



JAWS pdf server™

USER MANUAL

Version 3.0



GLOBAL GRAPHICS®



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Jaws PDF Server Manual

Jaws PDF Server 3.0

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1

Introducing Jaws PDF Server

Jaws® PDF Server™ (JPS) is a centralized server solution that converts PostScript® language, EPS files and TIFF images into optimized PDF files. PDF (Portable Document Format) is the industry-standard solution for publishing documents so they can be read on any platform equipped with an appropriate reader. Jaws PDF Server is powered by Global Graphics Software's MaxWorkFlow™, the intuitive drag-and-drop workflow management software.

1.1 The Jaws PDF Server GUI

The Jaws PDF Server GUI (graphical user interface) allows you to quickly and easily setup and configure your PDF workflows. When a workflow is running you can see at a glance its processing state, from the status bar above each module.

Refer to Chapter 3 for a detailed description of the Jaws PDF Server GUI.

1.2 Jaws PDF Server modules

Jaws PDF Server consists of three modules, PDF Creator, SmartInput and Queuer. These can be linked, in whatever configuration is required, to create your PDF workflows. A brief description of each module follows, but as you might expect, this manual provides full and detailed descriptions for each module.

SmartInput

SmartInput acts as a ‘gateway’ to PDF Server. Jobs enter the workflow through the SmartInput module and are passed to the other modules for processing.

Chapter 6 describes how to configure the SmartInput module.

Queuer

Queuer provides facilities for coordinating job flow through the workflow.

Chapter 7 describes how to configure the Queuer module.

PDF Creator

PDF Creator is the heart of Jaws PDF Server. It converts jobs into PDF files that are compliant with Adobe® PDF 1.3 and 1.4 specifications.

Chapter 8 describes how to configure the PDF Creator module.

1.3 Running Jaws PDF Server as an NT service

Jaws PDF Server v3.0 can be run as a server service on Microsoft® Windows NT® 4.0, Windows® 2000 or Windows® XP. The service may be added during program installation and the usual service options for starting, stopping and selecting security protocols are available to the administrator.

1.4 About this manual

This manual is a complete guide to using Jaws PDF Server. It is intended for anyone using or evaluating Jaws PDF Server on a PC running Microsoft Windows NT 4.0, Windows 2000 or Windows XP

1.5 Registering Jaws PDF Server

A registration card is included with Jaws PDF Server. Please take a moment to complete the card and post it to Global Graphics Software. You may also register online at <http://www.jawspdf.com>. By registering Global Graphics can provide you with the latest product news and free software updates. However, if you prefer, you may choose not to receive correspondence from us when registering.

1.6 Jaws PDF Server Technical Support

If you need help or have a question on Jaws PDF Server you can access the Jaws support pages at <http://www.jawspdf.com> and view a list of Frequently Asked Questions. If your query remains unanswered you can contact Jaws PDF Server technical support at the address given on the support site.

2

Installing Jaws PDF Server

This chapter describes the procedure for installing Jaws PDF Server. Before you begin installing make your system meets the recommended system specs, as listed in the table on page 11, to ensure correct working of Jaws PDF Server. If your system does not meet these specifications you should consider upgrading.

2.1 Recommended system specifications

Components	Requirements
Processor	Pentium III (600MHz or better)
Operating System	Windows NT 4.0 Server or Workstation ^a Windows 2000 Server or Professional ^a Windows XP Professional ^b
Minimum Disk space	500 MB
System memory	128 MB (256 MB or more recommended)
Network adapter	Ethernet 10 MB (Ethernet 100 MB recommended)
Applications	Internet Explorer 5.0 or greater installed
Server services	Macintosh services TCP/IP printing
Clients supported	Windows 98/NT4.0/2000/XP Mac OS 8.5/9.x ^c and OS X Linux ^d

a. Server required for Macintosh connectivity and FTP server.

b. Windows XP does not support Macintosh connectivity.

c. AppleTalk not supported on Windows XP.

d. Requires Samba client (or similar) to be installed. Does not support Jaws virtual printers.

2.2 Installation procedure

1. Jaws PDF Server can be installed on Window NT, Windows 2000 and Windows XP. Log on to your system as *Administrator* to ensure you have sufficient privileges to install the application files.

2. Insert the Jaws PDF Server CD-ROM and open it in Windows Explorer or My Computer. Start the installer by double-clicking **Setup.exe** to launch the InstallShield® Wizard, as shown in the diagram below.

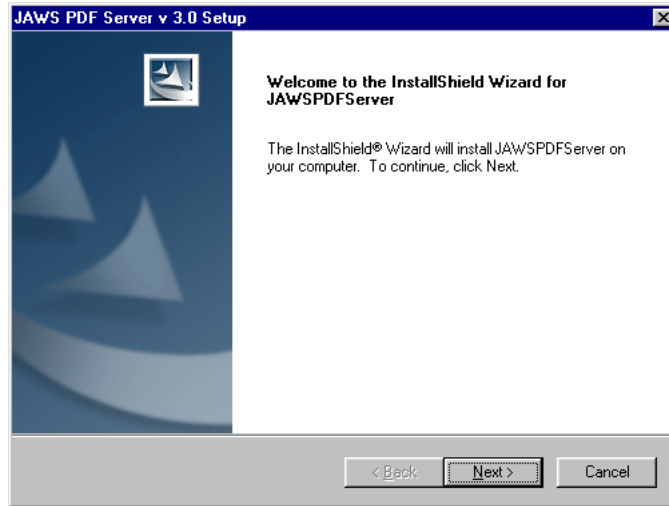


Figure 2.1 Jaws PDF Server installer wizard

The installer takes you through the process of installing Jaws PDF Server and its associated features. Click **Next** to proceed in the installer or click **Back** to go back a step.

- The installer allows you to choose the features you want to install from the CD, as described in the following table:

Jaws PDF Server Program Files	Installs the Jaws PDF Server application.
Sample files	Installs sample files and calibration targets.
MS Office Macros	Installs Microsoft Office macros so PDFs can be created directly from Word or PowerPoint.
Jaws PDF Server as Windows Service	Installs the Windows Service for Jaws PDF Server, allowing the application to be run as a Windows Service.
Jaws PDF Server Documentation	Installs Jaws PDF Server manuals.

Table 2.1 Installation features in Jaws PDF Server

- During installation you will be prompted for the Jaws PDF Server license file, which is supplied on the floppy disk provided. The license can only be used with the supplied dongle, and consequently Jaws PDF Server will *not* run if an incorrect license file/dongle combination is used.
- After the installer has done copying the files click **Finish** to close the installer window. The *Jaws PDF Server Windows Service* is only activated after you restart your computer.
- To start Jaws PDF Server, you may double-click the Jaws PDF Server icon on your desktop (only if you added this during installation), or you can access the Jaws PDF Server program group in the Start menu and launch the application from there. Remember to restart your computer after setting up the PDF server if you are using the *Jaws PDF Server Windows Service*.



2.2.1 Loading Jaws PDF Server with startup parameters

You may also load Jaws PDF Server from a command line using the following startup parameters:

```
C:\<installdir>\Man.exe [-c:filename.cfg] [-start] [-min]
```

where:

`[-c:filename.cfg]` loads the specified workflow

`[-start]` starts the workflow

`[-min]` starts minimized

A typical command might be:

```
C:\<installdir>\Man.exe -c:C:\JPSTData\Config\WorkFlow.cfg  
-start -min
```

2.2.2 Running Jaws PDF Server as a Windows Service

If you added *Jaws PDF Server as Windows Service* during the installation procedure, the Jaws PDF Server may be run as a Windows Service, allowing the PDF workflow to run without an application window (GUI). Once installed, JPS Service is added to your list of Windows Services and can be started and stopped from the services control panel.

3

Jaws PDF Server Interface

The Jaws PDF Server interface (GUI) provides an intuitive working environment that allows you to quickly and easily create PDF workflows. Using module building blocks and links, you can create complex processing workflows very easily. The main features of the GUI are highlighted in Figure 3.1, and described in the following sections.

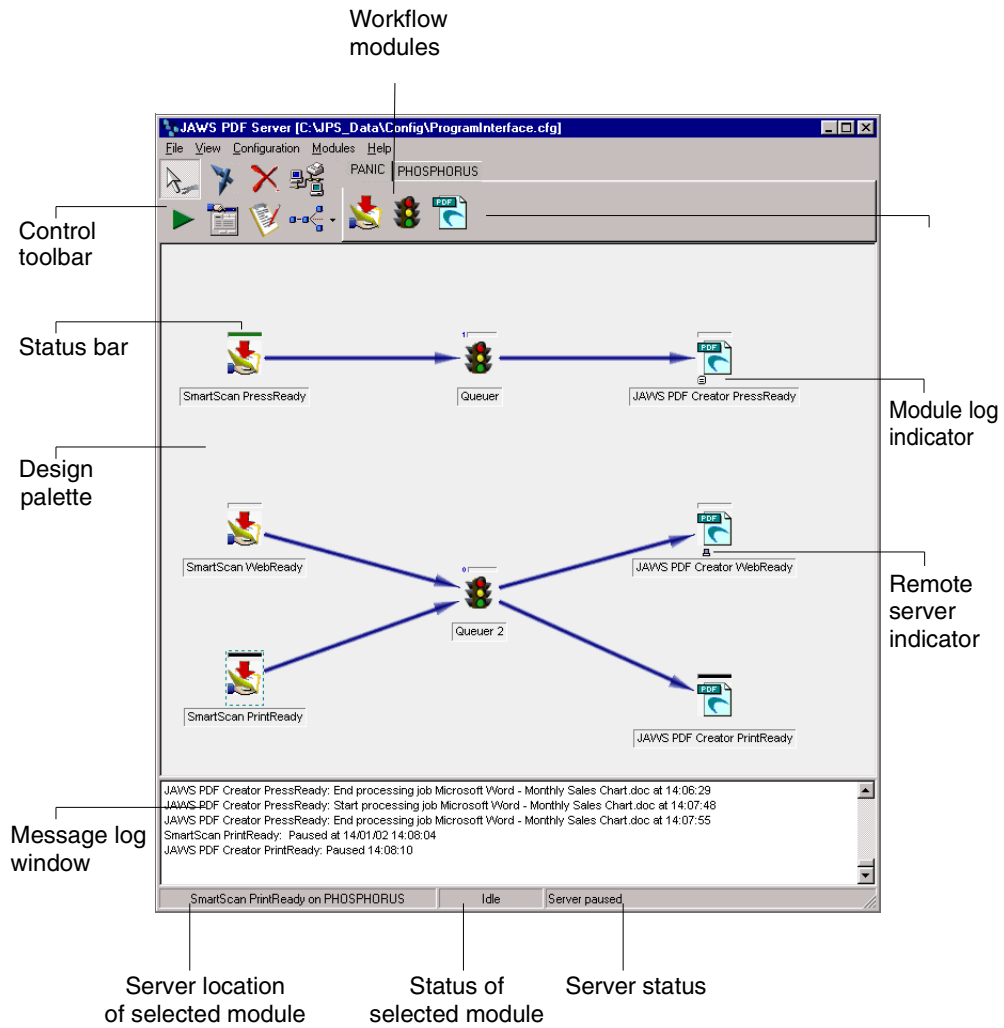


Figure 3.1 Jaws PDF Server window features

3.1 Control toolbar

The Control toolbar, shown in Figure 3.2, contains tools for selecting, linking, configuring and deleting modules. To select a tool click it once in the toolbar. When a tool is selected it appears “pressed-in” to indicate that it is active, as shown in Figure 3.2.



Figure 3.2 Control toolbar

The following tools are available in the Control toolbar:




Selector

Use this tool to select a module or a link on the Design palette. A broken line around a module indicates that it is selected. Once a component has been selected you can move it around the Design palette, or use the other tools in the toolbar to configure or delete it.



Log on/off

Use this tool to enable/disable module message logging. Any messages generated by the module, that is, when the module is started, stopped or processes a job, results in a message being written to the file `C:\JPS_Data\Log\MFW.LOG`.

A small  icon appears beneath the module when message logging is enabled for that module.



Link

Use this tool to link modules on the Design palette when creating workflows. Jobs flow from module to module in the workflow along the links created by the Link tool. The Link tool has some intelligence, it will not let you link modules that result in an illegal workflow being created.



Select computer

Use this tool to choose a remote Jaws PDF Server to run the selected module on. From the Select computer dialog box, Figure 3.3, choose the remote Jaws PDF Server machine and click **OK**. Jobs entering the module are transferred to the remote server and returned when the job has been processed.

The requirements for remote Jaws PDF Server processing are discussed in Section 3.9, “Networking Jaws PDF Servers”, starting on page 37.

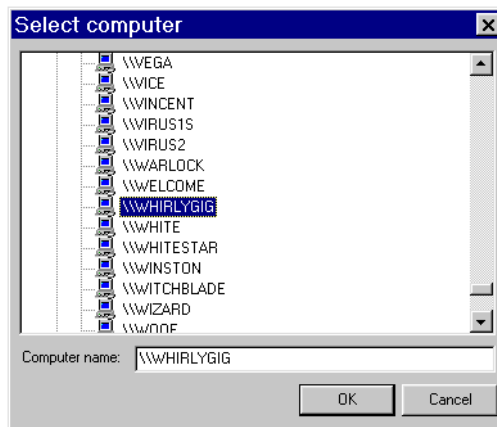


Figure 3.3 Select computer window



Delete


Use this tool to remove selected items from the Design palette. For security reasons, when a module is removed its associated folders remain intact and are *not* deleted. To remove these folders from your computer you must delete them manually. The folder’s location can be determined from the General tab of the module setup dialog box.



Object setup

Use this tool to open the setup dialog box containing all the options for the selected module. In Jaws PDF Server each module has a set of options that allow you to specify exactly how jobs should be processed. Refer to the relevant module chapter for a description of each option in the setup dialog box.

**Start / Stop**

Use this tool to start and stop modules. In a workflow a module must be started before it is allowed to process jobs. The button icon shows the action to perform when the button is clicked, that is, when the button shows  clicking it starts the module.

**Auto Arrange**

Use this tool to automatically tidy up and arrange the modules that are on the Design palette. It is particularly helpful when you have several workflows and you want to create space for more. The tool has several auto arrange options:

**Horizontal tree**

Automatically arranges modules currently on the Design palette in a left-to-right configuration.

**Vertical tree**

Automatically arranges modules currently on the Design palette in a top-to-bottom configuration.

**Line Tree**

Automatically organizes complex workflows currently on the Design palette, such as those containing multiple occurrences of scan and destination modules.

**Horizontal line**

Selected modules are aligned horizontally at the point where the tool is clicked on the Design palette.

**Vertical line**

Selected modules are aligned vertically at the point where the tool is clicked on the Design palette.

3.2 Module toolbar

The Module toolbar, shown in Figure 3.4, contains the processing modules that you will use to build your PDF workflows. To use a module first select it then click on the Design palette where you want the module placed. The toolbar also shows modules from remotely connected Jaws PDF Server servers, and you can use its modules in

your workflows to process jobs. Section 3.9, “Networking Jaws PDF Servers” describes how to add a remote Jaws PDF Server server and use its services to process jobs.



Figure 3.4 Module toolbar

The Module toolbar contains the following:



The SmartInput module accepts jobs into the workflow. It is always the first module in a workflow. You can set up shared network folders and virtual Jaws PDF printers in the SmartInput module. The features of this module are described in Chapter 6.



The Queuer module is used in workflows as a flow-control mechanism. Jobs are held by the Queuer until the destination module is available to process the next job, and the job is released. In the Queuer view window (see Section 7.4 on page 88) jobs can be held, redirected and reprocessed. The module is described in detail in Chapter 7.



