. Load balancing of VI Container document sets is limited to database mode VIPP print files. The VI Container must include a database master file (.dbm file).

See Also

"Creating Split Jobs" on page 4–71

"Viewing Job Split Details" on page 4–72

"Converting a Split Job to a normal Job" on page 4-74

Printer Selection Methods

Least-busy

The job is submitted to the printer that contains the least number of jobs, among the list of available and acceptable printers that are associated with the selected queue.

Round-robin

The job is sent to the next available and acceptable printer in the round-robin list.

Creating Split Jobs

The available job split methods are set on the queue by the system administrator. The system administrator will determine the appropriate methods and may choose to render specific methods unselectable. Once you submit the job to Job Manager you can change how the job is split for jobs in a Pending or Held state.

To Create a Split Job

1. Open **Job Manager**.

2. Click the **Submit Job** button.

NOTE: *If the job has been submitted, select the job in* **Job Manager**, *click* **Edit Job Properties**, *then go to Step 7.*

3. Perform one of the following:

    •   Select the **Local File System** radio option to submit a job from the server hard drive or from a networked drive.

    •   Select the **Repository** radio option to submit a job from a document repository database.

    NOTE: *The available document repositories will depend on the configuration settings in the Freeflow Administration Tool.*

4. Enter the path to the job location or click **Browse** to locate the job you want to submit.

NOTE: *In order to split a job, a job cannot be a pass-through job (document data is not processed).*

5. Enter a **Job Name** in the field provided.

6. Select a queue from the **Queue** pull-down menu.

7. If desired, select **Submit Job in Held State**.

NOTE: Bypass Processing in System *cannot be selected when splitting jobs.*

8. Click the down arrow on the Submit button and select **Submit and Edit Properties** to modify the job properties. The Job properties window will open.

9. Select the **Job Processing Options** menu.

10. The following two conditions must be set in the Job Manager: **Job Processing Options** menu in order to split a job:

    •   The Printer Requested selection must be **Assign By Queue**.

    •   The **Proof Quantity** value must be 0.

11. Select a supported **Job Split Method** from the pull-down menu

12. Set additional job properties as needed, then submit the job. The split job is placed in the job list.

See Also

Viewing Job Split Details

The job list contains information about split jobs.

To View Split Job Details

1. Open **Job Manager**.

2. Split jobs are viewable from within the **Job Split Detail** column. A double arrow icon indicates if the detail view is expanded or collapsed. A right pointing arrow indicates a collapsed view, while a down pointing arrow indicates an expanded view.

3. To view Job Split details, expand the view. The parent job that is being split displays the number of parts in the split. Each split can indicate the number of copies in the split or the page range of the split.

4. The type of split is shown iconically to the left of the split arrows. Place the cursor over the icon to invoke a text tip detailing how the job is being split. Jobs can be split by Quantity, Page Range, Document, Document Set, or Color.

NOTE: *Individual splits cannot be acted upon as a complete job. To change job properties you must access the parent job.*

See Also

Converting a Split Job to a normal Job

To convert a Split Job to a normal job

1. Within **Job Manager**, select the job by selecting its checkbox.
2. Click **Edit Job Properties**.
3. In the **Job Processing Options** menu, select **None** from the **Job Split Method** pull-down menu.
4. Select **Back to Job Status**.

See Also

"Creating Split Jobs" on page 4-71

"Viewing Job Split Details" on page 4-72

Holding a Print Job

Enables the user to hold a job as long it has not gone beyond a certain state. For example, the System is not processing or processed the job (e.g. Processing, Pre-processing, Completed, Sent to Printer, etc.).

To Hold a Print Job

1. Open **Job Manager**.
2. Select the job or multiple jobs to hold.
3. Select **Hold**. The job is placed in the Held state.

Releasing a Held Job to Print

If a job has been put on hold and you now want to print the job, you can release the job to print. When a job is held, it needs to process again before it can be printed. Printing starts at the beginning of the job.

To Release a Held Job to Print

1. Open **Job Manager**.
2. Select the job or multiple jobs to release.
3. Select **Release**. The job is taken up for processing by the system.

Resubmitting a Job

Places a job back in the queue where the job originated, in a held state. You can then make property changes.

NOTE: *Only a job in terminal state (e.g., Canceled or Completed) can be resubmitted.*

To Resubmit a Job

1. Open **Job Manager**.
2. Select the job or multiple jobs to resubmit for printing.
3. Select **Resubmit Job** from the **Job Options** menu. The job is placed in a held state in it's originating queue.

Reprinting a Job

Places a job back in the queue where the job originated. The job prints again with no property changes.

NOTE: *Only a job in terminal state (e.g., Canceled or Completed) can be reprinted.*

To Reprint a Job

1. Open **Job Manager**.
2. Select the job or multiple jobs to reprint.
3. Select **Reprint Job** from the **Job Options** menu. The job is placed in it's originating queue.

Deleting a Job

Deleting a job removes all traces of the job from the system.

To Delete a Job

1. Open **Job Manager**.
2. Select the job or multiple jobs to delete.
3. Select **Delete Job** from the **Job Options** menu.
4. Select **Yes** to remove the job from the system.

Canceling a Job

Cancelling a job terminates printing of the selected job. If a retention period is set, the job is retained on the system. The job can then be resubmitted.

To Cancel a Job

1. Open **Job Manager**.
2. Select the job or multiple jobs to cancel.
3. Select **Cancel**.
4. Select **Yes** to confirm the action.

NOTE: *Selecting the* **Cancel** *button within the feature dialog windows exits the window without canceling the job.*

Moving a Job to Another Queue

This feature allows you to move a job to another queue in the system. As an example, a queue can be set to accept, but not release jobs. As a result, job submitters cannot bypass operator control, because they are restricted from submitting directly to a release queue. The operator can then move the job to a release queue that is appropriate for the job.

A **Yes** designation in the Accepting/Releasing columns of Queue Manager indicates that a queue is accepting/releasing jobs.

To Move a Job to Another Queue

1. Open **Job Manager**.
2. Choose the jobs to move by selecting the corresponding **Job ID** checkbox.
3. From the **Move** menu button select the queue where to move each selected job. Jobs are moved to the queue selected.

NOTE: *If the Custom View Group feature has been enabled, the queues in the pull-down list will be limited to those that the logged on user has been granted access.*

Copying a Job to Another Queue

This feature allows you to copy a job to another queue in the system. Jobs can be copied to queues that are set to accept/not accept and/or release/not release jobs. As an example, a queue can be set to accept, but not release jobs. As a result, job submitters cannot bypass operator control, because they are restricted from submitting directly to a release queue. The operator can then copy the job to a release queue that is appropriate for the job.

A **Yes** designation in the Accepting/Releasing columns of Queue Manager indicates that a queue is accepting/releasing jobs.

To Copy a Job to Another Queue

1. Open **Job Manager**.

2. Choose the jobs that to copy by selecting the corresponding **Job ID** checkbox.

3. From the **Copy** menu button select the queue to copy each selected job. Jobs are copied to the queue selected.

    NOTE: *If the Custom View Group feature has been enabled, the queues in the pull-down list will be limited to those that the logged on user has been granted access.*

Printing a Proof Job

This feature allows you to print a proof copy of a multi-copy job while eliminating the need to resubmit the job to print once the content and/or layout have been verified.

All job attributes apply to Proof jobs except the quantity.

To Print a Proof Job

1. Open **Job Manager**.

2. Select each job or multiple jobs to access. If multiple jobs are selected, the properties for each selected job can be accessed using the **Job ID/Name** menu within the Job Properties window.

    NOTE: *Proof jobs cannot be split. The Proof setting must be set to 0 (zero) to use the split job feature.*

    NOTE: *If multiple jobs are selected from different queues, the Proof Job option will not be available from the Job Options menu.*

3. From the **Job Options** pull-down menu, select **Proof Job...**. The Job Proof dialog opens.

4. Enter a proof **Quantity**.

5. Select a printer from the pull-down menu.

6. Click **OK** to return to Job Manager.

Once job editing is completed, the proof job is printed. Once the proof is verified, it is placed in the **Held** state. The remainder of the job to print can be released.

Viewing Printer Conflicts

Allows you to view job conflicts with printers associated with a queue when a job cannot be scheduled. The System Status window will display a status message: "Job <job id> cannot be scheduled" when the System not find a suitable printer associated with the Job's queue that satisfies the Job requirements. The job will be put in the held state.

To View Printer Conflicts

1. Open **Job Manager**.

2. Select the job or multiple jobs to view.

3. Click **View Conflicts**. The Job Conflicts window opens. The Job Conflicts window presents information about which to be assigned printers have conflicts with particular jobs. Conflicts are listed in boxes containing the printer name and a description of the conflict. If there are no conflicts on a particular assigned printer, the box will contain a message to that effect. Select another job by using the **Job ID/Name** menu.

4. Select **Back to Job Status** to return to the Job status dialog to correct any conflicts.

NOTE: *Once the first set of conflicts have been corrected, a second set of conflicts may appear. Repeat the above procedure to verify the second set of possible conflicts, then correct those conflicts.*

5. System Status, System Usage Data and System Configuration

FreeFlow Output Manager allows operators to view the system status of configured printer, the system usage data based on the selected system source, and change system configuration settings.

System Usage Data

FreeFlow Output Manager allows you to access the system usage data for all or specific printers, queues or job submission methods.

The usage data will contain the number of jobs processed, pages processed, bytes processed and jobs accepted (if Job Submission method is selected) during the date range specified in the **From** and **To** fields.

There is also functionality for exporting all the usage date to a comma delimited file (csv). See "Exporting all the usage data to a file" on page 5-3 for instructions on how to export all the usage data.

To view the system usage data

1. Navigate to the Job Status properties, Queue Status properties or Printer Status properties page.

2. Click the **System Usage Data** link at the top of the right of the page.

3. Select the usage data source from the **View Data For** drop-down menu. Options include:

   • **Printers**: When selected, the **Select** drop-down option will display an **All Printers** option, as well as the specific printers configured for the system. There is also a **System Total** option that displays only the usage totals for all printers.

   • **Queues**: When selected, the **Select** drop-down option will display an **All Queues** option, as well as the specific queues configured for the system. There is also a **System Total** option that displays only the usage totals for all queues.

- **Job Submission Methods**: When selected, the **Select** drop-down option will display an **All Submission Methods** option, as well as IPP Inbound Gateway, JMF Inbound Gateway, LPR Inbound Gateway, CLI, or GUI. There is also a **System Total** option that displays only the usage totals for all the submission methods.

4. Select whether to view all or specific data using the options available in the **Select** drop-down menu. The available menu items will be based on the selection made in step 3.

5. Select a date range for the data using the **From** and **To** drop-down menus.

NOTE: *If you pick a date for which there is no data or an incorrect date, a warning message will appear.*

6. Select how the data is sorted using the **View Totals By** drop-down menu.

- **Date Range**: the totals for each column for the date range specified in the **From** and **To** fields will be displayed. One row of totals will appear.

- **Days**: the totals for each day specified in the **From** and **To** fields will be displayed in each column. Each day will appear as a separate row.

- **Weeks**: the totals for each week specified in the **From** and **To** fields will be displayed in each column. Each week will appear as a separate row.

- **Months**: the totals for each month specified in the **From** and **To** fields will be displayed in each column. Each month will appear as a separate row.

7. Click **Redisplay** to retrieve and display the usage data.

8. To print the data, click the **Printable Version** link. Click the **Print** button on the printable version page.

Exporting all the usage data to a file

You can export all the system usage data to a comma delimited file (csv). To export all the data, perform the following:

1. Navigate to the Job Status properties, Queue Status properties or Printer Status properties page.

2. Click the **System Usage Data** link at the top of the right of the page.

3. Select the Export All button on the upper right portion of the screen.

4. On the File Download dialog, perform one of the following:

   • Select **Open** to open the file in the application that has been associated to open csv file formats.

   • Select **Save** to navigate to a directory location and save the file.

System Status

All important warning or error messages for different events in the Job Manager, Queue Manager and Printer Manager are displayed in the System Status area at the top of the FreeFlow Output Manager browser window.

When a printer goes from an online to an offline state, a warning message will appear in the system status area. If the printer returns to an online state, an information message will appear.

The System Status area does not display all the status information that is available. The System Status expanded view window displays an expanded view of the system status with all available event messages.