The PDF Creator module converts jobs submitted to the workflow into fully optimized PDF documents, suitable for viewing on any platform with the appropriate PDF reader software. The many features and options that can be set in the module are described in Chapter 8.

3.3 Design palette

The Design palette forms the main part of the application window and is the place where you create your processing workflows. Jaws PDF Server uses a mouse driven, drag-and-drop GUI (Graphical User Interface) that allows you to easily create, configure and customize a workflow. Modules are connected to one another using an intelligent Link tool that prevents you from creating incorrect workflows. Section 4.1, “Setting up a PDF workflow” describes how to create workflows and save them to disk. Chapter 5, “Example Workflows” gives examples of some commonly implemented workflows.

3.4 View log window

The View log window, shown in Figure 3.5, is used by Jaws PDF Server to display module and system messages. This information is useful in determining what the server is doing and is a useful tool when diagnosing problems and issues.

You can show/hide the View log window by choosing **View log** from the View menu.

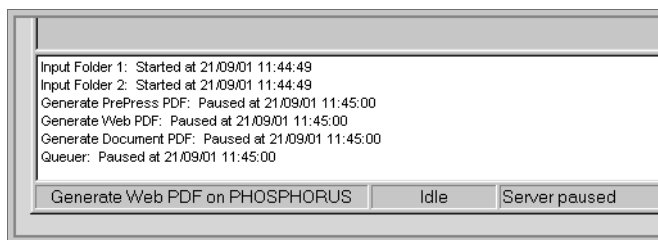


Figure 3.5 View log window

3.5 Menus

The menus contain commands and options used in Jaws PDF Server. You can access a menu using the mouse or by **ALT+<shortcut key>** (letter underlined in menu name).

The menus contain the following items:

3.5.1 File menu

New

Choose this item to clear the Design palette.

Jaws PDF Server prompts you to save any changes before clearing the Design palette.

You can also access this option by pressing **Ctrl+N** on your keyboard.

Open

Choose this item to clear the Design palette and load a saved configuration. From the Open dialog box, Figure 3.6, choose the configuration to load and click the **Open** button.

Jaws PDF Server prompts you to save any changes before clearing the palette and opening the new configuration.

You can also access this option by pressing **Ctrl+O** on your keyboard.

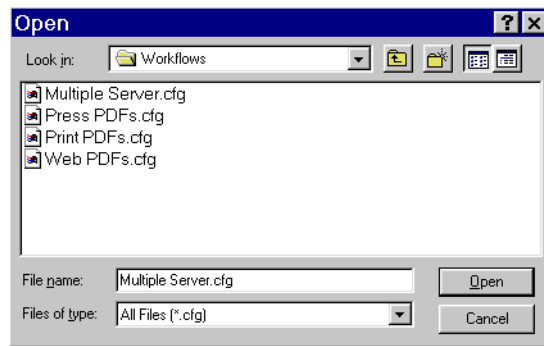


Figure 3.6 Open dialog box

Save

Choose this item to save the contents of the Design palette to disk. The first time you save a configuration, Jaws PDF Server prompts you for a name. In the Save As dialog box, Figure 3.7, enter a name for the file and choose a location, if necessary.

You can also access this option by pressing **Ctrl+S** on your keyboard.

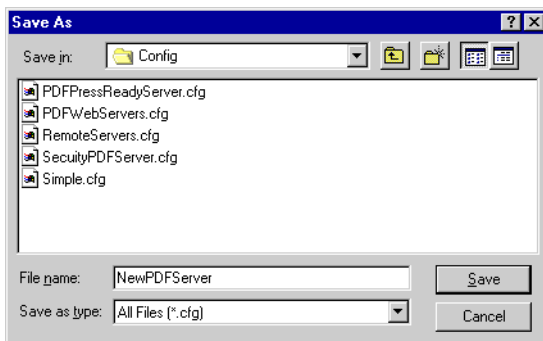


Figure 3.7 Save As dialog box

Save as

Choose this item to save a copy of the configuration using another file name. You may want to do this if you have made changes to an existing configuration and wanted to save the changes as a new configuration.

You can also access this option by pressing **Ctrl+E** on your keyboard.

Import

Choose this item to import a *MaxWorkflow export file* (.mef), allowing you to recreate a workflow that has been setup and configured on another Jaws PDF Server installation.

In the dialog box that opens, navigate to the file and click **Open**. The Design palette is cleared and the new configuration is loaded, along with its module settings. See also **Export**.

Export

Select this option to export workflows, modules and module settings to a MaxWorkFlow export file. This allows you to share workflow configurations between Jaws PDF Server installations.

In the dialog box that opens, choose a name and location for the file and click **Save**. Use **Import** to open an exported file.

Options

Choose this item to open the Options dialog box, Figure 3.8, where the overall system settings for Jaws PDF Server are configured, as shown in Figure 3.8. The controls in Options are described in Section 3.6, starting on page 29.

You can also access this option by pressing **F3** on your keyboard.

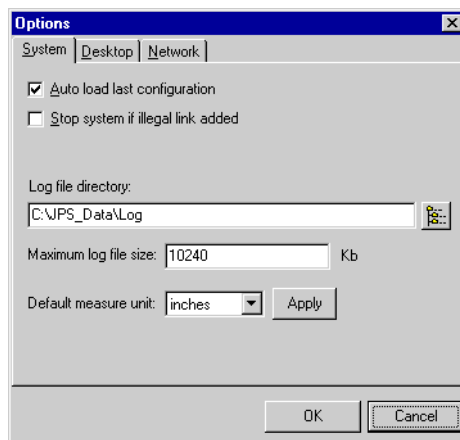


Figure 3.8 Options dialog box

Exit

Choose this command to close the Jaws PDF Server application, stopping all job processing in the process. Before shutting down, the system prompts you to save any changes made to the present configuration.

You can also access this command by pressing **Alt-F4** on your keyboard.

3.5.2 View menu

- View Log** Choose this option to show/hide the View log area of the application window. See Section 3.4 for more information on the information presented in the View log area.
- You can also access this command by pressing **Ctrl+G** on your keyboard.
- Modules Toolbar** Choose this option to show/hide the Module toolbar in the application window. Section 3.2, starting on page 20, details each of the modules available in the toolbar.
- You can also access this option by pressing **Ctrl+M** on your keyboard.
- Control Toolbar** Choose this option to show/hide the Control toolbar in the application window. Section 3.1 on page 18, details each of the tools available in the toolbar.
- You can also access this option by pressing **Ctrl+T** on your keyboard.
- Switch Icon Size** Choose this option to alter the icon size of the modules on the Design palette. There are three sizes available to help you organize your workflows. The menu options rotates through each of the available icon sizes.
- You can also access this option by pressing **F7** on your keyboard.
- Auto Arrange** Choose this option, and the appropriate sub-option, to let Jaws PDF Server automatically arrange the modules on the Design palette.
- You can also access these commands by pressing **F8, F9 and F10** on your keyboard, or by using the Auto Arrange tool in the Control toolbar, see page 20.

3.5.3 Modules menu

- Workflow Start** Choose this option to start and stop all of the modules on the Design palette, enabling your workflows to process incoming jobs.
- You can also access this command by pressing **F2** on your keyboard.
- Start / Stop** Choose this option to start/stop the selected module(s) on the Design palette. A module must be running (started) before it can process jobs. Jobs that are sent to a stopped module are queued until the module is restarted.
- You can also access this command by pressing **Ctrl+P** on your keyboard, or by using the Start/Stop tool in the Control toolbar, see page 20.
- Delete (Del)** Choose this option to remove selected modules from the Design palette. For security reasons, when a module is removed its associated folders are *not* deleted. If you want to delete them from disk you must delete them manually from the system.
- You can also access this command by pressing **Del** on your keyboard, or by using the Delete tool in the Control toolbar, see page 19.
- Setup** Choose this option to open the module's configuration dialog box. Each module has many options that allow you to control job processing. Refer to the module chapter for a description of each option available.
- You can also access this command by pressing **F5** on your keyboard, by right-clicking the module and choosing **Setup** from the pop-up menu, or by using the Object setup tool in the Control toolbar, see page 19.

View

Choose this option to open the job view window for the selected module. This window presents details about the module's status, job details and message logs. Refer to the module chapters in this manual for a description of the features in each view window.


You can also access this command by pressing **F4** on your keyboard, or by right-clicking the module and choosing **View** from the pop-up menu.

Change Computer

Choose this option to select a remote machine on which to process the jobs received by the selected module. Networking Jaws PDF Server installations is discussed in Section 3.9 on page 37.

You can also access this command by pressing **F6** on your keyboard, or by using the Select computer tool in the Control toolbar, see page 19.

Log On/Off

Choose this option to enable/disable message logging for the selected module(s). Messages are generated whenever the module is started or stopped, when a job is processed or when an error occurs. These messages can be viewed in the modules job view window, or they can be output to the Jaws PDF Server log file `C:\JPS_Data\Log\MFW.LOG` and viewed in a text editor. To indicate that messaging is enabled, a small  icon appears beneath the module on the Design palette.

You can also access this command by pressing **Ctrl+L** on your keyboard, or by using the Log on/off tool in the Control toolbar, see page 18.

Select All

Choose this option to select all items on the Design palette. You can also access this command by pressing **Ctrl+A** on your keyboard,

3.5.4 Help menu

- Quick Start** Choose this option to view the quick start guide *Getting Started with Jaws PDF Server*. This manual is also included with the product in a printed version.
- User Manual** Choose this option to open the *Jaws PDF Server User Manual*—the manual you are currently reading.
- About** Choose this option to display information about the Jaws PDF Server application. You may be asked to supply this information should you need to contact Technical Support.

3.6 Options

System, desktop and network selections may be configured in the Options dialog box by choosing **Options** from the **File** menu, or by pressing **F3** on your keyboard. The controls in the tabs are described in the following subsections.

3.6.1 Options: System tab

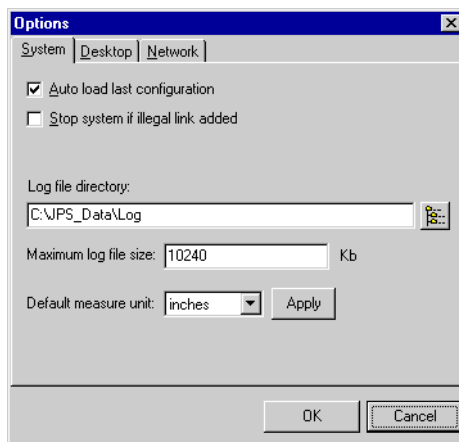


Figure 3.9 System options


Auto load last configuration

When this check box is selected, the last saved configuration is automatically loaded on the Design palette. This option is selected by default.

Stop system if illegal link added

When this check box is selected the system stops all job processing if a link is added to the workflow that would cause an illegal link to be made. In practice this feature has very little effect, since the Link tool is intelligent enough to work out when an illegal link is being made and will not allow it to be made. This option is not selected by default.

Log file directory

This option allows you to specify a directory location for the message log file **MFW.LOG**. Enter the folder location directly into the text box or click the  button then navigate to a folder.

Maximum log file size

This text box is used to specify a maximum file size for **MFW.LOG**. Messages are appended to the log file until the maximum file size is reached, when the log file is discarded and a new one created.

Default measure unit

Use the options available here to specify the units you want Jaws PDF Server to use. Click **OK** to update the units.

3.6.2 Options: Desktop tab

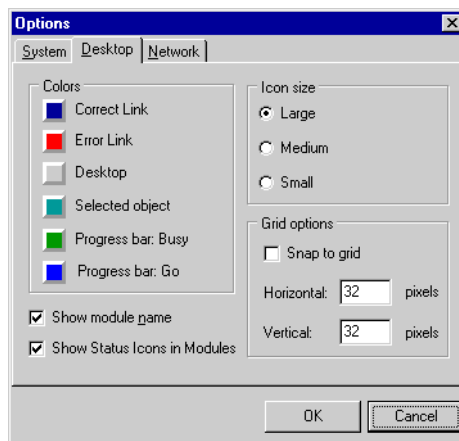


Figure 3.10 Desktop options

Colors

The options here allow you to determine the desktop colors used by Jaws PDF Server. Click the item you wish to change and choose a new color from the Colors dialog box that appears. The colors available are determined by your overall system color palette, set up in

Control Panel > Display Properties.

Show module name

Select this check box to display module names on the Design palette so they can easily be identified.

Show status icons in modules

Select this check box to show module status bars on the Design palette. The current state of the module is indicated by the status bar color, as follows:

Black—the module is currently stopped. No processing allowed.

Clear—the module is currently started and is ready for a job.

Green—the module is currently receiving a job.

Blue—the module is currently processing a job.

Red—the module needs configuring to complete the workflow.

Icon size

Allows you to choose the icon size for modules on the Design palette. You may also change icon size by choosing Switch icon size from the View menu, as described on page 26.

Snap to grid

Choose this option to turn on an invisible grid that modules will be aligned with when placed on the Design palette. Alter the grid spacing by entering values in the Horizontal and Vertical pixels text boxes.

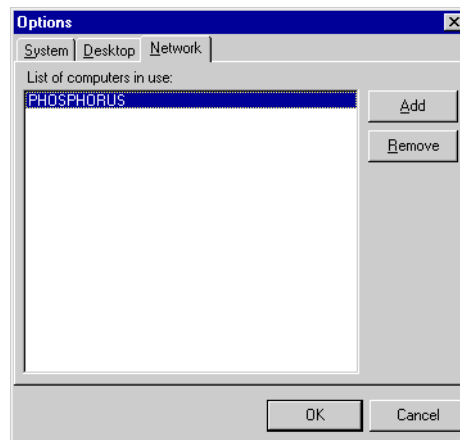
3.6.3 Options: Network tab

Figure 3.11 Network options

The Network tab contains the following options:

Add

Lets you add a remote Jaws PDF Server to your system. From the Select computer dialog box (Figure 3.12) select the computer with Jaws PDF Server installed then click **OK**. The PDF Server is added to the modules toolbar and its resources become available for use in your workflows.

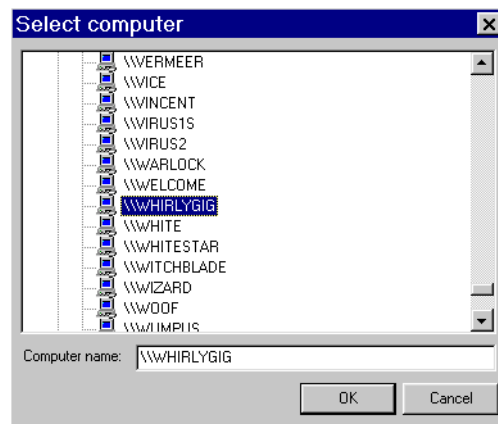


Figure 3.12 Select the remote PDF Server

Remove

Lets you delete a server from the list. Select the computer you want to remove and click the **Remove** button.

3.7 Module view window

Each module has its own module view window, where details relevant to the module are displayed. The module view window is accessed by double-clicking the module, right-clicking on it and choosing **View** from the pop-up menu, or by using the keyboard shortcut **F4**.

Figure 3.13 shows the view window for the SmartInput module. Many of its features are common to all module view windows, and are described next. The relevant module's chapter describes module specific controls in detail.

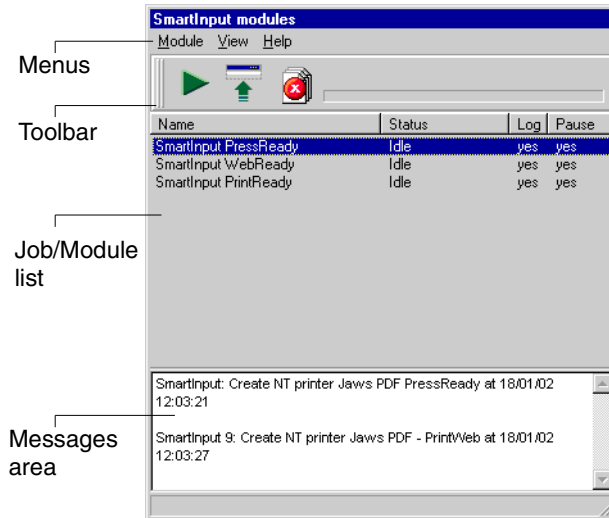


Figure 3.13 SmartInput View window

Toolbar

The toolbar contains tools for the most commonly used commands in the View window. The toolbar is usually anchored above the View list but it may be pushed off and become “free floating” on the Windows Desktop.

Tools that appear in each of the module's View windows are described below.




Show / Hide

Use this tool to hide the View window when the toolbar is anchored, or to show/hide the View list when the toolbar is detached on the Windows desktop.



Start / Stop

Use this tool to start and stop modules. In a workflow a module must be started before it is allowed to process jobs. The button icon shows the action to perform when the button is clicked, that is, when the button shows  clicking it starts the module.



**Abort job**

Use this tool to abort the current job in progress. The tool only becomes active when a large enough file is being processed, otherwise the button remains inactive and appears disabled.

**Delete**

Use this tool to remove a selected module or job from the View list. When deleting modules, the module is also removed from the Design palette; when deleting jobs, the job is removed from the storage folder.

Job / Module list

The job / module list comprises the main part of the Viewer window and is used to show all the modules that are of the same type currently on the Design palette, along with their current processing and message log enabled status.

Messages area

The Messages area of the module's view window displays processing messages for the selected module in the View list. This information can be a useful tool when diagnosing job processing problems. Using the Log tool, described on page 18, you can also output these messages to a log file so they can be viewed later in a text editor.

3.8 Module pop-up menus

You can access frequently used module commands from a pop-up menu by right-clicking the module. Figure 3.14 shows an example pop-up menu. Many of the options available are common to all modules and these are described next.

Setup	F5
Fonts	Ctrl+F2
View	F4
Clear Error	
Launch module	
Change Computer...	F6
Delete	Del
About Module	Ctrl+F1

Figure 3.14 PDF Creator pop-up menu

- Setup (F5)** Opens the setup dialog box where options for the selected module are configured. You can also access this command using the **Object Setup** tool, described on page 19.
- View (F4)** Opens the module's view window, described on page 33.
- Clear Error** Removes an offending error file from the SmartInput input folder so that job processing can resume. The file is moved to the error folder, located in the SmartInput input folder, for example `JPS_Data\Input\SmartInput\Error`.
- You may also configure the SmartInput module to automatically deal with errors by selecting the appropriate method in SmartInput options, as described in Section 6.3.1 on page 69.
- Launch Module** Initiates a module that has been shut down on the Design palette. Modules that are shut down appear disabled on the Design palette.
- Change Computer** Allows you to change the computer that will process jobs sent to the selected module. For more information on connecting to remote servers, see Section 3.9, "Networking Jaws PDF Servers".
- Delete** Removes modules and links from the Design palette. When a module is removed from the palette, its associated folders remain intact and are not deleted, you must delete folders manually to remove them from your system. You may also click the **Delete** tool (see page 19) to remove items from the Design palette.

3.9 Networking Jaws PDF Servers

A powerful feature of Jaws PDF Server is the ability to link with other Jaws PDF Servers across a local area network (LAN) to share the job processing workload. Jobs are submitted to the central server and distributed to remote servers for further processing. The processed jobs are returned to the central server where processing continues.

3.9.1 Requirements for processing jobs on a remote server

The following requirements are necessary to link Jaws PDF Servers across a network:

1. Jaws PDF Server must be installed on machines which meet the minimum specifications, as listed on page 11.
2. Jaws PDF Server must be installed on both machines but must *not* be loaded and running on any of the remotely connected (*slave*) machines. Only the *master* server should have Jaws PDF Server loaded and running.
3. The servers must be connected across a LAN.
4. COM security must be disabled on linked machines. You can disable COM security during the initial Jaws PDF Server installation procedure. If you did not turn off COM security during installation, re-install Jaws PDF Server and choose this option when prompted. Reinstalling does *not* delete any of your workflow configurations, so your settings will not be lost

There are two ways to configure modules in a workflow to run on a remote Jaws PDF Server. Both methods are described next.

Adding a remote server to the Module toolbar

You can add a remote Jaws PDF Server to the Module toolbar, as shown in Figure 3.15, then use its modules in your workflows.

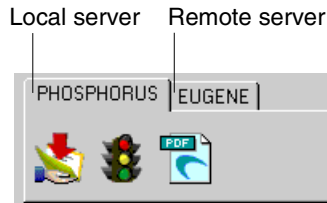


Figure 3.15 Module toolbar with remote server

To add a remote server, right-click the Module toolbar and choose **Add Computer** from the pop-up menu, or choose **File > Manager Options** and add the remote server in the Network tab. Using either method, the Select computer dialog box opens, as shown in Figure 3.16. Enter the network path to the remote Jaws PDF Server machine, or navigate to it using the network tree. Click **OK** to add the remote computer to the Module toolbar. The remote server's module are displayed when you click the tab and can be used in the workflow.

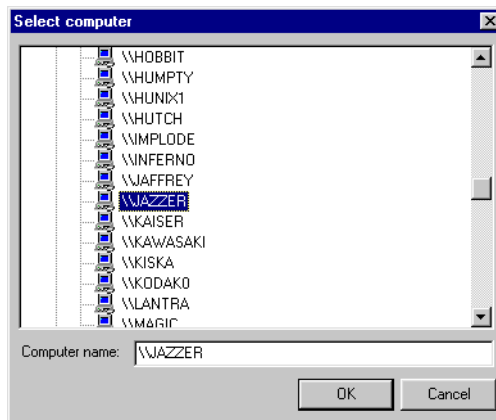


Figure 3.16 Adding a remote Jaws PDF Server

Configuring a module to run on a remote server

Any module already in place on the Design palette can be configured to run on a remote Jaws PDF Server, through the Select computer dialog box, Figure 3.16. There are several ways to open the Select computer dialog box:

- Right-click the module and choose **Change Computer** from the pop-up menu.
- Select the module and click the **Launch computer** tool in the Control toolbar.
- Select the module and press the shortcut key **F9**.

In the Select computer dialog box, enter the network path to the remote Jaws PDF Server machine, or navigate to it using the network tree. Click **OK** to finalize the configuration. Now when a job is received by the module, it will be processed on the remote server.

3.10 Monitoring Jaws PDF Server

Jaws PDF Server provides several facilities to help you monitor the status of modules and the progress of jobs through your workflows. Each tool, described in the following sections, provides a useful way of checking the workflow is processing jobs correctly and that no errors have occurred.

Module status icons

Module status icons provide a quick way of viewing the current state of a module. The status icons are located above each module on the Design palette, as shown in Figure 3.17. The color of the icon indicates the present state of the module. If you cannot see the status bar make sure you have them turned on in the Options dialog box, see page 31 for details.

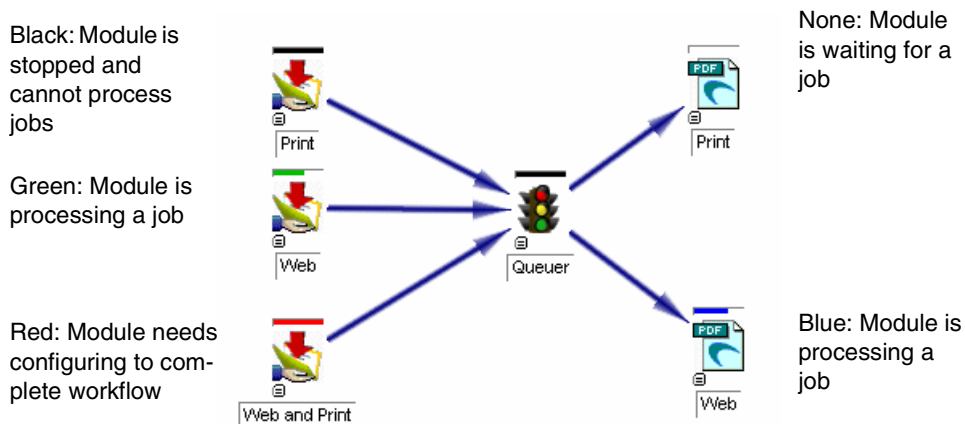


Figure 3.17 Module status bars and their meanings

Activity messages

Each time Jaws PDF Server processes a job or performs some action a message is generated and output to the message log areas of the main Jaws PDF Server window and the module's view window, as shown in Figure 3.18.

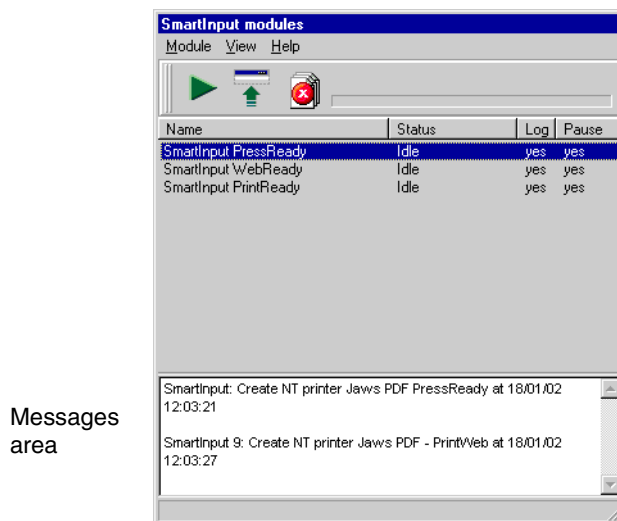


Figure 3.18 SmartInput viewer showing message area









These messages provide a useful monitoring tool since you are able to see all the processing done by a module and view any errors which may have caused the module to stop working.

Message log tool



The message log tool (shown left) provides a way to monitor individual modules and save their messages in a log file so they can be viewed at a later date. To enable message logging, select the message log tool and click on the module that you want to log. Then, when the module processes a job or generates a message, the message is written to **MFW.LOG** and may be viewed with a text editor. By default the log file is located in **C:\JPS_Data\Log** but this may be changed in the Options dialog box, as described on page 30.

3.11 Jaws PDF Server list of commands

Button	Command	Menu selection	Shortcut
	Manager options dialog box	File > Options	F3
	View/hide log window	View > View Log	Ctrl+G
	Modules toolbar hide/show	View > Modules Toolbar	Ctrl+M
	Workflow toolbar hide/show	View > Control Toolbar	Ctrl+T
	Change icon size	View > Switch Icon Size	F7
	Create a configuration	File > New	Ctrl+N
	Open a configuration	File > Open	Ctrl+O
	Save a configuration	File > Save	Ctrl+S
	Import a configuration	File > Import	
	Export a configuration	File > Export	
	Selector		
	Start and stop the PDF server.	Modules > Workflow Start/Stop	F2
	Delete a module	Modules > Delete	Delete
	Start/Stop a module	Modules > Start	Ctrl+P
	Setup a module	Modules > Setup	F5
	Module viewer	Modules > View	F4
	Generate a log file.	Modules > Log on/off	Ctrl+L
	Launch module from remote PC	Modules > Change Computer	F6
	Link tool		
	Alignment tool	View > Auto arrange	F8, F9, F10

4

Using Jaws PDF Server

In Jaws PDF Server you create workflows using modules and links. When a job is sent for processing it enters the workflow through the SmartInput module and is passed from module to module—moving along the workflow until the job is processed into a PDF. You must have at least one workflow running to process jobs; but to meet all the processing requirements of your users, you are likely to need several workflows running together.

4.1 Setting up a PDF workflow

Setting up a PDF workflow is simple and quick with Jaws PDF Server. You use an intuitive, graphical, mouse-driven interface to place *modules* on the Design palette and link them to create a processing workflow.

The procedures that follows take you through the process of creating a PDF workflow.

4.1.1 Placing modules

1. Begin with a clear Design palette by selecting **New** from the **File** menu.

- From the Module toolbar click the SmartInput module to select it. The module icon appears “pressed-in” when selected, as shown in Figure 4.1.



Figure 4.1 Module toolbar with SmartInput selected

- With the SmartInput module selected, click on the Design palette where you want the module located. The SmartInput module is placed on the Design palette at the point where you clicked. If this is not a suitable location, simply drag the module to another place on the palette.
- Next, place a PDF Creator module on the Design palette. Position it to the right of the SmartInput module, as shown in Figure 4.2.



Figure 4.2 SmartInput and PDF Server modules

- To create a simple workflow you should link the two modules with the **Link tool**. Click the **Link tool** in the Control toolbar to select it.

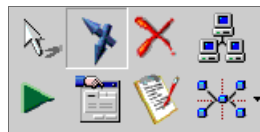


Figure 4.3 Link tool

6. With the Link tool activated, on the Design palette click the SmartInput module and move the pointer to the PDF module. Notice a link arrow is drawn from the SmartInput module and the pointer changes to a hand, as shown in Figure 4.4.

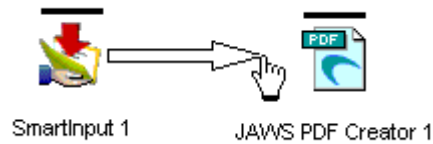


Figure 4.4 Creating a link

7. Click the hand on the PDF Creator module to create the link, as shown in Figure 4.5.

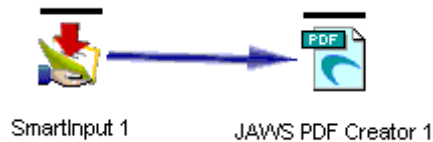


Figure 4.5 SmartInput and PDF Creator modules linked

Configuring the modules

1. Use the setup dialog box to configure the workflow modules so that jobs are processed according to your requirements.

There are several ways to open the setup dialog box:

- Right-click the module and choose **Setup** from the pop-up menu.
- Select the module and click the Setup tool in the Control toolbar, Figure 4.6.

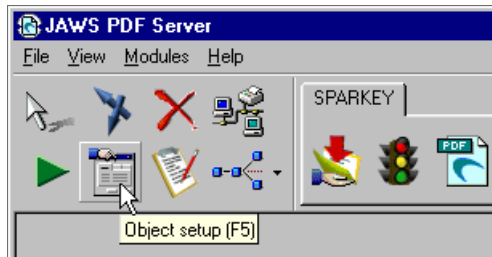


Figure 4.6 Click the Setup tool

- Select the module and choose **Setup** from the **Module** menu.
- Select the module and press **F5** on the keyboard.

- Using whichever method you choose, open the module's setup dialog box. Figure 4.7 shows the setup dialog box for the SmartInput module. Notice how the dialog box is organized into tabbed areas, making it is easy to locate a particular option.