To access the System Status Expanded View window

NOTE: *The expanded view only displays the top 100 event messages.*

To view the expanded view of the System Status messages:

1. Click the **Expanded view...** link on the left side of the System Status area. The System Status expanded view window will open.

2. To update the expanded view message list, perform one of the following:

    • Click **Update Now** to immediately update the list of messages.

    • Select an update interval from the **Automatic Update** pull-down list.

3. To sort the messages based on Type, Time, Source or Message content, click on the column heading. The up or down arrow next to the column heading will indicate if the sorting order is ascending or descending. To change the sorting order, click the column again.

4. To close the expanded view, scroll to the bottom of the message list and click **Close.**

System Configuration

Users can modify the default settings and system limits for the Output Manager system

To access the System Configuration

1. Click the **System Configuration** link at the top of the right of the page.

2. Click the selection heading at the top of the page to jump to that section, or use the scroll bar to navigate to the section you wish to edit.

3. Click **Apply** to save the settings, or **Reset All** to reset the system to the default values.

NOTE: *If you made changes to the Custom View Groups area only and used the Apply Changes button in that area, you do not need to use the Apply button mentioned above.*

NOTE: *The Reset All button does not reset the Custom View Groups area to a previous set of values.*

See Also

Custom View Groups

This area is used to enable and configure the Custom View Groups that have been setup in the Windows Authentication Service. When this feature is enabled, all displays that contain queues and printers will be subject to whether a queue or printer is visible, and therefore accessible to the currently logged in user. The FreeFlow Output Manager administrator has a complete view of the system. The Output Manager operators and guests have custom views.

CAUTION: **The FreeFlow Output Manager administrator should determine whether to enable or disable this feature when Output Manager is started for the first time. Once this feature is enabled, it can be disabled but it *should not* be re-enabled. Doing so will compromise the integrity of the system.**

For more information on this feature, see "Creating Custom View Groups" on page 1-9.

To set the accessible queues and printers

NOTE: *You **must** be logged in to Output Manager as the Administrator to enable and assign Custom View Groups. If you are not logged in as Administrator, log out, and log in using that account.*

1. Select one of the Access Group Feature radio buttons:

   • **Enable**: select this option to limit user access to selected queues and printers. If the feature is enabled without defining at least one queue and printer, a warning dialog will be display.

   • **Disable**: select this option to disable the feature. All logged in users will have access to all queues and printers. When disabling the feature, you must confirm your selection at the confirmation dialog, since it will give full access to all users.

2. Select a group name to configure from the Custom View Group Name pull-down menu. The list is populated with group names created in Windows Authentication Service.

   • The group list is populated when FreeFlow Output Manager Administrator interface is started. If changes have been made in the Windows Authentication Service since Output Manager was stated, select the **Update List** button to refresh the list. Only user groups with the prefix "Xerox FFOM" shall be visible.

3. Select the check box to the left of the queue name in the Accessible Queues list to make that queue accessible to the users assigned to the selected group. Queues can only be added to a single group.

- Deselecting a check box removes accessibility to that queue for the selected access group.

- The column to the right of the queue name lists the groups that have been assigned access to that queue. If the queue has no group access, the column will read "Not Assigned."

NOTE: *As a queue is selected, its associated printer in the Accessible Printers area is also selected. The group that the printer is assigned to will appear in the Group Assignment column to the right of the printer. If a printer has yet to be assigned, the column will read "Not Assigned."*

4. Select the check box to the left of the printer name in the Accessible Printers list to make that queue accessible to the users assigned to the selected group. Printers can only be added to a single group.

- Deselecting a check box removes accessibility to that printer for the selected access group.

- The column to the right of the printer name lists the groups that have been assigned access to that printer. If the printer has no group access, the column will read "Not Assigned."

5. After making the queue and printer assignments for the selected group, select the **Apply Changes** button. This applies the changes to selected group since the last time the button was selected.

NOTE: *You can also use the Apply button at the top right of the System Configuration window to apply the settings. However, it is best to use the Apply Changes button in this area before you move on to making changes in the other system configuration areas.*

NOTE: *The Reset All button at the top right of the System Configuration window does **not** reset the Custom View Groups settings to a previous or default state.*

See Also

Multifunction Device Input Client Setup

This area is used to enable or disable this function. When enabled, the system admin can add, edit, enable, disable, or delete a multifunction device. When a device has been added, the system administrator can specify the feature name that appears at the multifunction device, whether a confirmation page is sent when the job is printed, and the contact information that will appear on the confirmation page.

This area is also used to specify the specific Multifunction devices that will use this feature.

To setup the Multifunction Device Input Client feature

1. Select one of the following radio buttons:

    *   **Enable**: select this option to enable the feature at the Output Manager level.

    *   **Disable**: select this option to disable the feature at the Output Manager level.

2. In the **Feature Name at Device** text box, enter the name that will be displayed at the service access button at the multifunction device.

3. Select whether to **Enable** or **Disable** the **Send Confirmation Page to Device** option.

    *   If you enable the confirmation page option, enter the information that will appear in the header of the confirmation page in the **Confirmation Information** text box.

4. Perform one of the following:

    *   To add a multifunction device that will use this feature, see "Adding a Multifunction Device" on page 5-8.

    *   To edit the settings for an existing multifunction device, see "Editing a Multifunction Device" on page 5-9.

    *   To enable or disable a multifunction device using this feature, see "Enabling or Disabling a Multifunction Device" on page 5-9.

    *   To delete a multifunction device using this feature, see "Deleting a Multifunction Device" on page 5-9.

See Also

Adding a Multifunction Device

NOTE: *You cannot add two devices with the same IP address. A device can only be added once on each FreeFlow Output Manager server.*

1. Select the **Add Device** button.

2. Enter the IP address for the multifunction device in the **IP Address** text box.

3. Enter the **Administrative Name** for the device, and the **Device Password** into the appropriate text boxes.

4. Enter the **Multifunction Device Name** that you want to appear in the Device Name column of the Device list on the Multifunction Device Client Input screen.

5. Enter the **Location** of the device. This information will appear in the Location column of the Device list on the Multifunction Device Client Input screen.

6. Select the **Device Model** from the pull-down menu.

7. Perform from the following:
   - Select **OK** to add the device and return to the System Configuration screen.
   - Select the arrow button to add the device and add another device using this screen.
   - Select **Cancel** to return to the System Configuration screen without making any changes.
   - Select **Reset** to reset the screen to the settings that were entered when you entered this screen.

See Also

Editing a Multifunction Device

1. Select the check box to the left of the multifunction device you wish to edit.

2. Select the **Edit Device** button.

3. Edit the IP address for the multifunction device in the **IP Address** text box.

4. Edit the **Administrative Name** for the device, and the **Device Password** into the appropriate text boxes.

5. Edit the **Multifunction Device Name** that you want to appear in the Device Name column of the Device list on the Multifunction Device Client Input screen.

6. Edit the **Location** of the device. This information will appear in the Location column of the Device list on the Multifunction Device Client Input screen.

7. Perform from the following:

   • Select **OK** to enter the changes for the device and return to the System Configuration screen.

   • Select **Cancel** to return to the System Configuration screen without making any changes.

   • Select **Reset** to reset the screen to the settings that were entered when you entered this screen.

See Also

Enabling or Disabling a Multifunction Device

The status of the device is displayed in the Status column of the Device list.

1. Select the check box(s) to the left of the multifunction device(s) you wish to enable or disable.

2. Select the **Enable/Disable Device** button.

The Status column will change to Enabled or Disabled depending on the initial device status.

See Also

Deleting a Multifunction Device

1. Select the check box(s) to the left of the multifunction device(s) you wish to delete.

2. Select the **Delete Device** button.

3. Select **Yes** at the confirmation dialog.

See Also

Log file Options

This area determines whether the system logging is enabled or disabled, the type of events logged, the maximum log file size and the maximum number of log files retained by the system.

See Also

System Status Display

This area is used to enter the maximum number of system events that are retained by the system.

See Also

Job Manager Display

This area is used to set the number of items displayed on the Job Manager screen. The following options are available:

- **Display All Jobs on One Page**: select this option to show all the jobs on one page.

- **Custom**: select this option to set a custom number of jobs to be displayed,

- **Optimize to Eliminate Scrolling Within a Page**: select this option to specify a setting designed to optimize the number of jobs displayed to specific resolutions and maximized browser sizes. Selecting 5 is best for 800 x 600 pixels settings. 19 is best for 1024 x 768 pixels settings.

See Also

Job Status Columns

This area is used to set what information is displayed in each column of the Job Status page. Select the item for display from the pull-down menu for each column. Click the **Preview** button at the bottom of this area will display a preview of the look of your selections.

See Also

Repository Location

This area is used to enter the IP address or server name for a document repository. Repositories are used when submitting documents for print. The port number for the repository is also configured here.

See Also

Timeouts

This area is used to set the amount of inactivity, in minutes, before the system logs out, as well as the amount of time before retrying a job, and how long pre and post processing should be tried before failure is reported.

See Also

Guest Log In

This area is used to enable or disable the guest user account.

See Also

Measurement Units

This area is used to set the measurement units in inches or millimeters for image shift values and paper size values. The default value will be the locale of the operating system.

See Also

6.   Hot Folders

Hot Folders allows you to create customized workflows, such as pre-processing jobs that are not print ready. For example:

- appending information such as cover pages, page separators, and watermarks to jobs

- merging variable data, such as client addresses or billing records, with a standard form

The Hot Folders tool periodically queries directories and passes to a predefined program the files in those directories.

The launched program can execute a PERL or other scripted, and run a program. The launched programs or scripts delete original and temporary files after processing the job.

There are no restrictions on how the files are entered into the hot folder. Files can be copied locally, moved by NFS or FTP, or saved to the folder by an application.

How the Hot Folders Application Receives Jobs

A Hot Folder is a directory or folder on a networked drive where users can deposit documents. Output Manager manages hot folders, and when a document is deposited, it is turned into an Output Manager job by the script associated with the Hot Folder.

The document must be in one of the following formats:

- PostScript

- TIFF 6.0 (bi-level images using CCITT 4 encoding) or uncompressed

- PCL

- ASCII line data

- PDF

- VI Container

- JDF

Hot Folder Applications

The Hot Folder program is a Windows server function which consists of two applications.

- Hot Folders Service: This application begins automatically

when Output Manager is started. Use this application to state recovery, poll existing folders and process jobs.

- Hot Folders Client: This GUI application is used to configure settings, display job processing status, and serve GUI controls which include requesting the starting and stopping of folder polling.

Configuring the server and client ports

Communication between the server and clients must be configured appropriately to allow correspondence between the two. The default communication port is 1099, however if port 1099 is not available, an alternative port may be used. In <FreeFlow Output Manager installation directory>\config\HotFolderService.properties, a new value can be set for "registryPort".

Using Hot Folders

This section covers the use of the Hot Folders application. Configuring third-party processing applications.

Starting Hot Folder Service

When the system is booted, the Hot Folder Service manages processing of all defined Hot Folders. To define a Hot Folder for processing refer to section "Creating a Hot Folder".

Administering the Hot Folder is performed by starting the Hot Folder Administration GUI. This is done by selecting Start: Programs: Xerox FreeFlow: Output Manager: Hot Folders.

If the Hot Folder service is not running, the Hot Folder Client will display a message that the Hot Folder Client cannot connect to Hot Folder Service. Ensure that the service is started and there are no conflicting ports then reopen the Hot Folder application.

To Start Hot Folder Service:

1. Open Windows Service panel.

2. Select FFOM_HotFolder Service

3. Select [Start]

Stopping Hot Folder Service

Stopping the Hot Folder Service will stop processing of all Hot Folders.

To Stop the Hot Folder Service

1. Open Windows Services panel.

2. Select the service FFOM_HotFolderService.

3. Select [Stop].

NOTE: *After stopping and restarting the Hot Folder Service, the Hot Folder ClientClient will need to be exited and restarted.*

Configuring Hot Folder Service

The Hot Folder Service options can be configured.

- **User ID accessing Hot Folder:** When the Hot Folder service is started, the user ID used to access a Hot Folder is "SYSTEM". To access a remote Hot Folder, the user ID of the Hot Folder service process must be changed to a user ID having access to the remote folder.