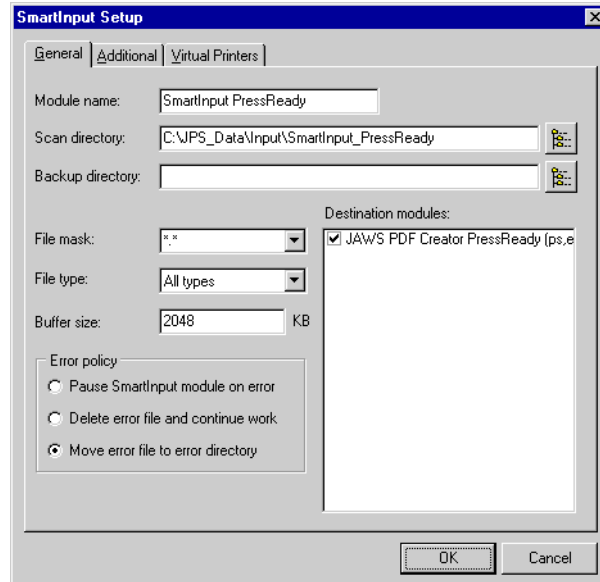


Figure 4.7 SmartInput Setup dialog box

- For this example we will not be setting any module options. Refer to Chapter 5, “Example Workflows” for a list of options used to produce several types of commonly used PDF document types.

When you have finished looking at the various options available click **OK** to close the setup dialog box. Any changes you have made to the module's configuration options will be retained. If you do not want to retain any changes made to the module options, click **Cancel** instead.

Saving the Design palette configuration

After creating your workflows you may want to save the contents of the Design palette to disk so that the configuration may be swapped out with another configuration and recalled later. To save the workflow do the following:

1. From the **Configuration** menu choose **Save**. The Save as dialog box opens, as shown in Figure 4.8.

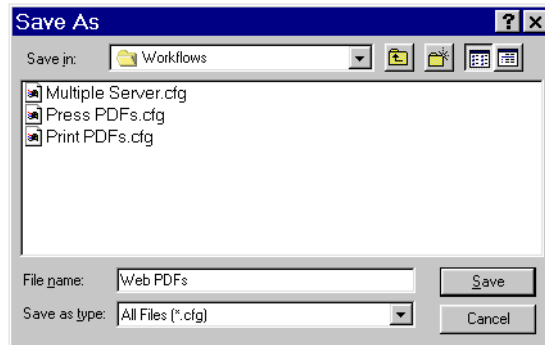


Figure 4.8 Save as dialog box

2. In the **File name** area enter a name for the workflow and click **Save**. Everything on the Design palette is now saved, along with all the module settings. If this is the last configuration to be saved before Jaws PDF Server is closed, the configuration will be automatically loaded when the Jaws PDF Server application is reloaded.
3. To open a saved configuration choose **Open** from the **Configuration** menu and select the saved file. The system prompts you to save any unsaved configurations before the Design palette is cleared and the new configuration loaded.

Starting the workflow

Before jobs can be processed you must start the workflow. Once a workflow has been started it is able to receive jobs and process them into PDF files.

There are several ways to start the workflow:

- Choose **File > System Start**.
- Press **F2** on your keyboard.
- Select the workflow's modules and click **Start/Stop** in the Control toolbar.
- Start the Jaws PDF Server service in the Services control panel in Windows. This feature is new for Jaws PDF Server v3.0 and is described in Section 1.3 on page 7.

4.2 Submitting jobs for processing

To submit jobs to the workflow for processing you must provide input mechanisms for users. Jaws PDF Server allows you to submit jobs using a Jaws PDF Server virtual printer or using a hot folder, as described next.

4.2.1 Using a Jaws PDF Server virtual printer

Setting up a virtual printer allows users to easily submit jobs directly from an application program, such as Microsoft Word or QuarkXPress. The virtual printer handles the process of passing the job to the workflow in the correct format for processing.


The virtual printer is created by the SmartInput module, as described in Section 6.3.3 on page 74, and published on the network just like any other networked printer.

Creating a Jaws virtual printer

The procedure for creating a Jaws virtual printer is as follows:

1. Select the SmartInput module that you want to add a virtual printer to and open its configuration dialog box; by right-clicking the module and choosing **Setup** from the pop-up menu, or by pressing **F5** on your keyboard.
2. Select the Virtual Printers tab to reveal the virtual printer settings. The tab contains all the settings for publishing the virtual printer on NT and AppleTalk networks.

Note: Windows XP does *not* support AppleTalk so it is not possible to set up a virtual printer for Apple Macintosh clients connecting to a Windows XP server. Instead use hot folders as an alternative, see “Using a hot folder” on page 51.

3. **Mac users**—To publish the printer on an AppleTalk network enter a name for your Jaws virtual printer in the **Printer name** text box, and in the **PPD** text box enter `C:\<installdir>\PPD\PDFCreator.ppd`, or click  and navigate to the file in the Windows dialog box that opens.

NT and 2000 users—To publish the printer on an NT network enter the name of the printer in the **Printer name** text box, and choose a name for the printer share (this is the name of the printer that will appear on the network). You may use the *same* name for both printer and printer share, but do *not* choose a name that is already in use on your system.

4. From the list of printer drivers choose `PDFCreator.ppd`. If this driver is not listed, install it by clicking the **Create PS Printer Driver** button.
5. Click **Create printer** to add the new printer to your list of installed printers and publish it on your NT network. Click OK to close the SmartInput setup dialog box.
6. Users may now add the new printer using the Microsoft *Add Printer Wizard* or *Chooser* on a Macintosh computer. Windows users must be logged onto the domain before they can add the printer successfully.

Once the virtual printer has been added it may be configured like other printer drivers. For example, you can define the output page size used when printing documents. In Windows this setting overrides the page size that has been defined in the document application.

4.2.2 Using a hot folder

Another way for users to submit jobs for processing is through a *hot folder*. Jobs are placed in the hot folder and picked up by the workflow and processed accordingly. Jobs can only be processed when they are in a format recognized by the modules, that is, they must be in PostScript language or TIFF image formats.

The hot folder is created in the SmartInput module, as described in Section 6.3.2 on page 72, and published on the network as a shared folder. Users who have access to the folder are then free to place jobs directly into the hot folder. You can specify who can see the hot folder through the Windows file sharing permissions dialog box.

It should be noted that only PostScript language files generated by the Jaws PDF Creator PostScript language printer driver (PDFCreator.ppd) can be correctly and reliably processed by the Jaws PDF Server modules. PostScript language files from other printer drivers may not be reliably processed, and may even cause the PDF Server to stop processing.

5

Example Workflows

This chapter describes how to set up and configure two example workflows. The first example is created manually from a clear Design palette. It produces PDFs suitable for web, print and press use. The second example uses a *MaxWorkFlow export file* to automatically create a fully configured workflow which produces PDFs suitable for web and print use. Both examples are typical workflows, commonly implemented in Jaws PDF Server, which may be used as the basis for your own PDF server workflows.

5.1 Example web, print and press PDF workflow

The first example workflow produces three PDF file types. The features of the PDFs are listed in Table 5.1, and Figure 5.5, page 63 shows the design for the workflow, as well as the main features of the window. You may want to refer to this diagram when setting up the example workflow.

Feature	Web ready PDF	Print ready PDF	Press ready PDF
Resolution	72	600	2540
Optimized for fast web viewing?	Yes	No	No
Thumbnails included?	No	No	No
Color images resolution	72	150	-
Grayscale images resolution	72	150	-
Monochrome images resolution	300	600	-
All fonts embedded?	Yes	Yes	Yes
Security implemented	None	None	None

Table 5.1 PDF features for the example workflow

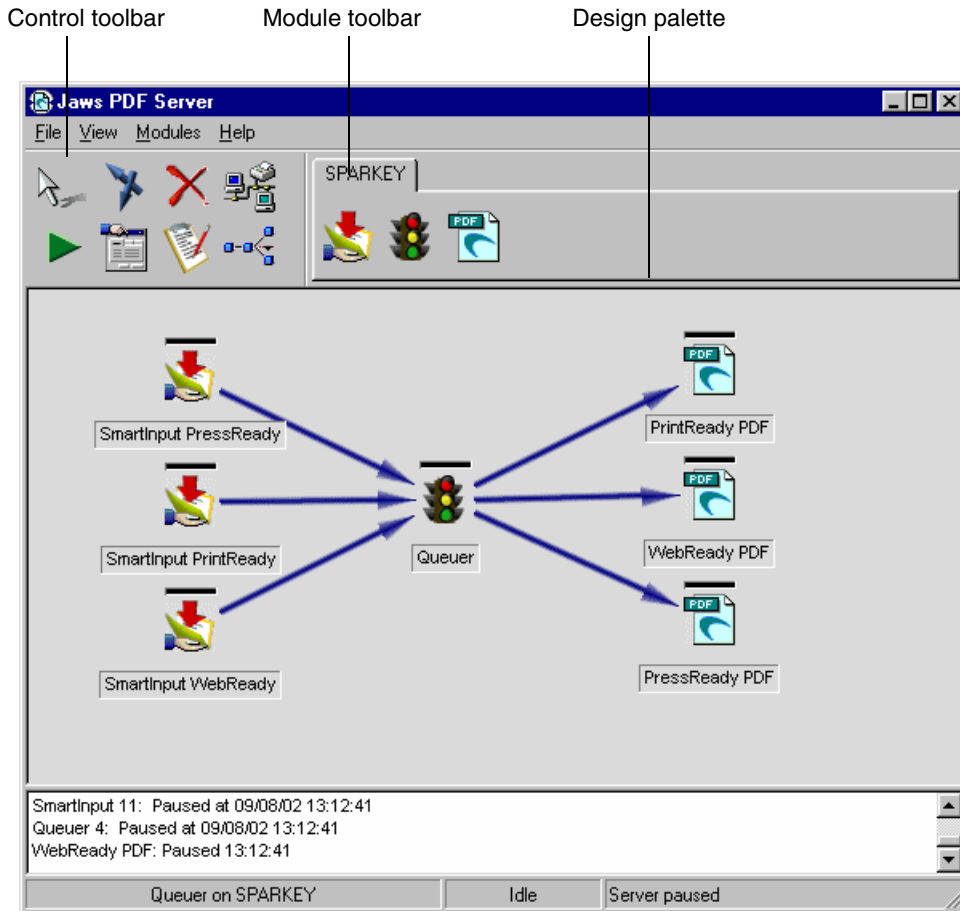


Figure 5.1 Example workflow

5.1.1 Creating the example workflow

1. Load Jaws PDF Server and clear the Design palette—the main work area—by choosing **File > New** from the menus.
2. Place three SmartInput modules, one Queuer and three PDF Creator modules on the Design palette, arranging them as shown in Figure 5.2. To add a module, select it from the module toolbar and click on the Design palette where you want it placed.

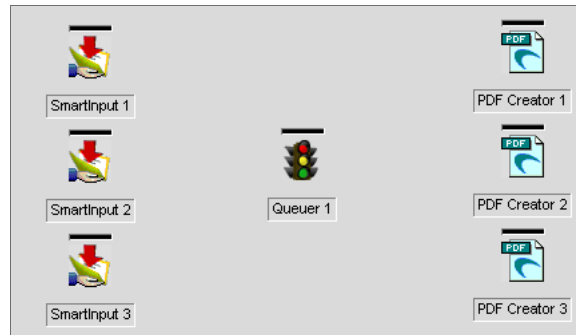


Figure 5.2 Workflow modules arranged on the Design palette

3. From the Control toolbar choose the Link tool—shown right—and link the modules to create a workflow. Start by linking the SmartInput modules to the Queuer module and continue until the modules are linked to form the workflow shown in Figure 5.3.



Link tool

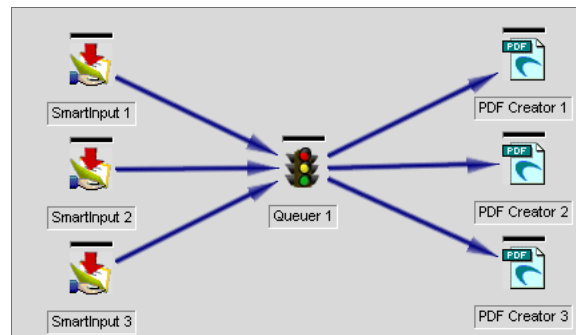


Figure 5.3 Modules linked

5.1.2 Configuring the modules

It is usually necessary to configure the modules in a workflow to obtain the required PDF features, such as resolution and security settings. In Jaws PDF Server each module contains a set of options which may be accessed by selecting the module and clicking **Object setup**, shown right.



Object setup
tool

In the example workflow, configure the PDF Creator modules using the information in Table 1 on page 59, then install the Jaws printer driver, as described in *Installing the Jaws printer driver* on page 60, before configuring the SmartInput modules with the information in Table 2 on page 61. It is *not* necessary to change the settings in the Queuer module as the defaults are suitable.

		Options	PDF Creator Modules		
			Web Ready	Print Ready	Press Ready
General	Module Name		WebReady PDF	PrintReady PDF	PressReady PDF
	Thumbnail generation		None	None	None
	Resolution		72 dpi	600 dpi	2540 dpi
	Optimize for fast web viewing		[✓]	[]	[]
	Auto-rotate Pages		[✓]	[✓]	[✓]
	Share output folder as		[✓]PDF	[✓]PDF	[✓]PDF
	Append user directory to path		[✓]	[✓]	[✓]
	Use Title as Output file name		[✓]	[✓]	[✓]
	Convert CMYK -> RGB		[✓]	[]	[]
	Preserve Overprint		[]	[]	[✓]
	Preserve OPI Comments		[]	[]	[✓]
Fonts	Embed all fonts		[✓]	[✓]	[✓]
	Subset all fonts		[✓]	[✓]	[]
Compression	Color	Downsample	Bicubic	Bicubic	Don't downsample
		Resolution	72 dpi	150 dpi	-
		Compress using	JPEG Medium	ZIP	ZIP
	Grayscale	Downsample	Bicubic	Bicubic	Don't downsample
		Resolution	72 dpi	150 dpi	-
		Compress using	JPEG Medium	ZIP	ZIP
Mono	Downsample	Subsampling	Subsampling	Don't downsample	
	Resolution	300 dpi	600 dpi	-	
Compress using		CCITT Group 4	CCITT Group 4	CCITT Group 4	
Compress text		[✓]	[✓]	[✓]	

Table 1 PDF Creator options

5.1.3 Installing the Jaws printer driver

Jobs must be submitted to Jaws PDF Server in the correct PostScript language format, otherwise the PDF cannot be created. The Jaws PostScript Printer Driver, supplied with Jaws PDF Server, allows users to print jobs and submit them in the correct format. To add the Jaws printer driver do the following:

1. Open the setup dialog box of a SmartInput module.
2. Click **Create PS printer driver**. The the New Printer Driver dialog box opens, as shown in Figure 5.4.

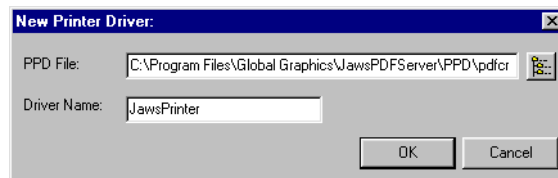



Figure 5.4 Adding the Jaws printer driver

3. In the **PPD File** text box enter
`C:\<path to installation folder>\PPD\pdfcreator.ppd`
 or click the navigation button  and select the driver in the dialog box that opens.
4. Enter **JawsPrinter** in the **Driver name** text box to complete the details and click **OK** to close the dialog box. Click **OK** once more to install the new printer driver.
5. You can now configure the other options in the SmartInput settings dialog boxes using the information from Table 2 on page 61.