- **Changing user ID of Hot Folder service.**

1. Open Windows Services Panel

2. Open Properties of the FFOM_HotFolderService.

3. Select the LogOn tab and select This Account.

4. Change the account name to the user that will access the Hot Folders.

5. Select OK to confirm changes.

6. Restart FFOM_HotFolderService.

Hot Folders Tips

- When running FFOM_HotFolderService on Windows 2008 server with remote or mapped drives, use a UNC address (e.g.\ \ip address\folder) to setup a hotfolder instead of specifying a drive name (e.g. X:\folder)

- On Windows 2008 server, if the default user "SYSTEM" is not used as the userID of the Hot Folder service, Windows will logoff the user if the session is idle. Once the user is logged off, the mapped network drive associated with the user may be lost. Users should not log off while the FFOM_HotFolderService is monitoring hotfolders on remote drives. To prevent loss of accessing remote folders, the network drive should be mapped with "Reconnect at logon" checked.

- When the Hot Folder Client displays an error "Cannot connect to Hot Folder Service...", close the current Hot Folder Client window and check to make sure FFOM_HotFolderService is running.

Creating a Hot Folder

A hot folder is a directory that the Hot Folder application oversees files that are placed in the folder and are transferred to the processing application assigned to the hot folder.

To Create a Hot Folder

1. Using the computer's file system, create a folder for the jobs to be placed in. If necessary, be sure the folder is accessible from the network.

NOTE: *Ensure that the folder has both read and write permissions set. This is especially necessary for network access.*

NOTE: *DO NOT create the Hot Folder directory in the My Documents or Program Files folders or subfolders.*

2. Copy simplejobsubmit.bat from: **C:\Program Files\Xerox\FreeFlow Output Manager\scripts\templates** and paste in: **C:\Program Files\Xerox\FreeFlow Output Manager\scripts\hotfolders.** The previous paths are the system default path.

3. Select [Start: All Programs: Xerox FreeFlow: Output Manager: Hot Folders] to start the FreeFlow Output Manager Hot Folders Client.

NOTE: *If the Hot Folder directory is remote, copy networkjobsubmit.bat from the templates to the hotfolders directory.*

4. The Hot Folders window opens. Select [New Hot Folder].

5. Under the Setup tab, in the Folder Name field, type the name of the Hold Folder directory that was previously created in the first step.

6. Browse to the location of the folder.

7. Select [simplejobsubmit] from the Processing Program if the folder is on the local file system. Select [networkjobsubmit] if the folder is on a remote file system.

8. Enter the name of the FreeFlow Output Manager Queue that will receive the jobs from the Hot Folder.

9. Select [Apply].

NOTE: *The FFOM_ HotFolder Service will be run as the default system user (recommended state).*

NOTE: *If you need to change the default selection, perform the following:*

- Select [Start: Control Panel: Administrative Tools: Services]. The FFOM_HotFolderService Properties

window opens.

- Select the [Log On] tab.
- Select [This Account] and enter appropriate user account information.

NOTE: *The FFOM_HotFolder Service is set to run automatically whenever the server is rebooted(recommended state). If you need to change the default, perform the following:*

- Select [Start: Control Panel: Administrative Tools: Services]. The FFOM_HotFolderService Properties window opens.
- Select the [General] tab and change the [Startup Type].

Deleting a Hot Folder

Since there is no limit to the number of hot folders, the reason for deleting any would be that they are no longer needed.

The viewed files will be deleted but not the files in the hot folder/ directory associated with the FFOM Hot Folder. Deleting the Hot Folder in the FFOM Hot Folder Application does not delete the windows folder. If the files are being processed, the processing will be completed before the hot folder is deleted. The processing application associated with the folder is not affected.

To Delete a Hot Folder

1. From the **Hot Folder** menu, select **Delete**.
2. Click the name of the folder that you wish to delete. The Delete Hot Folder Confirmation message appears.
3. Click **Yes** to confirm the deletion. Click **No** to cancel the deletion.

Opening a Hot Folder

A hot folder does not need to be open to be processing. Having the folder's window open allows you to:

- see what files are in the queue
- make changes to the folder
- change job priority
- start or stop the folder
- remove jobs from the processing queue

To Open a Hot Folder

1. From the **Hot Folders** menu, select **Open**.

2. Click on the name of the Hot Folder you wish to open.

Closing a Hot Folder or Summary Window

Close windows you are not using to clean up your workspace. Closing an individual hot folder window does not stop the hot folder: It will continue receiving and processing jobs regardless of whether its window is opened or closed.

To Close a Hot Folder or Summary Window

This command affects the currently active window only.

1. Click on the window you wish to close to make it active.

2. From the **Hot Folders** menu, select **Close**.

Starting a Hot Folder

Hot folders are initially either started or stopped based on the **Start Up State** option on the folder's Settings tab.

A folder must be started in order for the Hot Folder application to poll it for jobs. Jobs can be submitted to a stopped folder, but they will not be transferred to the processing application while the folder is stopped.

To Start a Hot Folder

1. From the **Hot Folders** menu, select **Open** if the folder is not already open.

2. Click on the name of the folder you wish to open.

3. In the Folder's window, click **Start**.

Stopping a Hot Folder

Hot folders are initially either started or stopped based on the **Start Up State** option on the folder's Setup tab.

A stopped folder is not monitored by the Hot Folder application. You can still place jobs in the folder, but they will not be transferred to the processing application until the folder is started.

To Stop a Hot Folder

1. From the **Hot Folders** menu, select **Open** if the folder is not already open.

2. Click on the name of the folder you wish to open.

3. In the folder's window, click **Stop**.

4. When the confirmation dialog box appears, click **Yes** to stop the hot folder.

Changing Job Priority

Jobs are processed according to the **Submission Order** you selected on the folder's Setup tab.

You can manually increase or decrease a job's order in the processing queue.

To Change Job Priority

NOTE: *The File View tab can only display a maximum of 100 items. When the list is full, the oldest item will be removed from the list.*

1. From the **Hot Folders** menu, select **Open** if the folder is not already open.

2. Click on the name of the folder you wish to open.

3. Click the folder's **File View** tab.

4. Click the job you wish to change.

   a. To move the job to the top of the queue, click **Process Next**.

   b. To increment the job's position one position at a time, click **Move Up** repeatedly until the job is in the desired position.

   c. To move the job down in position, click **Move Down** repeatedly until the job is in the desired position.

Removing Jobs from the Processing Queue

Removing a job from the processing queue prevents the Hot Folders Client from transferring the job to the processing application. The job remains in the folder, however. Hot Folder does not delete the files from the folder.

To Remove Jobs from the Processing Queue

NOTE: *The File View tab can only display a maximum of 100 items. When the list is full, the oldest item will be removed from the list.*

1. From the **Hot Folders** menu, select **Open** if the folder is not already open.

2. Click on the name of the folder you wish to open.

3. Click the folder's **File View** tab.

4. To remove a single job from the processing queue:

   a. Select the job you want to remove.

   b. Click **Remove**.

5. To remove all jobs from the processing queue, click **Remove All**.

Hot Folder Settings

The settings for each hot folder are controlled from the folder's **Setup** tab.

- "Changing the Folder Polling Interval" on page 6-8
- "Changing the Job Submission Order" on page 6-9
- "Setting Start Up and Error Options" on page 6-12
- "Polling Options" on page 6-12

Changing the Folder Polling Interval

The polling interval determines how often Hot Folders checks the folder for new jobs. The list of the files polled is displayed on the File View tab.

NOTE: *The File View tab can only display a maximum of 100 items. When the list is full, the oldest item will be removed from the list.*

To Change the Folder Polling Interval

1. From the **Hot Folders** menu, select **Open** if the folder is not already open.
2. Click on the name of the folder you wish to open.
3. Click the folder's **Setup** tab.
4. Under **Poll Folder Every**, type the **Minutes** and **Seconds**.
5. Click **Apply**.

Changing the Job Submission Order

Jobs can be submitted to the processing application on a First In First Out (FIFO) basis, or in alphabetical order. First In First Out is the default option.

TIP: If you have a series of files that must be assembled together in a specific sequence, you can control the sequence by naming the files in alphabetical order and selecting the **Alphabetical** option for Submission Order.

To Change the Job Submission Order

1. From the **Hot Folders** menu, select **Open** if the folder is not already open.
2. Click on the name of the folder you wish to open.
3. Click the folder's **Setup** tab.
4. Click the **Advanced...** button.
5. Under **Submission Order**, select a submission option:
   a. To process jobs in the order received, select the **First In First Out (FIFO)** option.
   b. To restrict job processing to a specific order, select the **Alphabetical** option.
6. Click **OK**.
7. Click **Apply**.

Assigning a Processing Program to a Folder

The choice of processing program is up to you. You may use a third party application, or you may create your own using a scripting or programming language.

Output Manager provides a processing program template that can be used to submit a job to an Output Manager queue. The template file is called "simplejobsubmit.bat". It is used if the hot folder is on the local file system. The JDF processing program template is called "simplejdfjobsubmit.bat". The remote Hot folder file is called "networkjobsubmit.bat". It is used if the hot folder is on a remote file system. They are found in the templates directory within the Output Manager scripts directory.

NOTE: *Hot Folders do not delete files. The processing application must be configured to delete old jobs, temporary files and related files from the disk drive after the job is submitted.*

To Assign a Processing Program to a Folder

1. Copy the script to the scripts/hotfolders folder. Close and re-open the Hot Folder application.
2. From the **Hot Folders** menu, select **Open** if the folder is not already open.
3. Click on the name of the folder you wish to open.
4. Click the folder's **Setup** tab.
5. Select a processing application in the **Processing Program Associated with Hot Folder** pull-down menu.
6. Click **Apply**.

See Also

Configuring the Default Processing Program Template

Output Manager provides a processing program template that can be used to submit a job to an Output Manager queue. The template file is called "simplejobsubmit.bat". It is found in the templates directory within the Output Manager scripts directory.

To Configure the Default Processing Program Template

1. Using your server's file system, copy and rename the template.

   NOTE: *If the Hot Folder directory is a remote or mounted directory from Output Manager use the script networkjobsubmit.bat.*

2. Follow specific instructions in the template file.

3. Install the new file:

   a. On Windows servers, install the new file to the Program Files\Xerox\FreeFlow Output Manager for Windows\Scripts\Hotfolders directory.

   NOTE: *If the application is not installed in the default directory, navigate to the FreeFlow Output Manager install directory and locate the \Scripts\hotfolders subdirectory.*

See Also

 "Assigning a Processing Program to a Folder" on page 6–10

"Optional parameters" on page 6-11

Optional parameters

Users can add command line additions for specifying optional parameters for the processing program.

To aid the user in specifying a particular queue, the Queue button will invoke a dialog listing all the available queues. Selecting a queue from this dialog will automatically fill in the optional parameters text box with the highlighted queue name.

To specify optional parameters

1. From the **Hot Folders** menu, select **Open** if the folder is not already open.

2. Click on the name of the folder you wish to open.

3. Click the folder's **Setup** tab.

4. Enter the processing parameters into the Optional parameters text box.

   • To specify a queue, click the **Queues...** button. Select a queue from the list in the popup dialog and click **OK**.

5. Click **Apply**.

See Also

Setting Start Up and Error Options

Folders can be started or stopped when Hot Folders is opened. Folders can be set to either stop or continue processing jobs when a job error occurs.

TIP: If the order in which jobs are processed is critical, you should set the folder to **Stop Processing** when an error occurs.

To Set Start Up and Error Options

1. From the **Hot Folders** menu, select **Open** if the folder is not already open.
2. Click on the name of the folder you wish to open.
3. Click the folder's **Setup** tab.
4. Select a **Start Up State** option.
5. Select an **On Job Error** option.
6. Click **Apply**.

Polling Options

The **Poll By** feature determines which files submitted to a hot folder are actually selected for processing.Only new files are checked into the hot folders.The default option is **All Files**. The options are:

• **All Files**: All files within the folder will be processed.
• **File Name**: Only files with a certain string of characters in their names will be processed. You can use wildcards.
• **User Permissions**: Only files with the exact permissions you have selected will be processed.

To set the "Poll by" options

1. From the **Hot Folders** menu, select **Open** if the folder is not already open.
2. Click on the name of the folder you wish to open.
3. Click the folder's **Setup** tab.
4. Click the **Advanced...** button.
5. Under Poll By, select a polling option.
6. Click **OK**.
7. Click **Apply**.

Using JDF files with Hot Folders

JDF files can also be placed in hot folders. Since the JDF submission mechanism to Output Manager is different than other file formats, JDF files should be placed in a separate hot folder.

A JDF file contains a reference to the data file which must be available when the JDF is submitted to a hot folder, but MUST NOT be written into the Hot Folder. It can reside in a Hot Folder sub-directory or other directories. If the file is local, the JDF file may contain an absolute file URL (i.e. URL="file:///D:/HotFolders/InputJdf/coloroddpages.pdf) or a relative path (i.e. URL="JDFProdDef/onepage.pdf"). The relative path is relative to the input hot folder. The referenced file may also be an HTTP file reference or file on a network share. In the case of an HTTP file reference, if a proxy is required for such access, this proxy may be specified in a configuration file.

Each hot folder is associated with a processing program. The sample JDF processing program provided (<FFOM installation base>\scripts\templates\simplejdfjobsubmit.bat) submits jobs to Output Manager, reports the submission status, and deletes the file.

When the job completes or aborts, and if the JDF file requests, the JDF file is updated to contain audit information such as the date and time that printing began and ended, the total printing time, number of black impressions, number of color impressions, and the total number of impressions. The updated JDF file is written to the specified or default locations. If JDF/NodeInfo/@TargetRoute is specified in the JDF, the updated JDF shall be written to the specified directory. Otherwise, based on job completion status, the updated JDF file shall be written to the default Output or Error folders. Output and Error folder locations are configurable via the property file Jdfjmfgateway.properties. Output and Error folders can be directed to

• A single folder

• Two separate folders (output/error)

• As sub-folders of each input folder (default)

The processing program associated with the hot folder is responsible for cleaning out the input Hot Folders. The submitter is responsible for cleaning out the "Output" and "Errors" folders.

Managing the Workspace

There are various features to assist you in monitoring and managing your hot folders. This section discusses those features.

See Also

Viewing the Summary Window

The Hot Folder Summary window displays a table of the hot folders you have created. The table lists:

- the name of each hot folder
- the number of files in each folder
- the number of files grabbed for processing, called the "snap"
- the status of the snap
- the path to the folder being polled
- the processing script associated with the folder

To View the Summary Window

1. From the **View** menu, select **Summary**.

See Also

Viewing the Details Window

Each hot folder has a Details window that allows you to view and manage the priority of files in the folder, and configure options for the folder.

To View the Details Window

1. From the **View** menu, select **Active Folders Only** if you wish to view the details for active folders. Otherwise, a detail window will be opened for every hot folder you have created.

2. From the **View** menu, select **Details**.

See Also

Filtering the Details Window

You can control how and which files are processed by each hot folder. This is done using the Poll By options, setting the number of files in each snap, and setting the Submission Order.

To Filter the Details Window

1. Click the folder's **Setup** tab.

2. Click the **Advanced...** button.

3. To limit the snap to specific files, change the **Poll By** option.

4. To limit the number of files in each snap, change the **Number of Files in Snap**. This setting determines the number of files considered each time the Hot Folder is polled.

5. For files which must be processed in a specific sequence, select a **Submission Order** option.

6. Click **OK**.

7. Click **Apply**.

See Also

Saving the Workspace

To spare you from having to reconfigure the workspace, opening and closing Hot Folder Detail windows every time you open the Hot Folders Client, you can save your workspace once you have it configured to your satisfaction.

This feature allows multiple users to each customize their own personal workspace.

To Save the Workspace

1. The folders you want to have in the Workspace must be opened before opening the Save dialog box.

2. From the **View** menu, select **Save Workspace**. The Save dialog box opens.

3. Enter the name of the workspace.

4. Click **Save**.

Deleting a Workspace

Saved workspaces that are no longer needed can be deleted.

To Delete a Workspace

1. From the **View** menu, select **Delete Workspace**.
2. From the list of workspaces, select the one you wish to delete.
3. Click **Delete** to delete the Workspace. Click **Cancel** to exit the Delete Workspace dialog box without deleting.

See Also

Opening a Workspace

Opening a saved workspace rearranges the Hot Folders window to match the saved configuration.

To Open a Workspace

• From the **View** menu, choose a workspace under the **Select Workspace** option.

See Also

Hot Folders Interface Components

Hot Folders allows you to view hot folder instances, create or delete hot folders.

These tasks can be performed from the menus or from the buttons on the window.

Hot Folder Menu

The Hot Folder menu has commands that allow you to create, open, delete or close hot folders.

View Menu

The View menu has commands that allow you display Summary or Details windows, filter the Detail view, and manage the workspace. There is also an Options setting that allows the user to switch the interface appearance from the Xerox standard interface to the operating system appearance. The operating system appearance setting supports high contrast and larger font settings.

Stop Hot Folder Dialog Box

This confirmation appears when you are about to stop a hot folder from processing.

Click **Yes** to confirm that you want to stop the folder.

Click **No** if you do not want to stop the folder.

Delete Hot Folder Dialog Box

This confirmation request appears when you are about to delete a hot folder.

Click **Yes** to confirm that you want to delete the folder. The folder will finish processing any files currently being processed. All files will then be deleted along with the folder.

Click **No** if you do not want to delete the folder.

Hot Folder Summary Window

The Summary window provides a one line summary of each hot folder on the system.

Hot Folder Window

Each hot folder has its own window that allows you to control the jobs in the processing queue and change the settings for that folder.

This section describes the icons and features found in the window. Instructions for setting up and using hot folders are found in the section "Using Hot Folders" on page 6–2.

Hot Folder Icons

The window for each hot folder has a status area that displays icons and messages indicating the current state of the hot folder.

Table 6-1. Hot Folder Window Icons

Icon	Meaning
	The hot folder has contents.
	The hot folder is empty.
	The hot folder is processing information (animated).
	The hot folder has an error.

File View Tab

In a hot folder's window, there are two tabs. The File View tab lets you view the files in the folder.

The tab also has controls for changing the processing order of files and removing files from the folder.

NOTE: *The File View tab can only display a maximum of 100 items. When the list is full, the oldest item will be removed from the list.*

Setup Tab

In a hot folder's window, there are two tabs. The Setup tab allows you to configure the folder and set processing options.

Changing the interface appearance

The Hot Folder interface can be switched between the standard Xerox interface and the operating system interface look and feel.

The operating system option supports high contrast and larger font settings. This setting should be selected when those accessibility options are required.

To change the interface appearance

1. From the **View** menu, select **Options.**

2. Select one of the following:

   • Select the **Use Xerox application appearance (Does not support high contrast and large fonts)** to enable the standard Xerox interface appearance.

   • Select the **Use operating system defined application appearance (Supports high contrast and large fonts)** to enable the operating system interface appearance.

3. Click **OK**.

7. Port Controller

The Port Controller accepts client connections on defined TCP/IP ports, spools client data and passes the data to a predefined launch program.

The launched program can, for example, execute a PERL script that uses the Command Line Interface to submit a job or modify job attributes.

The Port Controller does not delete processed jobs. It is the responsibility of the launched application or script to clean up the disk when job processing is complete.

Multiple simultaneous active connections are possible, limited by the host system resources. Port Gateway will backlog up to 5 pending connections, any more than that will be dropped, but this does not affect the number of active connections.

Port Gateway can be used to perform the following:

- Add a new port for monitoring
- Delete an existing port
- Block new connections
- Stop connections
- Start or Stop polling for new files to process
- Configure a spool directory for each port
- Optionally restrict access to the port from a specific incoming client (by IP address)
- Allocate disk space to the port for spooling

See Also

How the Port Controller Receives Jobs

The Port Controller allows client TCP/IP connections to the Output Manager server. Data received over the connection is spooled and passed to a program associated with that port. Typically, this would be a script that commands the Output Manager Command Line Interface to submit a job and set various job attributes.

The Port Controller has been used to allow mainframe applications that cannot print via LPR to submit jobs to a port where the job is converted to PostScript using a third-party application.

Using Port Controller

This section discusses the use of Port Controller, including how to create and manage ports, how to manage the workspace, and how to manage client connections.

Working with Ports

A port in the true sense allows hardware and software to access the computer's operating system. All activities, whether typing on a keyboard or moving a mouse require that piece of hardware to have a port in the operating system, by which the computer recognizes the input from the device.

Similarly, a port in Output Manager allows a remote client to submit jobs that will be processed in a specific manner using a defined application or script.

Creating a New Port

Multiple clients can use a port, unless you restrict the port to one client. To restrict it, you must enter the client's IP address.

To Create a New Port

1. On the **Port** menu, click **New**.

2. In the New Port dialog window, type the number for the new port in the **Number** text field.

3. Click **OK** to create a New Port Instance. The Port Instance dialog window opens.

   NOTE: *If you typed a port number that already exists, an error message appears. Click **OK** to close the error message and return to the main Port Controller window. Repeat this procedure from step 1 to create a new port.*

4. Type the path to the spooling folder in the **Spooling Folder** text field. If you do not know the path, click the **Browse** button to open a file system dialog and navigate to the location of the Spooling Folder.

5. Type the minimum amount of space for spooling in the **Minimum Free Spooling Space** field or use the up/down buttons to enter a value. If the amount of free space on the disk partition is less than this minimum, the port will stop spooling data until there is sufficient free disk space.

   NOTE: *Port Controller does not delete spooled jobs from the drive. Your processing program or script must clean up all job and temporary files to free disk space.*

6. Select a **Start Up State** option:

   • **Started**: Selecting this option will cause the Port to be in a Started state when port is created or when the Port Controller tool is started.

   • **Stopped**: Selecting this option will cause the Port to be in a Stopped state when the port is created or when the Port Controller tool is started.

7. Select an **On Error** option:

   • **Stop Processing**: Selecting this option will cause processing of the file to stop when an error is encountered.

   • **Continue Processing**: Selecting this option will cause processing of a file to continue when an error is encountered.

8. Select a processing program or script in the **Process Program Associated with Port** pull-down menu.

   • To make modifications to the processing application template or add optional processing command parameters, see "Modifying port processing programs and scripts" on page 7-7 for more information.

9. If you wish to limit access to this port to just one IP address, select the **Only Process Files from this Address** check box and type the IP address in the text field.

10. Click **Apply**.

See Also

Opening a Port

The **Open** menu option opens the Port Instance window for the selected port.

A port can receive jobs even if its Port Instance window is not open. Similarly, just because the Port Instance window is open does not mean the port is accepting data.

Each port's initial state is determined by the **Start Up State** option.

To Open a Port

1. From the **Port** menu, select the **Open** menu option.
2. From the list of ports, click the number of the port you wish to open.

See Also

Starting a Port

A port must be started before it can accept data.

Ports are initially either started or stopped, depending on the **Start Up State** option chosen in the Port Instance window.

To Start a Port

1. Open the Port Instance window for the port.
2. Click **Start**.

See Also

Stopping a Port

A stopped port is inactive.

Ports are initially either started or stopped, depending on the **Start Up State** option chosen in the Port Instance window.

To Stop a Port

1. Open the Port Instance window for the port.
2. Click **Stop**.

See Also

Deleting a Port

Deleting a port stops that port and then removes it from the system.

To Delete a Port

1. From the **Port** menu, select the **Delete** menu option.
2. On the expanded list of ports, click the port you wish to delete.

See Also

Viewing the Summary Window

The Port Controller Summary window provides a scrollable list of all the ports on the system, with the status and information about each. There is a shortcut menu available within this window that allows you access to the commands available on the Port menu in the main window.

To View the Summary Window

1. From the View menu, select **Summary**.

See Also

Viewing Port Details

You can view the details of all the ports on the system, or just those that are active.

To View Port Details

1. If you wish to restrict the view to active ports, select **Active Ports Only** option from the **View** menu. If you wish to view all, make sure this menu option is cleared.
2. From the **View** menu, select the **Details** option.

See Also

Modifying port processing programs and scripts

Output Manager provides a processing template script used to submit a job to an Output Manager queue.

Users can add command line additions for specifying optional parameters for the processing program. To aid the user in specifying a particular queue, the Queue button will invoke a dialog listing all the available queues. Selecting a queue from this dialog will automatically fill in the optional parameters text box with the selected queue name.

To configure the program:

1. Using your server's file system, copy and rename the template.
    - Copy the file "simplejobsubmit.bat" from the **Program Files\Xerox\FreeFlow Output Manager for Windows\scripts\templates** folder and rename it.