	Options	SmartInput Modules		
		Web Ready	Printer Ready	Press Ready
General	Module name	SmartInput WebReady	SmartInput PrintReady	SmartInput PressReady
	Destination modules	WebReady PDF	PrintReady PDF	PressReady PDF
Additional	NT Share	[✓]	[✓]	[✓]
	NT Share Name	WebReady HotFolder	PrintReady HotFolder	PressReady HotFolder
	Mac Share	[✓]	[✓]	[✓]
	Mac Share Name	WebReady MacHotFolder	PrintReady MacHotFolder	PressReady MacHotFolder
Virtual Printers	PPD	PDFCreator.ppd	PDFCreator.ppd	PDFCreator.ppd
	Printer name	WebPDF	PrintPDF	PressPDF
	Printer shared name	WebPDF	PrintPDF	PressPDF
	PS Printer driver	PDFCreator.ppd	PDFCreator.ppd	PDFCreator.ppd

Table 2 SmartInput options

5.1.4 Saving the workflow

After creating and configuring a workflow you will probably want to save it so that it may be recalled at a later date. To save a workflow choose **File > Save** from the menus. Enter a suitable name and location for the workflow then click **Save**. The saved file *cannot* be used on other installations of Jaws PDF Server; for that you must export the workflow then import it into the other installation. Click **File > Export** to export the workflow, and **File > Import** to import an exported workflow.

5.1.5 Starting the workflow

The modules in a workflow must be started before jobs can be processed. To start the workflow—and consequently its modules—choose **Modules > Workflow Start** from the menus. When a module is running its status bar changes from black to clear, or blue when the module is processing a job.

5.1.6 Submitting jobs for processing

After setting up the example workflow you will have created three Jaws virtual printers on your network; one for each type of PDF that can be created by the PDF server. Users may submit jobs to the PDF server using the appropriate Jaws virtual printer after first adding the printer—using the *Add Printer Wizard* in Windows or using the *Chooser* on a Macintosh computer.

Note: Jaws virtual printers are *not* available for Mac users connecting to Windows XP. The main manual offers an alternative solution for these particular users.

After generating the PDF the server outputs the file to

C:\JPS_Data\Output\PDF\`<user directory>`. Make sure your users have access to this location on the server so they can collect their completed PDF files.

5.2 Example web and print PDF workflow

The second example workflow creates PDFs suitable for web use (low resolution, small file size) and PDFs suitable for printing (medium resolution, medium file size). Table 5.2 summarizes the main features for the two types of PDF files created by the workflow.

Feature	Web ready PDF	Print ready PDF
File resolution	72	600
Optimized for fast web viewing?	Yes	No
Thumbnails included?	No	No
Color images resolution	72	150
Grayscale images resolution	72	150
Monochrome images resolution	300	600
All fonts embedded?	Yes	Yes
Security implemented	None	None

Table 5.2 Summary of PDFs created by workflow

5.2.1 Setting up the example workflow

The example workflow is supplied with Jaws PDF Server as a MaxWorkFlow export file (.mef). The file contains all the information needed to recreate the workflow and configure the modules correctly to produce PDFs suitable for web and print use.

In Jaws PDF Server, select **File > Import** and navigate to `C:\JPS_Data\pdf.mef` and click **Open**. The new workflow is installed on the Design palette, as shown in Figure 5.5, and each of the modules are automatically configured with the correct options for creating print and web PDFs.

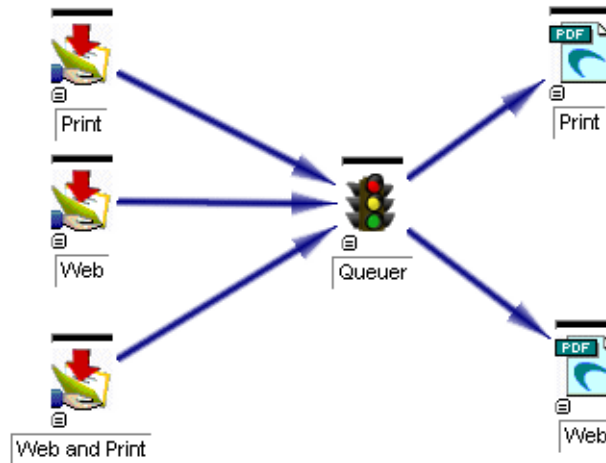


Figure 5.5 Example web and print PDF workflow

5.2.2 Creating virtual printers

After importing the workflow, setup Jaws virtual printers for each of the SmartInput modules. These will allow users to submit jobs to the workflow easily. Open the SmartInput module setup dialog box and select the Virtual Printers tab. Depending on the type of users you have, follow the instructions below, and repeat the same procedure for all three SmartInput modules.

Macintosh users

In the Mac Printer options, enter a name for the virtual printer in the **Printer name** text box. In the **PPD** text box enter
C:\<installdir>\PPD\PDFCreator.ppd.

Windows users

In the NT Printer options, enter the name of the printer in the **Printer name** text box. Choose a name for the printer share (this is the name of the printer as it will appear on the network). You may use the *same* name for both printer and printer share, but do *not* choose a name that is already in use on your system. From the list of printer drivers choose **PDFCreator.ppd**. If this driver is not listed, install it by clicking the **Create PS Printer Driver** button.

5.2.3 Starting the workflow and submitting jobs

To start the workflow select **Modules > Workflow Start**. The status bars above each of the modules change from black to clear. This indicates that the modules have been started and are ready to process jobs.

To submit jobs to the server, users will need to add the virtual printers that you created for each SmartInput module. The virtual printers are added to the users machines using the Windows' *Add Printer Wizard*, or through the *Chooser* on a Macintosh computer.

6

SmartInput



The SmartInput module is the gateway through which jobs enter the workflow. Users submit jobs to the SmartInput module either: by printing the document on the Jaws PDF Server printer (see *Using a Jaws PDF Server virtual printer* on page 50); or through a hot folder published on the network (see *Using a hot folder* on page 51). SmartInput constantly checks for incoming jobs in the *Scan directory* (see page 70) and passes them to the next module or ignores them, depending on the file mask in use.

6.1 SmartInput workflow

SmartInput processes PostScript language files (PS and EPS), PDF documents and raster files. Jobs are placed in the scan directory where SmartInput picks them up and passes them to the next module. You can configure the module to only process jobs of a certain file type or file mask—see *File type* and *File mask* on page 70 for details on how to do this. You can also configure SmartInput to deal with files submitted in error that output devices are unable to process, for example application files. For details on configuring error policy options see *Error policy* on page 71.

The SmartInput module passes its output directly to a PDF Creator module or to a Queuer module where the job is queued prior to being sent to a processor module, Figure 6.1 shows these types of workflows.

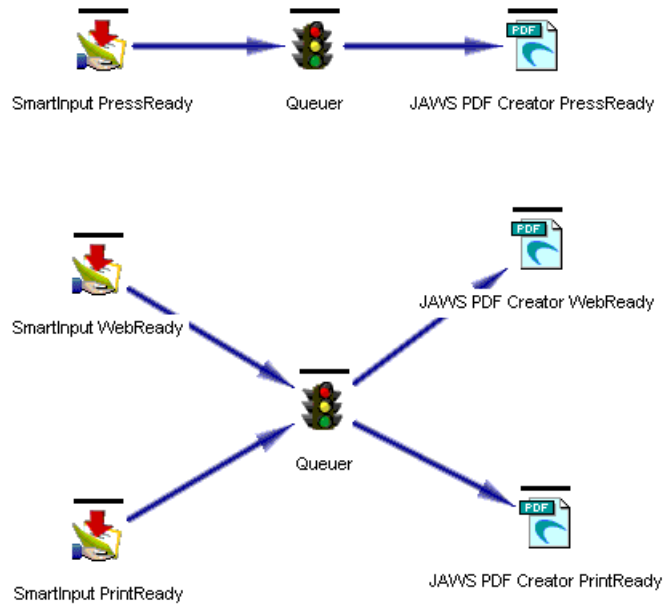


Figure 6.1 Example SmartInput workflows

6.2 SmartInput controls

On the Design palette right-click SmartInput module to access the module's pop-up menu, shown in Figure 6.2. From here all the module's configuration and viewing options can be easily accessed.

S <u>etup</u>	F5
I <u>nsert From ...</u>	Ctrl+F2
<u>V</u> iew	F4
<hr/>	
<u>C</u> lear Error	
<u>L</u> aunch module	
<u>C</u> hange Computer...	F6
<u>D</u> elete	Del
<hr/>	
<u>A</u> bout Module	Ctrl+F1

Figure 6.2 SmartInput pop-up menu

The pop-up menu contains the following items:

- Setup** Opens the SmartInput setup dialog box, where configuration options for the module can be specified. Section 6.3, starting on page 68, describes each of the options in detail.
- Insert from** Allows you to sweep jobs from another folder into the Smart-Input module. For more information see Section 6.4 on page 76.
- View** Opens the module's View window, where job processing and log messages can be observed. Section 6.5 on page 77, describes the View window in detail.

The other options in the pop-up menu are common to all modules and are described in Section 3.8, starting on page 35.

6.3 Configuring the SmartInput module

The SmartInput module is configured through the SmartInput setup dialog box. To access it, right-click the SmartInput module on the Design palette and choose **Setup** from the pop-up menu; alternatively select the SmartInput module and click the **Object Setup** tool in the Control toolbar.

The options in the dialog box are organized into tabbed areas, which are described next.

S <u>e</u> tup	F5
I <u>n</u> sert From ...	Ctrl+F2
V <u>ie</u> w	F4
C <u>l</u> ear Error	
L <u>au</u> nc <u>h</u> module	
C <u>h</u> ange Computer... F6	
D <u>e</u> lete	Del
A <u>b</u> out Module	Ctrl+F1

6.3.1 General tab

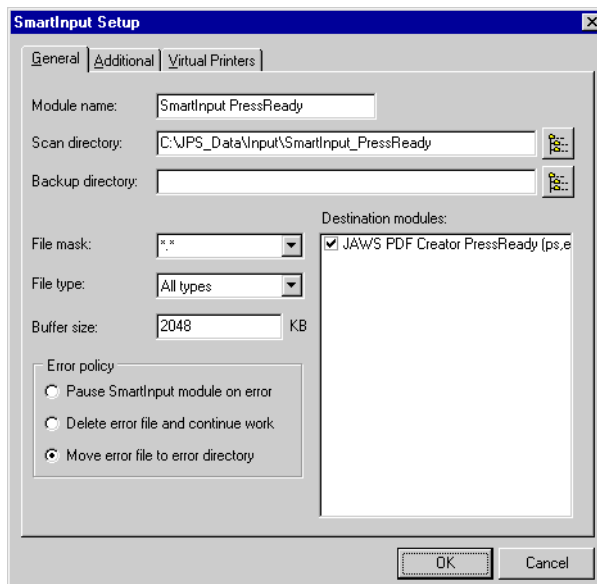



Figure 6.3 General tab

Module name

Allows you to assign a reference name to the SmartInput module. The name may contain up to 50 characters, with spaces. Initially, the module name is automatically assigned by the system when the module is placed on the

Design palette. You may continue to use this name or change it to something more descriptive if you wish. The name is used wherever the module is referenced, for example on the Design palette and in message logs.


Scan directory

The scan directory is the disk location into which jobs are placed as they enter the workflow. The system automatically creates the scan directory as the SmartInput module is placed on the Design palette. You may choose a different location by typing it directly into the text box, or by clicking the folder button  adjacent to the text box and navigating to the new folder in the dialog box that opens.

It should be noted that jobs placed in the scan directory are automatically deleted once they have been processed. If you want to preserve jobs specify a backup directory (see below) to place a *copy* of the file in the scan directory.

You can also sweep files from another folder into the workflow by right-clicking on the SmartInput module and choosing **Insert from** in the pop-up menu, see Section 6.4 on page 76 for more information.

Backup directory

Allows you to specify the location of a backup directory to keep copies of jobs which enter the scan directory. Enter the location directly into the text box or click the folder button  and navigate to a folder in the dialog box that opens.

File mask

Allows you to specify a file mask to filter jobs that enter the scan directory. Only those jobs that match the file mask are passed on for processing. Common file masks can be selected from the menu, or you may enter your own by typing directly into the text box. You may use any acceptable file name character, including the wildcards (*) and (?), where (*) represents zero or more characters in a string of characters, and (?) represents any one character. For example:

.	Matches all files.
*.ps	Matches files with extension .ps.
xyz.*	Matches files called xyz with any extension.
xyz*.*	Matches files starting xyz, or example, xyz123.ps.

`??z*.*` Matches files with **z** as 3rd character, for example `xyz123.ps`.

File type

This option filters jobs according to file type, so that only files of the specified type are passed on for processing. From the menu, choose which particular file type to process, so that all other types are excluded. You may find this option particularly useful when processing jobs submitted from Macintosh users, which do not necessarily adhere to the Windows standard of describing file type within the file's extension name, for example `.ps` to specify a PostScript language file.

Buffer size

Reserves an area of system memory for the spooling of files by SmartInput. The recommended setting depends on the amount of memory (RAM) in your PC:

- 128 Mb RAM set buffer to 2048 kb
- 256 Mb RAM set buffer to 4096 kb
- 512 Mb RAM set buffer to 8192 kb

Error policy

Determines the action to take when a file is received into the SmartInput folder that cannot be processed by the system, for example application files and bitmap images. There are three options available:

Pause module on error

The module is stopped so that no further processing can occur. You must manually delete the file, then restart the module to enable processing to continue.

Delete error file and continue work

The error file is deleted so processing can continue.

Move error file to error directory

The erroneous file is moved to `JPS_Data\Input\SmartInput<x>\Error` and processing continues.

Destination modules window

So that jobs can be processed you *must* choose at least one output destination device so that jobs can be directed appropriately. All connected output devices are listed in the Destination modules window, select the check box (or check boxes) that you want jobs to be directed to.

Note: By default *no* destination module is assigned to the SmartInput module.

6.3.2 Additional tab

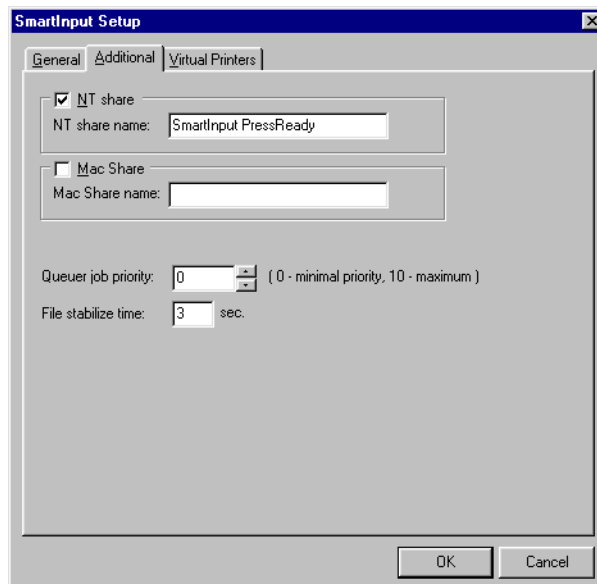


Figure 6.4 Additional tab

The Additional tab contains the following options:

NT Share

Selecting this check box publishes the scan directory as a public *hot folder* on the Microsoft network, allowing Microsoft network users to submit jobs directly to the workflow for processing.

Since the public hot folder is simply an alias for the scan directory, it shares the same features as it. That is, it accepts PostScript language files, PDF and TIFF images, is able to filter jobs according to a chosen criteria and deals with files that cannot be processed, according to the error policy in force.

NT Share name

Enter the name of the public hot folder for Microsoft users on the network. The folder is published on the network with *Guest* read/write access rights.

Note: The Guest account in Windows 2000 is disabled by default. The network administrator should therefore activate the Guest account so users can access the hot folder. Alternatively, change the share rights to the hot folder according to your own requirements.

If you have Window 95/98 users there is an important limitation to consider: the share name needs to be 8 characters or less, with no spaces. This limitation does not apply to Windows NT and 2000 users, where you can use up to 50 characters, with spaces.

Mac share

This option performs the same function as the **NT Share** check box, but in this case the public hot folder is made available to Mac users.

Mac Share name

Enter the name of the public hot folder as it will appear to Mac users. On the client machine the public hot folder can be accessed in the usual manner, through the *Chooser* in Mac OS 9 and through system resources on Mac OS X.

Queuer Job priority

Allows you to enter a priority number to jobs entering the SmartInput input directory. The Queuer uses the priority number to determine job processing order where jobs with a high priority are processed before those with low priority.

File stabilize time

Allows you to specify the waiting time for files entering the scan directory to enable them to stabilize before they are submitted for processing. The default delay is 3 seconds, which should be adequate for most files. If users are submitting particularly large files the delay can be extended to allow more time for the file to be completely written to disk.

6.3.3 Virtual printers tab

The Virtual Printers tab allows you to create a virtual printer so that users can send jobs directly to the workflow from an application such as Microsoft Word or QuarkX-Press. The virtual printer generates the PostScript language file and places it in the scan directory, where it is picked up by the SmartInput module and processed by the workflow. See also, Section 4.2, “Submitting jobs for processing”.

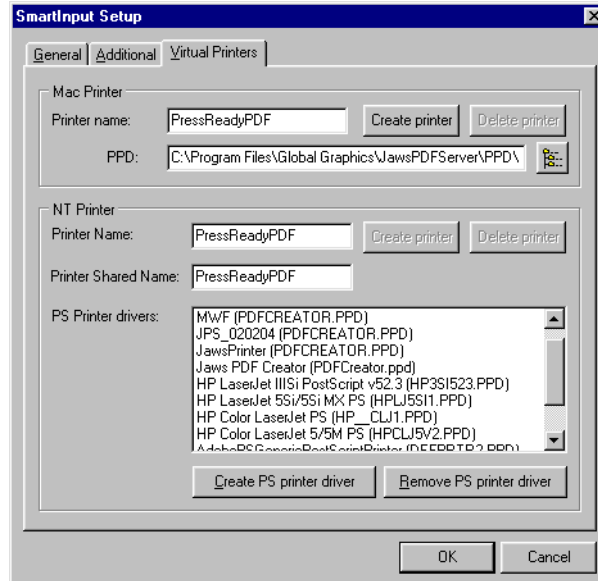



Figure 6.5 Virtual Printers tab

Mac printer

Printer Name

Enter a name for the virtual printer. The virtual printer is published to Mac users and appears in the *Chooser* in Mac OS 9 and as a network resource in Mac OS X. Since Windows XP does not support AppleTalk it is *not* possible to create a virtual printer for Mac clients connecting to Windows XP.

PPD

The name and location of the printer description file. Enter `C:\<install_dir>\PPD\PDFCreator.ppd` in the text box or click  and navigate to the folder.

NT printer

Selecting this check box publishes the virtual printer on a Microsoft network and makes it available to your Microsoft users. Users add the printer in the usual manner, that is, using the Windows Add Printer wizard.

Users who use Windows 95/98 are prompted for a printer driver after adding the virtual printer. The printer driver is available in the Jaws PDF Server installation folder, under Drivers. As the administrator, you need to make the driver available to the client. For Windows NT/2000 users the printer driver is automatically installed after adding the virtual printer, the user is not prompted for a printer driver.

Printer name

Enter a name for the virtual printer. To avoid potential system conflicts you should *not* use a name that already exists for a printer or folder on the server.

Users can add the virtual printer to their computer using the Windows' *Add Printer Wizard*. After adding, Windows 95/98 users will be prompted for a printer driver. The printer driver is available in the Jaws PDF Server installation folder, in the Drivers subfolder. As administrator, you must make sure the driver is available to the client by placing it in a shared folder. In

Windows NT/2000/XP the printer driver is automatically installed when the virtual printer is added to the user's machine.

Printer shared name

Enter a name for the virtual printer as it will appear on the network to client machines. You may use the same name as chosen for **Printer name**, above. If you have Windows 95/98 users, the virtual printer name must not be more than 8 characters and spaces are not permitted. This limitation does not apply to Windows NT / 2000 users, where you may use up to 50 characters, with spaces.


PS Printer drivers

This area lists the PostScript printer drivers (PPDs) currently installed on your system. From the list choose `PDFCreator.ppd` to ensure that PostScript language files created by the virtual printer can be processed correctly by the workflow modules. If you cannot see `PDFCreator.ppd` in the list, you should install it by clicking the **Create PS Printer Driver** button, as described next.

Create PS Printer Driver

This button allows you to install a new PostScript printer driver (PPD) on your system. We recommend that you install the Jaws PDF Creator PostScript printer driver and use this when setting up your virtual printers, as described above.

To install the Jaws PDF Creator PPD do the following:

1. Click the **Create PS Printer Driver** button to open the New Printer Driver dialog box.
2. In the **PPD File** text box enter `C:\<installdir>\PPD\PFCREATOR.PPD`, or use the folder button  to navigate to the PPD directory and choose `PFCREATOR.PPD`.
3. Enter a name for the new printer driver in the **Driver name** text box, limited to 12 characters only.
4. Click **OK** to create the new printer and add it to the list of PS Printer drivers. You may now select this printer when setting up your virtual printer.

Remove PS Printer driver

Allows you to remove a printer from the PostScript printer drivers list. Select the printer from the list and click this button to remove it.

6.4 Insert from

This option is available in the SmartInput pop-up menu. It allows you to sweep jobs that are PostScript language files and TIFF images jobs into the workflow for processing. This feature can be used, for example, to resubmit jobs that have already been processed (and stored in a backup folder), or submit jobs from another folder, as and when the need arises.

Choose **Insert from** to open the Select Directory window, shown in Figure 6.6. Navigate to the folder where the jobs are located and click **OK**. It should be noted that files are *not* deleted from the Insert from folder (as is the case when using a scan directory). Also, job files that are not of the correct type (PDF, PS, EPS or TIFF) are simply ignored and are not sent for processing.

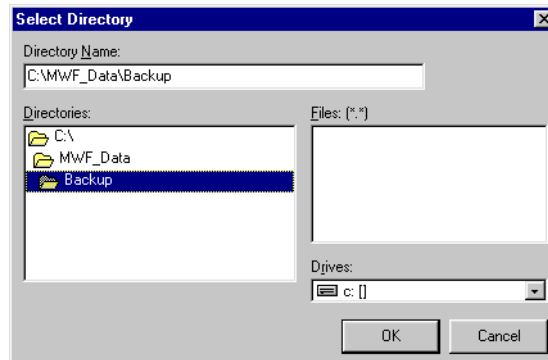


Figure 6.6 Select the folder to insert from

6.5 SmartInput View window

The SmartInput View window, shown in Figure 6.7, lists all the SmartInput modules that are on the Design palette, showing their status, log, and pause states.

Open the View window by:

- double-clicking the module, or
- right-clicking the module and choosing **View** from the pop-up menu, or
- selecting the module and choosing the **Modules > View** menu item, or
- selecting the module and pressing **F4** on your keyboard.

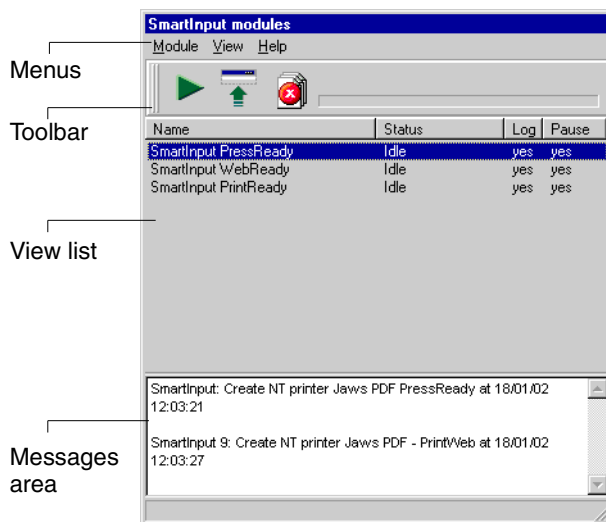


Figure 6.7 SmartInput View window

The features of the SmartInput View window are described next.

6.5.1 Menu

The menus are used to access commands and options in the View window. Click a menu heading to open the menu and choose the appropriate option. For ease of access, many of the menu items have been assigned a keyboard shortcut. Each menu option is described next.

Module > Start /Stop

This menu option starts/stops the selected module in the View list. Jobs can only be processed when a module is currently running (started). Stopping the module ceases all processing and stops jobs from being sent to the module, jobs are then queued until the module is restarted.

You can also start/stop a module with the **Start / Stop** tool (described in Section 6.5.2) or by pressing **F2**.

Module > Abort job

Choose this menu item to immediately stop a module from any further processing on the current job. The job is abandoned and processing continues with the next job.

Module > Setup

Choosing this option opens the SmartInput set up dialog box where module options are configured. The options in this dialog box control all configurable aspects associated with setting up the module such as module name, directory locations and virtual printers. The SmartInput setup dialog box is described in Section 6.3.

You can also access this command by pressing **F5**.

Module > Shut down

This menu option shuts down all SmartInput modules on the Design palette. When a module has been shut down the module appears disabled on the Design palette and its icon is removed from the Windows' System Tray. The module is also removed from system memory. It may be necessary to use this option if the system becomes unstable or if a system access violation error occurs.

To re-launch the module, right-click it on the Design palette and choose **Launch Module** from the pop-up menu.

View > Hide Window

This menu item closes the window when the toolbar is anchored, or show/hides the View list when the toolbar is detached.

View > Log Window

Hides the Messages area of the View window. The Messages area is described in Section 6.5.4.

View > Toolbar

Use this menu item to show or hide the View window toolbar. The tools in the toolbar are described below.

6.5.2 Toolbar

The toolbar is usually anchored above the View list, but it may be pushed off and become detached on the Windows Desktop.




Show / Hide

Use this tool to hide the View window when the toolbar is anchored in its default location (below the menus), or use it to show/hide the View list when the toolbar is detached.



Start /Stop

Use this tool to start and stop modules. A module must be started in a workflow before it is allowed to process jobs. The button icon shows the action to perform when the button is clicked, that is, when the button shows  clicking it starts the module.



Delete

Use this tool to remove the selected module from the View list and also remove it from the Design palette.

6.5.3 Module list area

The headings for the modules list area are as follows:

Name	This column lists the name of the SmartInput module as it appears in the Design palette. The module name is configured in the SmartInput setup dialog box, described on page 69.
Status	This column indicates the current processing status of the module, that is, whether a module is currently idle or busy processing a job.
Log	This column indicates if the module is set to generate messages as it processes a job. When set, messages are output to the Message log window and also to the log file MFW.LOG , see page 30 for details on how to specify the location of this file.

Pause This column indicates the current stop/start status of the SmartInput module. To process a job, a module must be started, and any jobs passed to a stopped module will be held there until the module is restarted.

6.5.4 Messages area

Whenever the module performs some action, that is, when it is started or stopped, when a job is processed or when an error occurs the module generates a descriptive message and outputs it to the Messages area. Using the Log tool, described on page 18, you can also output these messages to a log file so they can be viewed later in a text editor.

7

Queuer



The Queuer module performs several important functions in the workflow:

- It helps maintain the job flow by managing process queues and by monitoring output device status, so that, for example, if a module is stopped or taken off-line the Queuer will hold output for that device until it is restarted.
- It is able to multiplex jobs so the workload is shared equally between output modules in the workflow. This option is generally used where modules are configured to run on multiple servers or when the server has multiple processors installed.
- It may be employed to store processed jobs so they can be reprocessed or sent to another output module. This saves the client from having to resubmit the job.

7.1 Queuer workflows

Figure 7.1 shows example workflows that use the Queuer module:

- In the bottom workflow the Queuer is used to multiplex jobs across several servers to create the same type of PDF document.

- In the top workflow the Queuer is used to direct jobs to the appropriate PDF Creator module as specified when the job was submitted.

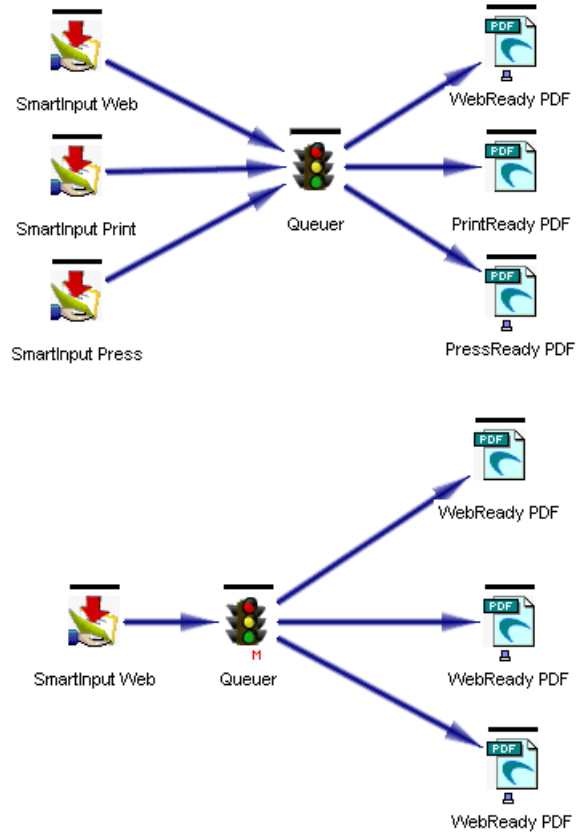


Figure 7.1 Example Queuer workflows

7.2 Queuer controls

On the Design palette right-click the Queuer module to access the module's pop-up menu, shown in Figure 7.2. From here all the module's configuration and viewing options can be easily accessed.

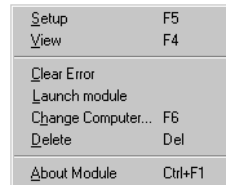


Figure 7.2 Queuer module pop-up

The pop-up menu contains the following items:

- Setup** Opens the Queuer setup dialog box, where configuration options for the module are specified. Section 7.3, starting on page 85, describes each of the options in detail.
- View** Opens the Queuer Viewer window where job processing and log messages can be observed. Section 7.4 on page 88 describes the Viewer window in detail.

The other options in the pop-up menu are common to all modules and are described in Section 3.8, starting on page 35.

7.3 Configuring the Queuer module

The Queuer setup dialog box (Figure 7.3) contains all the options for the module, which are described next.

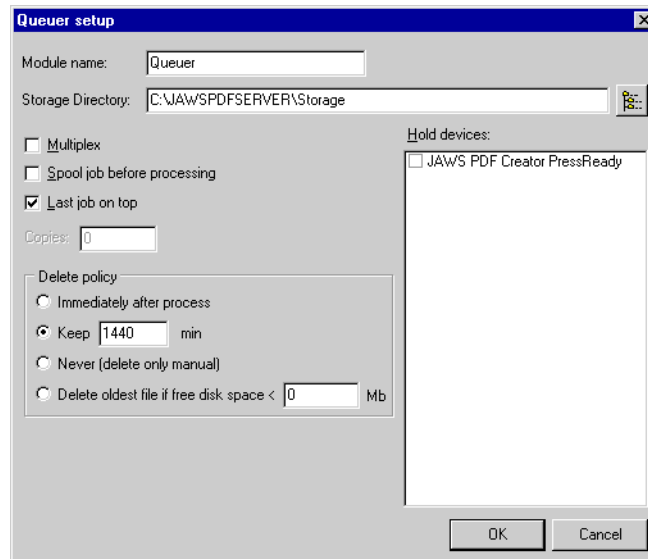



Figure 7.3 Queuer Setup dialog box

Module name

Assigns a reference name to the Queuer module. The name may contain up to 50 characters, with spaces. Initially, the module name is automatically assigned by the system as the module is placed on the Design palette. You may continue to use this name, or change it to something more descriptive. The name is used wherever the module is referenced, for example on the Design palette and in message logs.