    NOTE: *If the application is not installed in the default directory, navigate to the FreeFlow Output Manager install directory and located the \scripts\templates subdirectory.*

2. Follow specific instructions in the template file.
3. Install the new file into the **/portgateway** directory in the Output Manager Scripts directory.

To specify optional parameters

1. Enter the processing parameters into the **Optional Parameter** text box.

   • To specify a queue, click the **Queues...** button. Select a queue from the list in the popup dialog and click **OK**.

2. Click **Apply** on the Setup tab.

See Also

Working with Connections

This section covers closing connections, for occasions when it is necessary to stop jobs from being received at the Output Manager server.

Blocking New Connections

The **Block New Connections** menu option and button closes open connections that are not in use and keeps currently active connections from reopening once they close.

To Block New Connections

1. From the **Port** menu, select the **Block New Connections** option.

See Also

Shutting Down Connections Immediately

The **Immediate Shutdown** menu option and button closes all open connections, regardless of the current state of data transfer, and keeps the connections from reopening until a port is started again.

To Shut Down Connections Immediately

1. From the **Port** menu, select **Immediate Shutdown** option.

See Also

Managing Workspaces

Workspaces are a timesaving feature that spares you from having to rearrange the work area every time you open the Port Controller application.

See Also

Saving Your Workspace

Different users may have different workspace needs. You can save the preferred workspace for each.

To Save Your Workspace

1. From the **View** menu, select the **Save Workspace As** option.
2. Type the path to the folder where you wish to save your workspaces in the text field.
3. Click **OK**.

    NOTE: *If the workspace name you enter is the same as a previously saved name, you will be presented with a Confirm Overwrite dialog. Select **Yes** to overwrite the previously saved workspace, or select **No** and specify a different name.*

See Also

Deleting Workspaces

If a workspace is no longer needed, you can delete it to clean up the disk.

To Delete a Workspace

1. From the **View** menu, select the **Delete Workspace** option.
2. From the list, select the workspace you wish to delete.
3. Click **Delete**. The workspace is removed from the disk.

See Also

Opening a Workspace

Use this command to rearrange the workspace to match a previously saved workspace.

To Open a Workspace

1. From the **View menu**, select the **Select Workspace** option.
2. From the list of workspaces displayed, select the workspace you wish to open.

See Also

Port Controller Interface Components

The Port Controller window shows the instance of each open port. You can view a summary of all ports, and create, open, delete, close or block ports from this window.

See Also

Port Window

The Port window allows you to adjust the settings for an individual port. You can also start or stop the port.

See Also

Port Window Status Icons

Each Port window has a status area that displays icons indicating

the state of the port.

Table 7-1. Port Controller Status Icons

Icon	Meaning
	Port is idle.
	Port is stopped.
	Port is processing information (animated icon).
	Port error.

Menus

This section describes the menu commands found in the Port Controller application.

See Also

Port Menu

The **Port** menu has commands to create, close, open, delete and block ports.

See Also

View Menu

The **View** menu allows you to arrange the workspace, save your workspace settings, deleting saved workspaces, and choose which windows are visible. There is also an Options setting that allows the user to switch the interface appearance from the Xerox standard interface to the operating system appearence. The operating system appearence setting supports high contrast and larger font settings.

See Also

New Port Dialog Box

The **New Port** dialog box allows you to enter the number for the new port. If you enter a number of an existing port, an error message will appear and you will be taken back to the New Port creation window.

Click **Cancel** to exit the operation and return to the main Port controller window.

See Also

Delete Port Dialog Box

The Delete Port dialog box asks you to confirm that you wish to delete the port by clicking **Yes**. If you do not wish to delete the port, click **No**.

If you click **Yes**, the port will be stopped and removed from the system.

See Also

Changing the interface appearence

The Port Controller interface can be switched between the standard Xerox interface and the operating system interface look and feel.

The operating system option supprts high contrast and larger font settings. This setting should be selected when those accessibility options are required.

To change the interface appearence

1. From the **View** menu, select **Options.**

2. Select one of the following:

    • Select the **Use Xerox application appearence (Does not support high contrast and large fonts)** to enable the standard Xerox interface appearance.

    • Select the **Use operating system defined application appearence (Supports high contrast and large fonts)** to enable the operating system interface appearance.

3. Click **OK**.

11. FreeFlow Output Manager Scripting

FreeFlow Output Manager (FFOM) functionality can be easily extended and enriched with scripting. FFOM scripting combines an operating system scripting method with FFOM's Command Line interface. Examples of what is possible using scripting includes:

- Operator messaging and interaction
- Queue scheduling
- FreeFlow Process Manager job scheduling
- Document emailing
- Job tracking
- VIPP command insertion

To implement a script requires knowledge and experience with the available scripting languages for your operating system.

Scripting Examples

The current version of FreeFlow Output Manager includes example scripts to illustrate the capabilities of scripting and what a script might look like. The examples were developed on a Microsoft Windows 2003 Server operating system, using MS Windows Script Host, VBScript language, and MS DOS batch files.

The examples are intended to raise interest and imagination on the usage of FreeFlow Output Manager and the use of scripting to customize workflows. Knowledge and experience with Windows scripting is required to perform the required customization of the example scripts.

Operator Messaging and Interaction

A direct connection to the FFOM server operator provides operations with direct messaging to inform or obtain direction. Interactive animation adds to the otherwise automated document handling of FFOM. Job or document attributes are used to dynamically create the messages or queries. Operator responses are used to conditionally manage the document workflow.

Applications include:

- Notify messages
  - Urgent job arrival
- Job Setup
  - Media configurations in trays
- Queries
  - Conditional scripting

Hot-Job Queue

In this example, a queue is configured to display a message when a job arrivals to notify the FFOM server operator. The alert message draws special attention to important jobs. When a job arrives at queue PrintNow, a message box appears with the queue name, job number, and job name.

Operator Query

Querying the operator allows conditioning of scripting controls. In this simple example, the operator name is requested, the message is modified, and then the message is displayed as in the previous example.

Queue Scheduling

FFOM has a limited set of methods for handling queue scheduling to automatically release an output queue's ready jobs. Currently the queue is always on or off, the operator (via the command line) enables or disables a queue, or the queue is enabled at a specific time.

To add provisions for daily or weekly or monthly processing, without regard for a fixed date, scripting can be used in conjunction with Microsoft Scheduling Task application available in Windows. Two batch files are needed for each queue requiring this control (one to enable, one to disable)

Daily scheduling of a FFOM output queue

For this example, the queue is scheduled "nightly" to start release ready jobs daily at a specific time, then scheduled to hold any received jobs.

Job scheduling for FreeFlow Process Manager

Currently, FreeFlow Process Manager has no method of scheduling jobs for submission. Using FFOM and the Daily Queue Scheduling script example, allows a front-end job management layer to Process Manager.

FreeFlow Process Manager job scheduling

In this example, job submission utilizes Process Manager's hot folder interface, queue scheduling and post-processing scripting. When processing occurs, the FFOM sends the job's document to a dummy queue to satisfy FFOM's print requirement, then the post-processing script copies it to a Process Manager's hot folder.

Document Distribution

FFOM is considered a printer server. Scripting allows the expansion of document disposition to archiving systems and email distribution. FFOM commands allow a job's document to be copied to a local file and processed by an external process or command.

Applications include:

- Email - Job event notification
- Email - Document distribution
- Archive - repository storage

Email

Using an emailing shareware, BLAT, for this example the document is attached and emailed. In the example, a fixed message body is selected and job's document is attached. The message could be tailored by additional scripting.

Document Tracking

Using a VBScript's ActiveX Data Object (ADO) method, a connection to a Microsoft Access database can be used to record both pre-processing and post-processing stage information. Extracting job and document attributes, the recorded information can be customized by the client. Integration into other client systems allows FFOM to be seen as part of a greater system

Applications include

- Tracking of job/document properties
    - Pre-processing state
    - Post-processing state

Pre-Processing Job tracking

For this example, selected job attributes are entered into Microsoft Access. Accessing the information in Access is done via an ODBC connection.

Document Conditioning

For some applications, devices like Document Centres, Work Centre Pros, and Phasers, require commands to pre-amble print streams for proper printing. For ASCII data printed in PCL mode, insertion of PCL commands indicating the proper line ending handling is common. For VIPP, adding the VIPP start commands (an XGFNub emulation) and ending postscript end-of-file DSC command facilities the VIPP workflow process.

Applications include

- VIPP command insertion
- PCL command insertion

VIPP Command Insertion

For this example, a VIPP STARTLM ini file is pre-pended and %%EOF is post-pended.

12. Error Messages

This section lists error messages for the following applications:

Output Manager

This section provides recovery actions for the following error messages.

General

Job

Job Splits

Queue

Printer

"An internal error occurred."

An unexpected error occurred.

Action

Retry operation. If conditions persist, call customer support.

"Printer <printername> has been deleted from the system."

The requested operation cannot be performed because the printer has been deleted from the system.

Action

None

"Printer <printername> has not been disabled."

The device must be disabled prior to deleting the device.

Action

Perform the "Do Not Accept Jobs" operation and retry the Delete Printer operation.

"Printer <printername> cannot be deleted because it contains active jobs."

All jobs forwarded to a device must complete printing or canceled prior to deleting a device.

Action

Allow all jobs to print at the device or cancel the jobs. Retry the Delete Printer operation.

"Job <job id> has already started processing."

The requested operation cannot be performed because the job has already started processing.

Action

None.

"Job <job id> has already completed."

The requested operation cannot be performed because the job is already completed.

Action

None.

"Job <job id> does not exist."

The requested operation cannot be performed because the specified job has already been deleted from Output Manager.

Action

None.

"Printer name is invalid"

The name of the printer is restricted to the characters [A-Z, a-z, 0-9,- <dash>,_<underscore>]. The name may not have embedded spaces in the name.

Action

Use only valid characters when creating a printer.

"Printer <printername> already exists."

When creating a new printer, the name is currently used to name another printer or queue.

Action

Use another name to name the printer.

"User name or password is invalid. Please try again."

When logging on at the Output Manager console, the user name is not registered in the Output Manager authorization groups or the password for the user is invalid.

Action

Re-enter the username and password and retry operation. Verify if the user is a member of the Output Manager authorization group. Verify the Output Manager authorization groups exist.

"Your session has timed out. Please re-enter your user name and password."

If there is inactivity detected at the console for a period of time, the current logged on session has been terminated.

Action

Log in at the console.

"The queue name is not unique."

When creating a new queue, the name is currently used to name another queue or printer.

Action

Use another name to name the queue.

"The queue name is invalid."

The name of the queue is restricted to characters [A-Z, a-z, 0-9,-<dash>,_<underscore>]. The name may not have embedded spaces in the name.

Action

Use only valid characters when creating a queue.

"Unable to list queues."

An unknown error occurred while listing queues.

Action

Retry operation. If problem persists, restart Output Manager.

"Queue <queuename> does not exist."

The specified queue has been deleted.

Action

None

"Queue <queuename> is not disabled and cannot be deleted."

The queue cannot accept jobs before it can be deleted.

Action

Use the Do Not Accept Jobs operation to disable the queue and execute the Delete Queue operation.

"Queue <queuename> contains jobs and can not be deleted."

The queue cannot have Pending, Held, Printing jobs before it can be deleted.

Action

Allow all jobs to complete printing or cancel the jobs, then execute the Delete Queue operation.

"Job <job id> is not in a valid state for this operation."

The requested operation on the job failed because the job is not in a valid state. An example is canceling a completed job.

Action

None

"Cannot delete or cancel the last valid document."

In the Document Details window, the last document is attempting to be canceled or deleted. When there is only one document defined in the job or there is only one non-canceled document remaining, the operation is not allowed.

Action

Use the Cancel Job or Delete Job operation.

"The file <filename> does not exist or cannot be read."

When using the Submit Job operation, the specified file to submit for printing is not found or does not have read permission

Action

Verify that the selected file is still present and has read permission. Retry operation.

"<field> contains invalid data."

The selected input field contains invalid data.

Action

Verify that the data is in the correct format.

"Job <queue>:<job-id> cannot be scheduled."

The specified job cannot be scheduled.

Action

Use the View Conflicts operation to determine which properties of the job fail scheduling. Verify that the queue has associated printers, the printers are accepting jobs and do not have status of "No Report".

"The preprocessing program <program name> cannot be found."

A preprocessing program has been assigned for the job. The program name is not found in the scripts directory.

Action

Edit the job and set the preprocessing program to an existing program or add the program to the "scripts" directory. Verify that the default Preprocessing Program defined in the queue exists.

"The Post-Processing program <program name> cannot be found."

A postprocessing program has been assigned for the job. The program name is not found in the scripts directory.

Action

Add the program to the scripts directory. Verify that the postprocessing program defined in the queue exists.

"Preprocessing failed for job <queue>:<job-id>."

The preprocessing program reported an error during execution.

Action

Validate the preprocessing program.

"Postprocessing failed for job <queue>:<job-id>."

The postprocessing program reported an error during execution.

Action

Validate the postprocessing program.

"Job <queue>:<job-id> failed transform"

A job requiring a transform failed. Transform occurs when a PDF file is converted to PostScript for printing or the file is processed for color splitting

Action

The job will be aborted. Resubmit the job for processing. If job still fails, contact customer support.

"Job <job id> on hold: Invalid Attributes"

A job will cause this error when there is conflicting page-range information on the job. For example, a job gets submitted to Output Manager with a job ticket, and the application preprocessing detects that it has 5 pages, but there is a request to print pages 8-10. This error is not to be confused with a job conflicts error because the job is not conflicting with the printer, but is invalid based on its own setting's.

Action

Go to the Job Properties page and edit the job properties. Re-release the job. If the job is not edited correctly and is released to the device, the job may get rejected or aborted by the printer.

"There are no available printers associated with the queue."

There are no printers associated with the queue or the printers have been disabled. No jobs will be scheduled.

Action

Check if there are printers defined for this queue and the printers are enabled. Add printers to the queue or enable the printers.

"All devices associated with the queue are offline. Jobs will be scheduled to the standby printers."

All primary printers associated with the queue are in the unknown state. Output Manager will schedule jobs to the standby printers if defined.

Action

None

"The system has encountered an unrecoverable error. Please restart system."

Output Manager has encountered an unrecoverable error during operation.

Action

Restart Output Manager.

"The software license has expired."

The software license for Output Manager has expired. Output Manager will not operate.

Action

Obtain an updated license file and install the license file. Restart Output Manager.

"The software license will expire in <number> days."

The software license will expire in the displayed number of days. An updated license file must be installed prior to the expiration. Output Manager will not be operational after the license file has expired.

Action

Obtain an updated license file and install the license file. Restart Output Manager.

"The software license file is not found or is invalid. Please install a valid license file."

The software license file is not installed in the "license" directory.

Action

Install the license file in the "license" directory and restart Output Manager.

Printer <printer name> is offline.

Output manager has determined that the device is not responding

Action

Verify communications to the device is working.

Printer <printer name> is online.

Output Manager has established communications with the printer.

Action

None

"The number of jobs on <printername> has exceeded the threshold. Jobs will not be scheduled to the printer."

A maximum number of uncompleted jobs is set for the printer. If the number of uncompleted jobs exceeds the threshold, Output Manager will not assign jobs to this printer until the number of uncompleted jobs is below the number specified in "Resume Accepting Jobs At:".

Action

Verify the device is printing jobs.

"The number of jobs on <printername> is below the threshold. Jobs can be scheduled to the printer"

The number of uncompleted jobs is below the number specified in "Resume Accepting Jobs At:". Output Manager will resume scheduling jobs to this printer.

Action

None

"Job <job id> was not split between color and black/white printers because it contains only color or only black and white pages."

Action

None. Depending on how the queue's Job-splitting-failure is set, the job will either be retried after being held for 5 minutes, or it will be sent to a single capable device.

"Job <job id> was not split between color and black/white printers because it contains more than one document."

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split between color and black/white printers because of its finishing requirements."

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split between color and black/white printers because it is not a PDF job."

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split by page count because it contains more than one document."

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split by page count because it has a specified page range."

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split by page count because it has finishing requirements."

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split by page count because its page count was not known."

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split because it does not have the minimum quantity specified by the Queue for splitting."

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split because it does not have the minimum pages specified by the Queue for splitting."

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split because it does not have the minimum number of document sets specified by the Queue for splitting."

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split by document sets because it is not a VI container job."

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split because of an internal processing error."

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split because the queue has only one printer capable of printing the job."

Action

None. depending on how the queue's Job-splitting-failure is set, the job will be either retried after being held for 5 minutes, or it will be sent to a single capable device.

"Job <job id> could not be split."

"Best Fit" has been chosen for the job split and the job is not suitable for any of the possible split methods.

Action

The job will be automatically sent to a single available capable device.

"Job <job id> was not split because it has exceeded color pages threshold specified by the Queue."

This error is produced when the job contains more color pages than has been set by the color page threshold settings.

Action

Reset the threshold settings for the queue, or submit the job to another queue with an adaquate color split threshold.

Hot Folders

This section provides recovery actions for the following error messages.

- "Folder <foldername> already exists." on page 12–17
- "Hot Folder name cannot be empty" on page 12–17
- "Hot Folder location cannot be empty." on page 12–17
- "File name cannot be empty" on page 12–18
- "Polling time cannot be 0" on page 12–18
- "The Hot Folder tool is open. Cannot open it again." on page 12–18
- "Select at least one User Permissions." on page 12–18

"Folder <foldername> already exists."

When creating a new hot folder, the specified hot folder name already defines an existing hot folder.

Action

Use a different hot folder name.

"Hot Folder name cannot be empty"

When defining a hot folder, the name of the hot folder must be specified.

Action

Enter the hot folder name and retry operation.

"Hot Folder location cannot be empty."

When defining a hot folder, the directory location of the hot folder must be specified.

Action

Enter the hot folder directory location and retry operation.

"File name cannot be empty"

When selecting the "File Name" option in the "Poll By" field, a filename pattern must be specified.

Action

Enter a valid file name pattern.

"Polling time cannot be 0"

A polling interval greater than 0 seconds must be specified for the hot folder.

Action

Specify a value other than 0.

"The Hot Folder tool is open. Cannot open it again."

When starting the Hot Folder tool, an existing Hot Folder tool has already started.

Action

None.

"Select at least one User Permissions."

When configuring a Hot Folder, one of the permissions, "Read", "Write", or "Execute" must be selected.

Action

Select one of the user permissions.

Port Controller

This section provides recovery actions for the following error messages.

Port Number Already Assigned

The port number you entered in the New Port dialog box is already in use by another port.

Action

Check the list of ports in the Summary window to determine which port numbers are already assigned.

"Port <portnumber> is stopped due to insufficient spool space"

The amount of free spool space specified for this port is below the minimum threshold.

Action

Delete any unneeded or unwanted files.

"Invalid IP address"

When entering an IP address that will be allowed to submit files to the port, the IP address is not in a valid format.

Action

Reenter the IP address in the form xx.xx.xx.xx or the hostname

"The Port Controller is already open. Cannot open it again."

When starting the Port Controller, an existing Port Controller has already started.

Action

None.

"Processing file is missing."

The processing program field must have a processing program set when defining a port.

Action

Make sure there are processing programs in the Portgateway directory within the scripts directory.

A. Output Manager JMF/JDF Gateway Service

This section describes the FreeFlow Output Manager JMF/JDF Gateway Service.

Overview

FreeFlow Output Manager implements the JDF Specification Version 1.2. The level of support is described in the FreeFlow JDF Support Specification, Version 8.0 document. It conforms to a subset of the MIS ICS level 2 and a subset of MIS ICS level 3. FreeFlow JMF Service is provided over http for nonsecure interactions only.

The Output Manager supports JMF clients such as Adobe Acrobat 7, 8 and 9 Professional, and FreeFlow Web Services.

FreeFlow Output Manager submits jobs directly to printers and therefore is considered a device since it is acting as a proxy for the printer that will execute the JDF nodes.

FreeFlow Output Manager provides the following support:

- Accept the SubmitQueueEntry command message
- Accept Status Query message with a subscription for job and printer status updates
- Send Status Signal messages to one or more subscribers listening on different ports or on entirely separate IP addresses.
- Return the modified JDF instance file to the client after the job completes or aborts via the ReturnQueueEntry command message.
- Accept the KnownDevices query message
- Accept the AbortQueueEntry command message
- Accept the StopPersistentChannel command message
- Accept Status Queue Query message

Supported JMF Queries and Commands

SubmitQueueEntry

The SubmitQueueEntry message submits a JDF job to a printer. FreeFlow Output Manager does not validate the JDF against the printer capabilities. If the JDF contains attributes that the printer cannot honor, the printer will do its best to print the job. If the job cannot be printed, it will be aborted and a JMF signal shall be sent to the MIS.

The following types of nodes are accepted:

- Combined Digital Printing
- Product Intent - describes the customer's intention for the final product. FreeFlow Output Manager can handle the Product Intents that can be printed on a digital printer.

The device id required for submission shall be identified in the FreeFlow Output Manager URL, http://<host>:7781/[device ID], or in the device ID (jmf/@deviceID) of the JMF message. If both are specified, the latter takes precedence. If the device id is invalid, or the device is not accepting jobs, or the device connection cannot be established, the request shall be rejected and an error code returned.

If the submission contains a Product Intent node, FreeFlow Output Manager shall convert this to a Combined Digital Printing node. Pre-press or post-press intents, if present, are ignored.

Only one PDL file is allowed per JDF job. If the job ticket consists of several components, they all must reference the same PDL file.

The JDF instance file may contain a referenced file. Supported file references are:

```
file://host/path
```

where host is the fully-qualified domain name of the system where the referenced file resides. Host can contain the string "localhost" or can be empty. path is the directory path to the referenced file.

```
cid:content-id
```

content-id identifies a file that was delivered within the MIME multipart message.

```
http://host:port/path
```

where host is the fully-qualified domain name of the system where the referenced file resides. Host can contain the string "localhost" or can be empty. Port contains the port number of the http server. Path is the directory path to the referenced file.

Once the submission is accepted, if the job cannot be printed for any reason, it shall be aborted and a JMF signal sent to the MIS.

Persistent Channels

FreeFlow Output Manager sends Status Signals to the MIS through a persistent channel. The MIS sets up a persistent channel by sending a Status Query message with a Subscription element.

The subscription identifies a URL which shall be registered for this controller. Once the persistent channel is established, it remains open (across system restarts) until a StopPersistentChannel message is received.

The StopPersistentChannel message unregisters a listening controller from a persistent channel. No more messages are sent to the controller once the command has been issued.

Status Signals

The FreeFlow Output Manager sends a JMF Status Signal to the subscribers for each of the following conditions:

- Job forwarded to printer
- Job at printer, but held waiting for resources (media, finishing)
- Job printing in progress
- Job printing stopped while waiting for resources (media, finishing)
- Printer connection lost
- Job Completed
- Job Aborted

ReturnQueueEntry

The ReturnQueueEntry command returns a jdf file that had been submitted with a SubmitQueueEntry command. This command is sent by the FreeFlow Output Manager after the job completes or aborts. The Audits and JDF/@Status of the JDF that is being processed shall be set to "Completed" and the JDF delivered to the URL as specified by SubmitQueueEntry/@ReturnJMF.

Output Manager will attempt to send a ReturnQueueEntry command multiple times, until such submission is successfully received by the client. This allows a temporarily down client the time to regain operation. Send attempts will also be made at preconfigured time periods, assuming that it may take some time for the client to resume proper functionality (for example, during a reboot). Both the time period and number of attempts are configurable.

KnownDevices

The KnownDevices query requests information about the devices. For each device, the device status and device ID are returned.

AbortQueueEntry

If the job has not been forwarded to the printer, it will be canceled and a Success status shall be returned in the Response. If the job has already been forwarded to the printer and has not completed printing, a Success status shall be returned in the Response and the Abort request forwarded to the printer.

If the original job submission contains a returnJMF (SubmitQueueEntry/@ReturnJMF), the updated JDF shall be delivered to the specified location.

SuspendQueueEntry

If the job has not been forwarded to the printer, it will be held and a Success status shall be returned in the Response. If the job has already been forwarded to the printer, an error code shall be returned in the Response.

ResumeQueueEntry

If the job has not been forwarded to the printer, it will be released for printing and a Success status shall be returned in the Response. If the job has already been forwarded to the printer, an error code shall be returned in the Response.

Status Query

The controller can be requested to send a list of all jobs in the queue, along with their status and associated attributes. A particular job's information may be returned where QueueEntryID/ Job ID is specified in the query.