Storage directory

The storage directory is used to maintain a copy of jobs that enter the Queuer module. Files are held in the storage directory until they are either deleted manually or are deleted automatically by the system according to the Delete policy settings, described on page 87.

The default storage directory is set to `C:\<installdir>\Storage` but you may enter your own location by typing it directly into the text box, or by clicking the folder button  and navigating to an appropriate location on your system.

Multiplex

When this option is selected the Queuer module releases a job in turn to each connected PDF Creator module; ensuring that all PDF Creator modules are used equally to process jobs.

You may want to select this option if you have multiple connected PDF Creator modules, each producing the same PDF type but running on separate servers, or you have a multiprocessor computer. Figure 7.4 shows an example workflow that employs three PDF Creator modules to produce the same type of PDF document. Notice that two of the PDF Creator modules are running on remote Jaws PDF Servers, indicated by the  icon in the workflow. By selecting the **Multiplex** option you can ensure that all servers are fully employed in job processing.

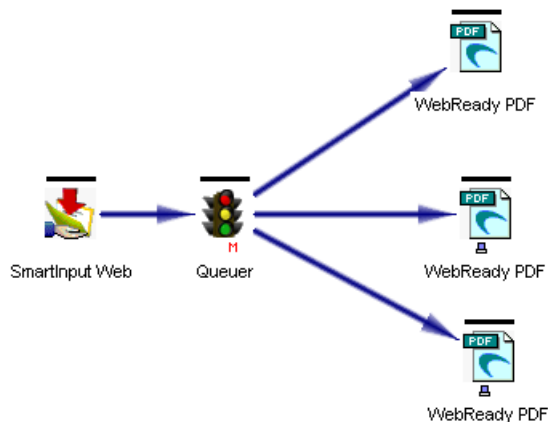


Figure 7.4 Example multiplexed workflow

Spool job before processing

When this option is selected a file entering the Queuer is written to disk (spooled) and allowed to stabilize before it is passed to the next module. This ensures that all the file is written to disk before processing commences.

This feature is usually desirable for very large files as it helps to manage the load on the system and prevents processing errors. It should be noted though that turning this option on will significantly increase processing time through the workflow.

Last job on top

When this check box is selected jobs that enter the Queuer are placed at the top of the queue and will be released before jobs already held by the Queuer.

Note: Jobs with high priorities will *always* be released from the Queuer before jobs with low priorities, regardless of whether this option is turned on or off.

Delete policy

The delete policy options allow you to determine when jobs will be removed from the Queuer once they have been processed. There are several options to choose from, as described next:

Immediately after processing

Copies of jobs are not saved once they have passed through the Queuer.

Keep nnn minutes

Jobs are saved for the specified period **nnn** minutes, after which they are removed from the Queuer processed jobs list and deleted from disk.

Never delete (only manual)

Jobs are saved until they are manually deleted from the Queuer. To delete a job, select it in the Viewer and click the **Delete** tool. The job is then removed from the list and deleted from disk.

Delete oldest file if free disk space < nnn MB

Jobs are kept until the free disk space reaches a certain limit, determined by **nnn**. After this, further space is created by deleting the oldest files until the disk space surpasses the limit.

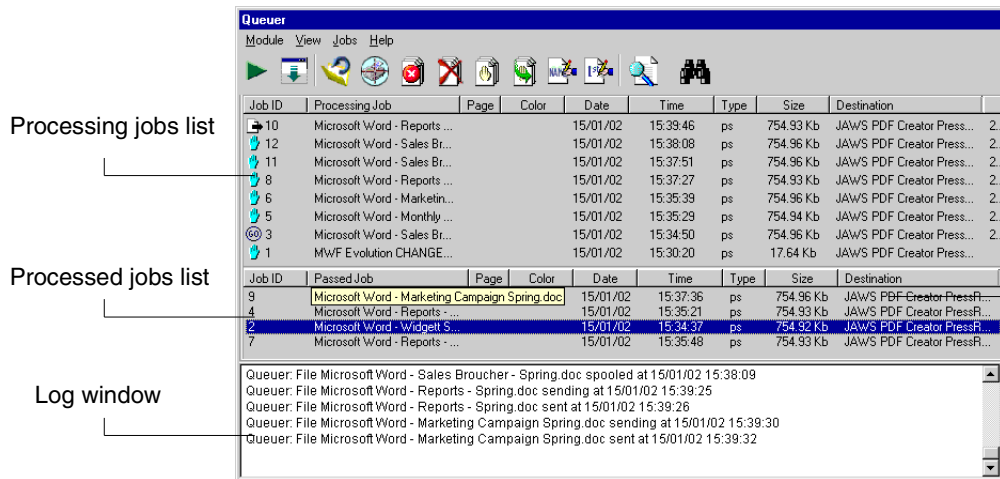
Hold devices

The **Hold devices** list shows all connected output devices. Selecting a check box causes all jobs destined for that device to be held by the Queuer until they are manually released by clicking the **Release job** tool, or are aborted with the **Abort jobs** tool. See page 92 for details on releasing and aborting jobs from the Queuer.

7.4 Queuer Viewer

The Queuer Viewer, shown in Figure 7.5, shows jobs that are currently held, pending release when the destination module becomes available. The Viewer also lists those jobs that have passed through the Queuer and which have been retained, possibly for re-processing at a later date.

To open the Viewer, right-click the Queuer module and choose **View** from the pop-up menu. Alternatively, press **F4** on the keyboard. The Viewer is split into two main areas: the upper area lists jobs that are currently waiting to be released from the Queuer; the lower area lists jobs that have been processed, and which have been retained for possible future processing. These jobs are stored on the hard disk in the Storage folder, as specified in the Queuer setup dialog box, described on page 85.



Job processing key




-  Processing a job
-  Receiving a job
-  Job on hold

Figure 7.5 Queuer Viewer

Each job in the Viewer is listed with the following information:

- Job Id** A unique identification number automatically assigned to the job by the system.

Processing / Passed Job

Name of the job, which is usually the name of the file submitted to the workflow. The job name can be changed with the **Change names** tool, described on page 93.

Page

The job page number. This field only applies to jobs that have been split into multiple pages.

Color

The separation color of the job. This field only applies when the job has been split into separations.

Date

Date the job was submitted for processing.

Time

Time the job was submitted for processing.

Type

File type of the job. The system is able to process PostScript language files (PS, EPS), PDF and TIFF files.

Size

Memory size of the job in bytes.

Destination

Destination output device for the job.

7.4.1 Viewer Toolbar

The Viewer toolbar, shown in Figure 7.6, contains tools for manipulating jobs listed by the Queuer. Some of the buttons in the toolbar are applicable to only one of the lists (processing jobs or passed jobs) and consequently appear dimmed when the tool is not available for a particular job.



Figure 7.6 Control toolbar

The controls in the toolbar work on *selected* jobs as follows:





Show / Hide

Hides the Viewer when the toolbar is anchored, or is used to show/hide the Viewer when the toolbar is free-floating.



Start / Stop

Starts / stops the Queuer module. As with all modules, the Queuer must be started before it can process jobs. The button icon shows the action to perform when the button is clicked. That is, when the button shows  clicking it starts the module; and when the button shows  clicking it stops the module.



Reprocess jobs

Reprocesses jobs that have already passed through the Queuer, but which have been retained for future processing in the passed jobs list. The job is directed to the device as specified when the job was originally submitted. If you want to redirect the job to a different device, then you should use **Redirect selected jobs**, as described next.



Redirect selected jobs

Redirects jobs that have been retained by the Queuer for future processing (listed in the passed jobs area of the Viewer), to a different output device than that originally specified when the job was submitted.

From the Select destination devices dialog box, shown in Figure 7.7, select the new output device and click **OK**. The jobs are moved into the processing jobs queue, where they are subsequently released to the destination device.

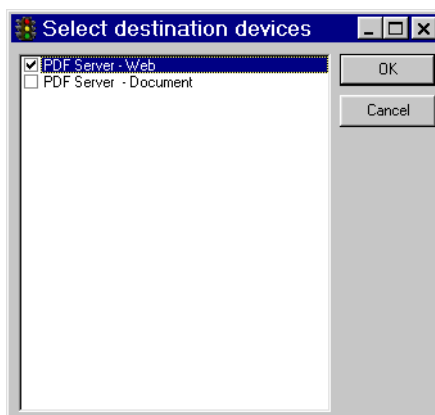


Figure 7.7 Select destination device dialog box



Abort jobs

Aborts jobs and removes them from the list of jobs waiting to be processed. The jobs are also deleted from the hard drive, so they must be resubmitted if they are required again.



Delete jobs

Removes jobs from the passed jobs list and deletes them from the storage folder.



Hold jobs

Holds jobs in the Queuer. Jobs may be subsequently released by clicking the **Release jobs** tool. A hand symbol appears next to any held job.



Release jobs

Releases a “held” job in the Queuer. According to the delete policy in force (see page 87), when a job is released it is either placed in the passed jobs list or it is removed from the Queuer and is deleted from disk.



Change names

Changes the name of the job listed in the Queuer. Click the tool and enter the new job name in the dialog box that appears.



Change job priority

Changes the priority of the selected job. In Jaws PDF Server, jobs are released from the Queuer according to priority, so that a job with priority 10 is released before a job with priority 0. Jobs are initially assigned a priority as they enter the SmartInput module, as configured in the Additional tab, described on page 72.



Search

Locates jobs in the Queuer according to some specified search criteria. The Search dialog box, shown in Figure 7.8, allows you to search on any aspect of job detail— job id, page number, job size, format type, and so on. Any jobs found matching the search criteria are highlighted in the Viewer.

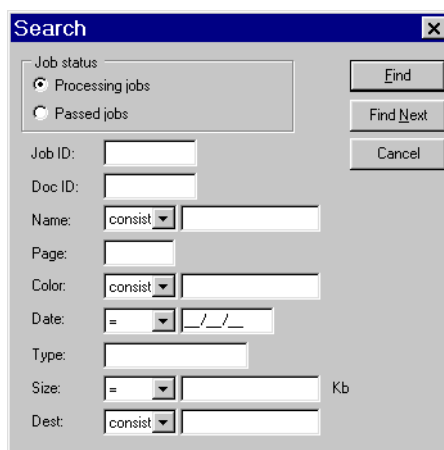


Figure 7.8 Search dialog box

7.4.2 Menus

The menu items are used to access the various commands and options available in the Queuer Viewer. For ease of use, many of the menu items have been assigned a keyboard shortcut. Each menu item is described next.

Module > Start /Stop

This command starts/stops the Queuer module. In Jaws PDF Server, jobs can only be processed by a module that is running; that is, when the module has been started. Stopping a module ceases all processing and stops jobs from being sent to the module. Jobs are queued until the module is restarted.

This command can also be accessed using the **Start/Stop** tool, as described in Section 7.4.1, or by pressing **F2**.

Module > Setup

Choosing this option opens the Queuer setup dialog box where module options are configured, such as module name, held devices and multiplex options. The Queuer setup dialog box is described in Section 7.3.

You can also access the setup command by pressing **F5**.

Module > Shut down

This menu option shuts down the Queuer module on the Design palette. The module appears disabled on the Design palette when it has been shut down, and its icon is removed from the Windows' System Tray. The module code is also removed from system memory. It may be necessary to use the shut down option if the system becomes unstable, or if a system access violation error occurs.

To re-launch the module, right-click it on the Design palette and choose **Launch Module** from the pop-up menu.

View > Hide Window

This menu item closes the window when the toolbar is anchored, or shows/hides the process and processed jobs list areas when the toolbar is detached.

View > Process Jobs, Passed Jobs, Log Window

Use these options to select which areas of the Viewer to make visible or hidden. Figure 7.5, page 89, shows the areas that are controlled from this menu.

View > Toolbar

This option shows/hides the toolbar. The toolbar and its tools are described in Section 7.4.1 on page 90.

Jobs > Reprocess

This option can be used to resend a job from the *Processed jobs* list back to the original destination PDF Creator module.

Use the Redirect option, described next, to send the job to a different PDF Creator module, which saves you from having to resubmit the job again.

Jobs > Redirect Selected Jobs

Choose this option if you want to reprocess a job through a different PDF Creator module. Choose the job from the *Processed jobs* list before selecting this option.

Jobs > Abort Job Choose this option to remove a job from the processing jobs list so that it is not processed.

Jobs > Delete Choose this option to remove a job from the passed jobs list. This option also removes the job from the storage directory specified in the Queuer setup dialog box, as described in Section 7.3 on page 85.

Jobs > Hold This option can be used to hold a job that is currently queued and waiting to be processed. The job can be released by selecting **Jobs > Release**, as described next. You may want to hold a job so that other jobs may be processed first, for instance, if you urgently need to process a particular job.

Jobs > Release Use this menu item to release a job that is currently being held by the Queuer.

Jobs > Change Names

This menu item allows you to rename a job. The new name is passed to the output module and used as the final output file name. Select the job from the list before choosing **Change names**. In the Enter new job name dialog box, enter the new name for the job, and click **OK** to finish.

Jobs > Change Priority

Choose this menu item if you want to change the priority of a selected job. In the Queuer, jobs are released according to their priority and then by the order that they are received,

which is by default set as first-in-first-out but may be changed to last-in-first-out by setting the **Last job on top** option, Queuer, as described on page 87.

- Jobs > Save as** This option allows you to make a copy of the selected job using a different name.
- Jobs > Select all** Selects all files in a job list. Click on at least one item in the list to make the list active, then choose **Select all**.
- Jobs > Search** Use the search tool to find specific jobs in the processing jobs list or the passed jobs list. You can search on any aspect of the job including name, job id, page number, date, color and size.
- Jobs > Search Again**
Repeats the last file search.

8

PDF Creator



The PDF Creator module converts PostScript® language files (PS and EPS), PDF and TIFF images into Portable Document Format (PDF) files that are fully compliant with PDF 1.3 and 1.4 specifications published by Adobe® Systems Incorporated.

8.1 PDF Creator workflow

The PDF Creator module consumes PostScript language files and TIFF images to produce optimized PDFs. Figure 8.1 shows two simple example workflows, where the PDF Creator module is used.

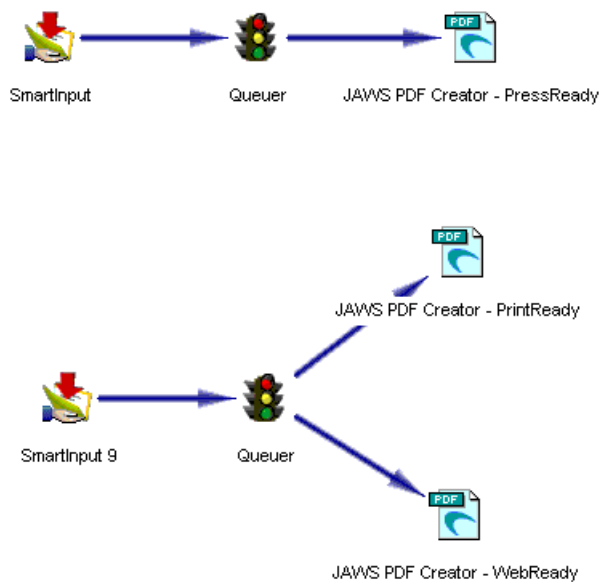


Figure 8.1 Example PDF Creator workflows

8.2 PDF Creator controls

To access the PDF Creator controls, right-click the PDF Creator module on the Design palette to open a pop-up menu, as shown in Figure 8.2. From the menu all the module's configuration and viewing options can be accessed.