Status Queue Query

The controller can be requested to send a list of jobs in the queue filtered by status, along with their status and associated attributes. The filter is specified in the query. If there are no jobs having status matching the specified filter, the list of jobs will be empty. If the filter is null, then a list of all jobs, along with their status and associated attributes will be returned.

Web Services supplemental information

The purpose of this section is to provide important supplemental information as it applies to FreeFlow Output Manager and supported JMF status signals when used in conjunction with FreeFlow Web Services.

For additional information on using Output Manager with Web Services, refer to the *FreeFlow Web Services Integration Guide*.

FreeFlow Web Services and Xerox Production Printing

FreeFlow Web Services is integrated with Xerox production printing technology, allowing the Print Provider to utilize production-level job ticket programming and selection of FreeFlow Digital Front Ends (DFE) for Xerox production printers. There are several methods available in Web Services for communicating to Xerox production printers or other FreeFlow modules. Some of these methods use a new, emerging standard call Job Definition Format (JDF) and a protocol called Job Messaging Format (JMF). Not all Xerox Production Printers natively support JDF/JMF and, instead, another FreeFlow module, such as FreeFlow Output Manager, may be used to submit the job from Web Services to the printer.

When using JDF/JMF, a Web Services Output Device is created in order to route the job to FreeFlow Output Manager. The actual routing of the job is normally assigned as part of the pricing setup of a template or job type.

Since JDF is an emerging standard, not all possible job ticket attributes from Web Services are currently supported by the JDF path. Support currently exists for paper stock selection and copy count. FreeFlow Output Manager does not validate the JDF against the printer capabilities; if the JDF contains attributes that the printer can not honor, the printer will do its best to print the job. If the job can not be printed, it will be aborted and a JMF status signal will be sent to Web Services.

Support for additional JDF attributes is expected to increase as the technology matures.

JMF Status Signals

Refer to your FreeFlow Web Services documentation for information about job status icons.

Glossary

#

2D Overstrike   2D Overstrike is a PCL image quality control that causes each scan line to be shifted by one pixel in both the fast and slow scan directions and to be merged with the original scan line. This will cause very dark patterns to be printed as a solid black line.

2-sided   The 2-sided selection enables or disables printing on both sides of the paper.

2X scaling   2X scaling is a PCL image quality control that scales the patterns by a factor of two. This process works well for printing user-defined patterns designed for 300 dpi.

A

abort   To terminate a program, printing, or non-printing execution before it is completed.

account   A way to identify a job. An account can consist of a mixture of letters, numbers, and symbols. If an account is not entered, the system will indicate "none specified".

Administrator   The person generally responsible for configuring, operating, and maintaining the Output Manager system. The Administrator can access and control all system and job data except service data and functions.

AppleTalk   The network communication protocol inherent to the Apple Macintosh operating system.

application software   Software resident on the client workstation used to create print documents.

ASCII   American Standard Code for Information Interchange: Standardized code that represents letters, numbers, and other characters established by the American National Standards Institute to achieve compatibility between data processing and data communications equipment.

B

Banner Page   A page printed with each print request that shows the user who submitted the print request, the request ID, when the request was printed, and other information about the printed job.

bind   To join printed pages and covers in order to form a book.

bindexer   A sorter that is located inside the printer's finisher. The bindexer collates the pages of each print set.

bitmap   An electronic image. It is comprised of a matrix of picture elements (pixels or dots), where a bit value of one means that the picture element is imaged, and a bit value of zero means that the picture element is not imaged. The number of picture elements in a square area is a function of the display device resolution.

boot   To load initial instructions into the memory of the computer. These instructions then direct the loading of the rest of the program.

buffer   An area of memory used for the temporary storage of data as it is being transferred from one location to another.

C

capability matching   A job processing paradigm in which printer capabilities are matched against job requirements. If a queue is so configured, jobs are sent from that queue only to printers that can support all the job requirements.

Cartridge Font   Fonts that were added to the controller using floppy disk, CD ROM, or downloaded through a queue as part of a job request. These fonts can be deleted from the system when they are no longer needed.

caution   A notice that alerts the user to any safety information that will prevent damage to the equipment.

client software	The software that enables the submission of print jobs to the controller.
collated	A method of stacking the printed pages. The prints are grouped in a 1-2-3, 1-2-3, 1-2-3 page order. See "uncollated" on page xvii
command	A statement that instructs the system to perform a specific operation.
command line	A string of statements with possible arguments that you enter to instruct the system to perform an operation or series of operations.
controller	A primary component of the printing system that manages the queueing and processing of print jobs sent over the network, as well as various other tasks.

D

data stream	The format of data passed from one device to another.
decomposer	A controller subsystem that generates the bitmap image that is based on the PDL file.
decomposition service	A process within the print service that allows, through the use of various applications and options, the saving of files on the FreeFlow® Print Server controller as TIFF image files.
default	A particular setting or value for a variable that is assigned automatically by the FreeFlow® Print Server software and remains in effect until cancelled or changed by the operator. This setting is designed to produce the best results using the available settings. See also; System Specified.
device	A device represents a printer and a port on that printer (for example, a specific IPP port/virtual printer on a FreeFlow® Print Server controller). It is possible to have more than one device that addresses the same printer.
device dependent	A feature associated with a particular model of device. Device-dependent features result in output varying from one printing device to another.
diagnostics	The programs that are used to diagnose problems within the system or to help service personnel pinpoint the source of such problems.

directory	Logical grouping of files and subdirectories that are identified by name.
document	The document object represents the content that is to be printed and internal formatting information about that content. A job is composed of one or more documents.
dpi	Dots per inch.
driver	A program that links a peripheral device to the operating system.
dry ink	The minute particles of resin and carbon black toner that are deposited and fused onto the page to create images.
duplex	To print on both sides of a sheet of paper.

E

edge treatment	Lead Edge Screening is used to prevent fuser wraps on documents that print edge to edge by lightening the image along the leading edge, thus reducing the amount of toner. Some documents contain a dense image along one edge of the paper causing an increase in the amount of toner in that region. If that region is at the leading edge of the paper, the excess toner may cause the paper to wrap around the fuser and jam the printer.
error message	A message displayed on the system or printed on an error page, informing you of an error or a fault that occurred with the processing of a job.
Error Page	A page printed at the end of a print job that includes error messages, if any occurred.
Ethernet	The network architecture standard consisting of a coaxial cable and associated components for connecting workstations to each other, file servers, and peripherals. This communication system enables workstation users to share information and services.
Exception Pages	Pages within a job where special page characteristics are set. Exception Pages can be a different stock size or color, side imaged or other options available on FreeFlow® Print Server.

extension	The portion of a filename that follows a period. In some instances the extension identifies the file type. For example, .ps would specify a PostScript file.

F

fault	A condition which prevents proper processing of a print job and requires the intervention of an operator. For example, a paper jam is a fault.
filename	A name of a file or a directory.
fill	The PostScript graphic operation in which the inside of a shape is painted with some color, such as black or a pattern.
finishing	The operations that are performed after a document leaves the press. For example, binding is a finishing operation.
fixed disk	A disk drive permanently mounted within a computer. Same as hard disk.
font	A complete set of alphanumeric characters and symbols that have common characteristics such as style (typeface), point size, weight, and stress. Computers store font images in data files, defined in either bitmap or contour format. For example, 10 point Helvetica Light Italic.
font renderer	This is an option that allows the System Administrator to select the rasterizer that will be used to process PCL jobs that contain scalable fonts. Additional parameters may be set for the selected rasterizer to enhance the printing of Intellifont and TrueType fonts.
format	The layout of a document, including margins, page length, line spacing, and font; to prepare a disk to accept data.
frame	The unit of data within a packet whose specifications are defined by the network architecture and network communications protocol.
FreeFlow® Print Server	The Xerox application software that is running on the Sun workstation which becomes the interface connection between the client and the printer.
FTP	File Transfer Protocol: A network protocol layer used for reliably transferring files over a network, built upon TCP/IP.

fuser wrap   A condition, resulting in a paper jam, during which the output sheet of paper sticks to the fuser roll and the paper curls around the roll.

G

gateway   A network switching device used to connect incompatible networks.

Graphical User Interface (GUI)   A graphics based user interface. It acts as a means of input/output allowing users to interface in a more intuitive and effective way. GUIs consist of windows, icons, and pull-down/pop-up menus.

grayscale   An image in which each picture element (pixel or dot) is defined as a gray value as opposed to black or white values. An image file may contain different numbers of gray values depending on its resolution. A halftone screen is applied to grayscale images to prepare them for printing on devices that are capable of printing only solid black dots.

Guest   Has the minimum access rights on the Output Manager system. This user is not required to log in.

GUI   See "Graphical User Interface (GUI)" on page vi.

H

Half Bitting   A control that simulates a partial change in position of a pixel by printing every other pixel and allowing the printer to smooth out the ripples. The resulting effect is that peaks and valleys of the pixels are smoothed.

halftone screen   A tool used in the offset printing, typesetting, and laser printing process to convert a continuous tone (photographic) image to dots. This allows the image to be printed using one of the printing processes.

hard disk   A disk drive permanently mounted within a computer. Same as fixed disk.

head to head   To print the reverse side of a page so that the finished document opens like a book.

head to toe   To print the reverse side of a page so that the finished document opens like a calendar.

highlight	A visual indication that an object is in a special state. Often used to denote that an item is selected.
High watermark	A job processing paradigm in which a queue is configured to stop a printer from accepting jobs after a specified number of jobs have been queued.
Hold	Delaying the printing of a selected job.
humidity	The degree of wetness in the printer.
HTTP	HyperText Transfer Protocol: The communication protocol used on the World Wide Web.

I

icon	A small pictorial representation of a base window. When an icon is used, it conserves screen space and keeps the window available for easier access.
image	The rectangular array of sample values. Each sample value represents some gray-level value or color. Also known as "sampled image".
image quality	An option that allows a System Administrator to set a variety of functions to enhance the quality of the printed image based on the type of PDL file being printed and the type of fonts being used. (check)
Image Shift	A job option that allows you to adjust the location on a page where printing will occur by shifting the image horizontally and/or vertically along an X and/or Y axis.
ineligible job	A job whose resources are not available to the printer (such as yellow paper, tabs, etc.) Once the resource becomes available, the job will print.
interpolation	An algorithm used to convert bitmap data from one resolution to a bitmap having another resolution.
interposer	A device that provides additional paper trays for a printer and allows for the use of preprinted forms or inserts that can be inserted into a job without needing to pass through the fuser.
Internal Font	One of the resident fonts loaded on the FreeFlow® Print Server controller at installation.

IOT	**Image Output Terminal.** The part of a printer or a copier that actually marks the paper.
IP	The Internet Protocol of the TCP/IP communications suite.
IPP	The IPP (Internet Printing Protocol) is an application level protocol that can be used for distributed printing using Internet tools and technologies. The protocol defines interactions between a client and a server. The protocol allows a client to inquire about capabilities of a queue, submit a print job to a selected queue, inquire about a job progress, inquire about a queue status, and cancel a print job. In addition, the protocol defines operations that rudimentary administration of printers but these operations are not supported in the Mars IPP IBS.

J

job	The job object is a model of a print job. The job object is the managed unit of work. It contains information on the characteristics and state of the document or documents that comprise it.
job flow	The path a job takes from creation to completion at the printer.
Job Forwarding	A FreeFlow® Print Server option that provides the user with the ability to forward a job from one FreeFlow® Print Server system to another FreeFlow® Print Server system.
Job Inserts	pages that separate specific pages of a job.
job size	The size of the print master data file measured in bytes.
job status	The status of a print job in the print queue.
job submission	The process of sending a document with an attached job ticket to the server.
job ticket	A file that contains all the settings that will determine how the printer will print your document. For example, a typical job ticket contains information on paper type, simplex or duplex, binder or tab pages, and number of copies to fit. It also contains information on whether the document has any finishing options set, like stapling, binding, etc.

L

LAN	**Local Area Network.** A network connecting computer and peripheral devices through cables.
landscape	The page orientation in which page images are arranged horizontally on the page so that the resulting image is wider than it is long; contrast to portrait.
least-busy printer	The printer that has the least number of processing jobs.
load balancing	The concept of spreading print jobs across printers, so that all printers are kept busy and one or two do not come overburdened while others are seldom used. In this way, printer productivity is improved, yielding greater efficiency and return on investment.
log	A file that contains a record of events such as messages, errors, and job and accounting information.
log in	The process of gaining access to a system by entering a user name and, optionally, a password.
log out	The process of exiting a user work session on a system.
Long Edge Feed (LEF)	The orientation in which the paper is fed through the imaging system long-edge first. See "Short Edge Feed (SEF)" on page xv.
LPR	**Line Printer Requester**. A network printing program that allows access to remote printers on a network (via lpr, lpq, lprm). LPR enables the user to choose a target printer, specify job options (number of copies, titles and banner pages, file type), print one or several files residing on her/his workstation, view print jobs in the queue, and remove jobs from the queue.

M

menu	A group of controls contained in a list of options.
minimum thickening	The width of a minimum stroke in pixels.
misregistration	The result of incorrectly aligned colors due to many factors including paper stretch, and press alignment. Misregistration results in white gaps and shifted hues. See also, trapping.

modules	Individual control units within the FreeFlow® Print Server software. FreeFlow® Print Server contains the following modules: Job Manager, Printer Manager, Reprint Manager, Queue Manager, Color Manager, and Administration.
moiré	The pattern which results because of one screen angle overprinting other screen angles in color printing.

N

named stock	A particular paper stock which has been assigned a particular name to make it easier to identify the stock and its associated characteristics (color, weight, size, etc.) within the FreeFlow® Print Server stock list.

O

offset	A stacking option that delivers printed output in a manner where the edge of each printed job set is placed a few inches from the edge of the other printed sets.
operating system (OS)	Computer software that controls the low-level operations of computer hardware, including input and output to memory, disk drives, and peripherals.
Operator	A log in level. The Operator, typically equivalent to the print operator, possesses less access rights than the System Administrator and more rights than a guest user.
Ordered Stock	Stock placed in a specific order in a tray, such as tab stock.
orientation	The position of the page image relative to the actual page; describes whether the printed image is parallel to the long side of the paper (landscape orientation) or to the short side of the paper (portrait orientation).

P

password	A combination of letters and numbers associated with a user name. A password provides security for a user account.
path	The route to a file on a disk.

PCL	**Printer Command Language**. A text-oriented language developed by Hewlett Packard primarily for use with its own range or printers. It is also compatible with many other printers. It supports graphics, text, and images with a wide variety of fonts.
PDL	**Page Description Language**. A file format that provides a set of instructions to the printer describing the appearance of a page or pages. PostScript and PCL are examples of page description languages.
peripheral	A device used in conjunction with a computer or workstation usually for input or output. Printers and modems are examples of peripherals.
permissions	The attribute of a file or directory that specifies who has read, write, or execute access.
pitch	The number of characters per inch.
pixel	An abbreviation for "picture element". The smallest addressable element on the scan line of the output device. Pixels have a finite size which depends on the resolution of the device. For example, a pixel on a 300 spi printer is 1/300 of an inch wide.
platform	A combination of hardware and operating system software.
portrait	The page orientation in which page images are arranged vertically on the page so that the resulting image is taller than it is wide; contrast to landscape.
PostScript	A page description language developed by Adobe Systems, Inc. It supports graphics, text, and images with a wide variety of fonts. It is designed to be printer independent.
PostScript job	A PostScript program such as a creator's final form document. Also referred to as a "PostScript master" or "PDL file".
PostScript stroke command	A PostScript graphic operation in which the length of a path is painted with a color, such as black.
power off	To shut down the system.
power on	To start the system.
power saver	A printer mode which enables you to minimize the printer power consumption during times of no usage. Both manual and automatic power saver activation is available.

ppm	Pages per minute.
preferences	Preferred settings which can be set within the FreeFlow® Print Server software to control such things as language and fonts.
preferred tray	This is the tray in the printer that contains the most commonly used stock. The printer can be set up to use this tray as the default, until its stock runs out.
primary printers	Primary printers are used on a regular basis, while Standby printers are used when all Primary printers are unavailable to accept jobs. The Standby printers selection is only available when the Associated Printers selection is Selected Printers.
primary stock	Primary stock is the most commonly used paper stock in the printer.
print application software	Software resident on the client workstation used to create print documents.
print client	The application or machine in the distributed system that assembles a service request and submits the request to the server.
print job	An object that represents a request to print one or more documents together on a logical printer.
Print Now	A Job Manager option that allows you to interrupt a currently printing job to print another selected job.
print options	A set of options available for controlling the processing of a print job. Print options include simplex or duplex printing, media selection, collating, stitching, etc. Print options can be sent to the Controller as a part of the job, providing automatic job processing.
print queue	A queue that temporarily stores print jobs that have been sent over the network.
print service	A print service accepts printing requests and performs the indicated actions.
printer	The hardware component that places the page image on a physical page.
priority	The order in which queues are serviced.

proof job	A job option that can be achieved by selecting [Job: Proof]. If this option is selected, a single copy of the document will be printed. A benefit to this is that the printer operator gets the chance to view the document before a long print run is begun. When a job is proofed, it is not removed from the queue as occurs when the job is released to the printer. This also helps the user to avoid having to resubmit the job from his or her workstation.
promote	Moving a job above all pending jobs in the queue.
public net	The customer's main enterprise-wide network, comprising possibly many segments joined by gateways and routers.

Q

queue	A queue maintains pools of jobs and is responsible for managing the distribution of these jobs to the printers on your network. You may create a queue of all color printers, for example, or a queue of all printers in one geographic location. The queue is the central object in Output Manager: incoming jobs arrive in a queue; outgoing jobs are sent to printers from the queue.

R

RAM	**Random Access Memory**. Volatile memory used for temporary storage of data and software commands, used by programs for immediate task processing.
Raster Image Processor (RIP)	The hardware and/or software that rasterizes an image by changing text and images into an array of pixels that will be printed.
rasterizer	A portion of software that converts graphic objects made up of vectors, or line segments, into dots for output to raster graphic screens and printers.
reboot	Reloading initial instructions into the memory of the computer. These instructions then direct the loading of the remainder of the programs.
release	Allows the selected held job to be printed. The job is placed immediately after all printing or pending jobs in the queue.
Resident Fonts	The fonts that are loaded on the server at the time of installation and cannot be deleted.

resolution	The measurement of the number of picture elements (pixels or dots) per square area of unit.
Reverse Landscape	The image is rotated -90 degrees with respect to the medium from the portrait orientation
Reverse Portrait	The image is rotated 180 degrees with respect to the medium from the portrait orientation
RIP	See Raster Image Processor.
rotation	To turn a page image from its current position. 0 (zero) degrees represents no rotation.
round robin	A job processing paradigm in which a queue cycles through its associated printers and assigns each job in turn to the next printer on the list.
router	A device used to connect networks or similar or different architectures to isolate data transmission within each network.

S

Sample Job	A print file in a specific PDL format whose printed result is known. The output of the Sample Job on a subject printer is compared with the known result as a diagnostic tool to determine whether the printer is working properly.
SBM	Signature Booklet Maker.
scalable fonts	A mathematical equation that describes to the printer how to draw the characters of a font. Because only one equation must be stored to produce a character in a variety of sizes, the required amount of memory is much less than for bitmap fonts.
scroll bar	A control that is used to move the view of the data displayed in a window or work space settings.
scrolling	Using the scroll bar to view data that cannot be viewed entirely within a single pane.
select	To choose from a list of options, such as those in a menu.
server	In a computer network, a unit that provides a specific service (such as data storage and computer services) to network users.

settings	The controls used for defining values.
Short Edge Feed (SEF)	Laser printing in which the paper is fed through the imaging system short-edge first. See "Long Edge Feed (LEF)" on page ix.
simplex	Printing on one side of the paper.
slider	A control used to set a value and give a visual indication of the setting.
Slip Sheets	Extra paper or other media that are inserted between document sets of a print job.
SNMP	Simple Network Management Protocol: A widely used protocol for managing networks.
Soft Fonts	Fonts that are loaded on the server any time after the initial installation using floppy disk, CD ROM, or downloaded through a queue as part of a job request. These fonts can be deleted when they are no loner needed.
Solaris	A bundled software release from Sun Microsystems which includes the Sun Operating System.
spi	Spots per inch.
spooling space	Space allocated on a print server for storing requests in the printer queue.
stacking	To offset stacks for collated output, uncollated output, or both. This enables stacks or sets of prints to be delivered in a staggered pile.
standby printers	Primary printers are used on a regular basis, while Standby printers are used when all Primary printers are unavailable to accept jobs. The Standby printers selection is only available when the Associated Printers selection is Selected Printers.
staple	A finishing option that uses precut wire to staple each print set.
status	The current condition of a system component.
status message	The information generated by an application that informs you about the progress of a process.
stitch	A finishing option which cuts and inserts the wired stitches into each print set.

stochastic screening   The process of using randomly spaced dots instead of the traditional halftone dots aligned along designated screen angles to avoid moiré patterns. The stochastic screen prevents screening interference patterns, but it can cause graininess and other visual artifacts.

stock   The various types of paper used for printing.

stock list   A list available within the FreeFlow® Print Server interface that identifies all stock types currently loaded on the printer or that are available to be loaded. (work on)

stock name   A name assigned to a particular stock to make it easier to identify the stock and its associated characteristics (color, weight, size, etc.) within the FreeFlow® Print Server stock list.

string   A sequence of alphanumeric characters treated as one unit of data by a program.

stroke   The weight, or width of a character or line.

subnet mask   A series of 4 bytes whose bits identify the corresponding bits in a 4-byte network—host addresses as network versus host addresses. The "1's" in the mask correspond to the bits used for the network address. The "0's" in the mask correspond to the bits used for the host address.

System Specified   The system determines the most appropriate settings for the given job. This could be an output location, output order, or resolution. System Specified settings can generally be changed by selecting various FreeFlow® Print Server print system options in the Setup: Preferences window. See also, default.

T

Tagged Image File Format (TIFF)   A common image format developed by Aldus and Microsoft for scanned color and black and white images. It is a versatile, reliable, and widely supported bitmap format designed for exchanging digital information.

TCP/IP   **Transmission Control Protocol/Internet Protocol.** Commonly used network communications protocol supported by the FreeFlow® Print Server system. It is a set of data communications protocols, or a type of "language" that the devices use to "speak" with each other.

throughput The measurement of the speed of a printer, expressed in pages per minute.

TIFF Tagged Image File Format: A common image format developed by Aldus and Microsoft for scanned color and black and white images. It is a versatile, reliable, and widely supported bitmap format designed for exchanging digital information.

toner Particles of resin and carbon black. Toner accepts an electrical charge and is used to create the xerographic prints.

trapping An image processing technique used to compensate for misregistration in a print engine or press.

U

UFST Agfa's Universal Font Scaling Technology is one of several font rasterizers. The USFT control setting is used to adjust the amount of thickening for Intellifont scalable fonts.

uncollated A method of stacking printed pages. Documents are printed in separate sets of each page. Printing two sets of a three page document would result in a 1-1-1, 2-2-2 page order. See also, collated.

Unspecified Stock A stock name that presents the system with a minimum of limitations for printing.

V

VIPP **Variable Data Internet PostScript PrintWare**. Setting up and using a "VIPP cache" queue enables the user to reuse desired document objects that exist in a post ripped state.

virtual printer A way of creating reusable job settings by using logical names for an actual printer. When you create a virtual printer you assign unique default attributes. When jobs are submitted to those virtual printers, they assume the attributes automatically.

W

warm boot   Restarting the controller while power to the controller is still on.

warning   Documentation or Help warnings alert users to safety information that will prevent personal injury or equipment damage. Software warnings notify the user that the settings may cause unsatisfactory or undesirable results.

weight   Refers to the weight of the paper stock in grams per square meter (gsm) or pounds. The paper's weight is usually printed on the ream wrapper.

workstation   A computer able to process data but designed specifically for interaction with a network.

write black   The laser images the location on the photoreceptor where black marks are to be printed. The technology enhances the ability to consistently print the fine details associated with lines, text, and halftone dots thereby producing uniform, smooth gray tones and graphics.

write white   The laser images the location on the photoreceptor where white marks are to be printed.

X

X axis   The horizontal axis on a grid.

Y

Y axis   The vertical axis on a grid.

Z

zone   Logical, user-defined grouping of devices in an AppleTalk intranet that makes it easier to locate network services.

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