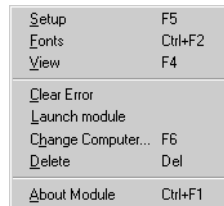


Figure 8.2 PDF Creator pop-up menu

The PDF Creator pop-up menu contains the following options:

- Setup** Opens the Queuer setup dialog box where configuration options for the module can be specified. Section 8.3 describes each available option.
- Fonts** Opens the Fonts dialog box where you can manage the fonts used in PDF files created by PDF Creator. See Section 8.4, “Fonts in PDF Creator” for more information on using and managing fonts in PDF Creator.
- View** Opens the PDF Creator Viewer, where job processing and log messages can be observed. See Section 8.5 on page 119 for more information on the Viewer.

8.3 PDF Creator options

PDF Creator options are configured in the setup dialog boxes accessed through the module's pop-up menu, or by selecting the module and pressing **F5** on the keyboard. As with other modules, the various options are arranged into tabbed dialogs, described in the following subsections.

8.3.1 General settings

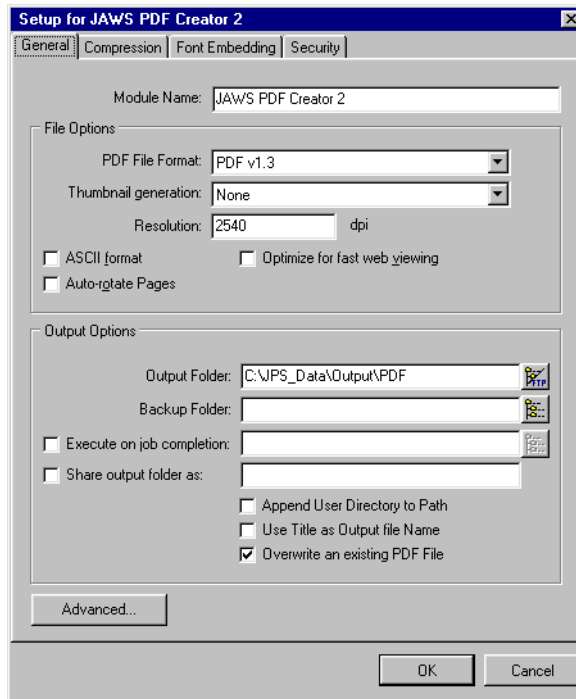


Figure 8.3 PDF module general settings

Module name

Allows you to specify a name for the PDF Creator module that will be used on the Design palette and in message logs when referring to that particular module. You may use up to 50 characters with spaces.

File options

PDF File Format

Selects the output format for the PDF files created by the module. The options are:

PDF v1.3 Uses the PDF 1.3 specifications published by Adobe®. Supports 40-bit security encryption.

PDF v1.4 Uses the PDF 1.4 specifications published by Adobe.
Supports 128-bit security encryption.

Thumbnail generation

When selected this option causes PDF Creator to generate and embed thumbnail images of each page into the PDF. These thumbnails are used as a navigation aid in Acrobat Reader. It should be noted that Acrobat Reader 5.0 also generates thumbnails, although these are produced at the time the PDF is opened.

Although embedding thumbnails results in slightly larger file sizes, it enables a faster redraw of the thumbnails in Acrobat Reader.

Resolution

Allows you to specify the resolution at which the job is rendered. This affects jobs which contain resolution-dependent (and therefore device-dependent) code. If your job contains pattern fills, the printer driver attempts to snap the pattern frequency to a sub-multiple of the device resolution. Some drawing packages also use the resolution (in conjunction with the halftone frequency) to calculate the number of steps to use for graduated fills. All other page elements should be unaffected by the resolution. If the PDF is intended for printing, you should set the resolution to be the same as the resolution of the intended final output device; otherwise, you should only change the resolution if you experience poor-quality output with pages containing patterns or graduated fills.

ASCII format

If this option is selected any binary data (including compressed text) in the PDF file is converted to a printable ASCII representation. This makes it safe to transmit your PDF pages over a medium that does not support binary transmission (e-mail for example). It should be noted that using ASCII format increases the size of your PDF file.

Auto-rotate Pages

When selected the module attempts to determine the orientation of the majority of the text on the page and rotates the page until this text is orientated upright. The PDF Creator module will always honor requests for landscape output, however, some Windows applications produce landscape output by rotating the output onto a portrait page. When printed out this is not a problem as the page can easily be rotated. However, when producing a PDF this leads to text running up the screen.

Optimize for fast web viewing

Before distributing PDF files via the web you should make sure they are created using the Optimize for fast Web viewing option.

This option reduces file size, and prepares the document for page-at-a-time downloading, sometimes called byte-serving. You will generally find that this option significantly reduces the files size of the your PDF document.

When a document has been optimized for page-at-a-time downloading, the web server sends each individual page of information requested by the user, rather than the whole PDF document. When working with large documents, which can take a long time to download, using the Optimize for fast Web viewing option is particularly important.

Text and graphics are compressed to suit web serving, therefore with this option selected, any compression settings you may have configured are overridden.

Output options

Output Folder

The Output folder is used to specify a directory for the finished PDF file. Enter the location directly into the text box or use the navigation button to the right to locate a folder.

Backup Folder

When a backup folder is specified a duplicate PDF of the processed file is created. This is an efficient method for producing copies of the output PDF since it occurs simultaneously as the file is processed.

The use of a backup folder is especially useful when there is a need to preserve the output PDF prior to it being sent for further processing. For example, you may have set up your workflows so that the output from one PDF Creator module becomes the input for another module, thereby destroying the original file. The backup folder preserves the original PDF file so that it may be used later.

Execute on job completion

You can use this section of the dialog box to define extra actions after the module has created each PDF file. To do this, you type text specifying a command and its options in a way similar to typing in a Windows command prompt

window. The command can be a simple batch file or a complex application, provided that you can give the command all necessary options and information on the command line (a command needing operator interaction is likely to cause problems), and the application is available on the computer running Jaws PDF Server. For example, you can use such post processing commands to e-mail the generated PDF to the user who submitted the job.

Select the check box to enable post-processing and enter the post-processing command in the adjacent text box. Optionally, you can supply substitution codes (as specified in Table 8.1), as well as options understood by the application.

The command string should normally include the file extension and the full path name of the application file. However, you can type just the file name if the command file has extension `.EXE` and is in one of the folders specified by the `PATH` variable.

Table 8.1 lists the substitution codes that can be used by the PDF Creator module.

Code	Meaning
%f	The output PDF file name, not including the full path.
%o	The full output directory path.
%u	User name of the client who submitted the job. Defaults to Unknown if the user name is not known.
%d	Date the job was submitted for processing.
%n	The job name of the PDF file. This is not necessarily the same as the file name.
%s	Computer (system) name from which the job has been printed.

Table 8.1 Post processing substitution codes

Share output folder as

This feature allows you to publish the Output folder on your network as a shared resource. Select the check box and enter a name for the folder in the text box.

Append User Directory to Path

For Windows users, selecting this option directs the processed PDF documents into client subfolders within the designated PDF output folder, thus making it easy to locate the finished PDFs.

Note: This option is only available to Windows users who submit jobs with a virtual printer. This feature is *not* implemented for Mac users.

Use Title as Output file Name

When this check box is selected PDFs are created using the same name as the submitted job name. When not selected a PDF is created with an arbitrary name, assigned by PDF Creator.

Overwrite an existing PDF file

Select this check box if you wish to overwrite any PDF that exists in the output folder that has the same name as the newly created PDF. Uncheck the box if you want to stop PDF Creator overwriting existing PDFs.

8.3.2 Advanced settings

Click **Advanced** in the General dialog box to access the Advanced options, as shown in Figure 8.4. These options generally apply to prepress environments.

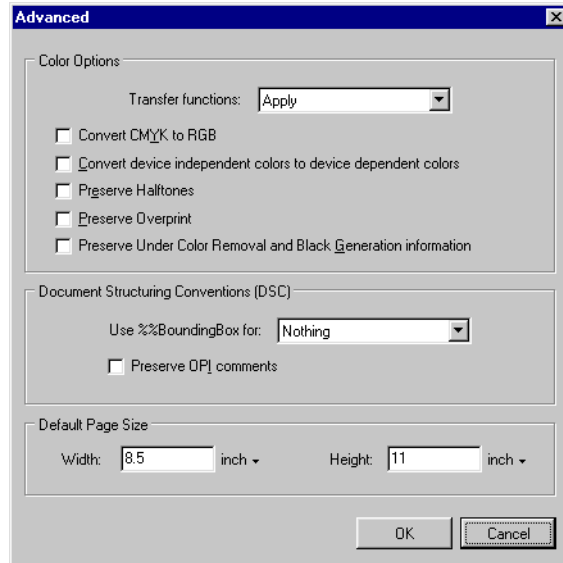


Figure 8.4 PDF module advanced settings

Transfer functions

Provides options for preserving, applying or removing transfer functions from the PostScript language file. The options are as follows:

Apply	The document is displayed the same on-screen as when printed.
Preserve	Transfer functions are preserved in the PDF file.
Remove	Transfer functions are removed in the PDF file.

Convert CMYK to RGB

This option affects any color images that are present in the job. When enabled, any four-color CMYK images in the job are converted to RGB images in the PDF. This may result in a smaller PDF file that displays on-screen more quickly. You should enable this if your documents are intended for on-screen viewing, but disable it if the PDF is destined for printing.

Convert device independent colors to device dependent colors

Enabling this option can cause an apparent color shift in the images to which it is applied. The conversion that PDF Creator uses is better suited to photographic images than to CMYK approximations of spot colors. You may find that on-screen reproduction of some graduated fills and tinted images is better with this option disabled than with it enabled.

With this option selected, PDF Creator converts colors specified in device-independent CIE-based color spaces into device-dependent RGB. This produces PDF files which display more quickly. Otherwise, these colors are converted into a device-independent calibrated RGB color space. This produces PDF files which render more slowly, but whose colors are more constant across properly set up output devices.

Preserve Halftones

With this option selected, any halftone changes requested by the job are passed through to the PDF file. You should select this option when producing PDF files for print, and disable it when producing PDF files for on-screen viewing.

Preserve Overprint

When this option is selected, any overprint parameters relating to graphics in the original PostScript language file are passed through to the PDF file.

Preserve Under Color Removal and Black Generation information

Select this option if you want to preserve under-color removal and black-generation information from the PostScript language file. This is normally only used in prepress environments.

Document Structuring Conventions (DSC)

Use %%BoundingBox for

As well as the conventional page size request embedded in the PostScript language file, many files also contain comments describing the actual extent of marks on the page. The options are as follows:

Nothing	Lets you ignore comments.
Page Size	Use the bounding box for the PDF page size.
Crop box	Use the bounding box for the optional page cropping box. Acrobat Reader always displays pages as if they were the size specified for the page cropping box. Some applications may generate their own cropping box information using <code>pdfmark</code> , which overrides any cropping box set in this way.

Preserve OPI comments

OPI (Open Prepress Interface) is used to reduce network traffic by substituting high-resolution images with low-resolution screen images for the purpose of screen display and page make-up—often called *FPO* (For Position Only). Select the check box to apply the OPI comments stored within the PostScript language file. OPI comments in the PostScript language input file are reproduced as OPI dictionaries in the PDF output.

It is not necessary for the high-resolution image data to be available to PDF Creator since it passes the file name through to the output. PDF Creator produces only an OPI 1.3 dictionary, only an OPI 2 dictionary, or both, depending on whether the PostScript language file input uses one or both versions of the OPI comments.

Default Page size

The width and height boxes let you to specify the default page size for the PDF page. It should be noted that these values are only effective when the file does *not* already contain page size information. In general, PostScript language files and TIFF files *do* contain page size information, so the values entered here have no effect on the printed page size for these file types. Choose the unit of measurement from the drop-down list.

8.3.3 Compression settings

The Compression tab provides options for the output format of images from the PDF Creator module. This option handles images in three different categories: Color, Grayscale, and Monochrome. Also provided are options to re-sample images in all three categories using subsampling, average downsampling or bicubic resampling.

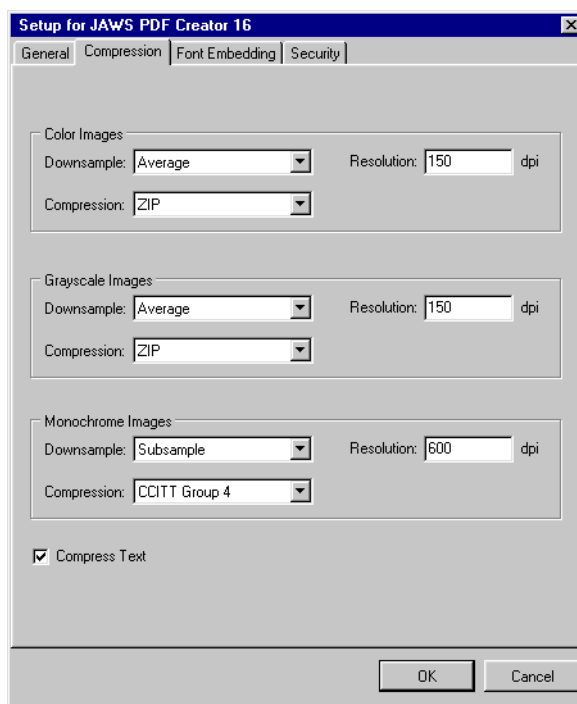


Figure 8.5 PDF module compression settings

Downsample

The downsampling options determine how images in the document are handled. Using the options you can control downsampling for color, grayscale and monochrome images, independently of each other. The downsample options are as follows:

Subsampling

Removes and discards vital information from the image as it recalculates the image resolution. This can sometimes affect color integrity, smoothness of tones and type. Subsampling is an effective method for making documents web ready.

Average downsampling

Takes an average number of dots-per-inch and re-samples the image.

Bicubic

Reduces the resolution by performing bicubic interpolation to generate new pixel values. This option can generate more pleasing results, though the PDF file will be slower to generate. Bicubic is not available with monochrome images.

Compression

Compression squeezes the image into a smaller package. It calculates how to fit twice as much information (sometimes more) into a smaller package. Unlike subsampling, most compression algorithms do not discard valuable information (JPEG being an exception). Therefore, compression is an effective way to manage file sizes on disk for press quality documents.

You can control compression for color, grayscale and monochrome images, independently of each other. The compression options are as follows:

ZIP

The ZIP filter uses a lossless compression technique and normally produces good compression ratios.

- JPEG** The JPEG filter uses a lossy algorithm (which irretrievably discards data), but it produces excellent compression ratios on photographic images. When JPEG compression is selected you have the option to select one of the options from the **Quality** menu.
- CCITT Group4** The CCITT Group4 filter uses standard fax compression, and is only applicable to bitmap images.

Resolution

If you have enabled downsampling this option lets you specify the target resolution of the reduced images embedded in the PDF file. Typical resolution settings that you might employ are three types of PDF documents are: 72 dpi for screen and web-friendly PDFs; 600 dpi for printable documents, for example on an office laser printer; 2540 dpi for commercial quality, press-ready printing.

Compress text

Select this check box to compress text.

8.3.4 Font Embedding settings

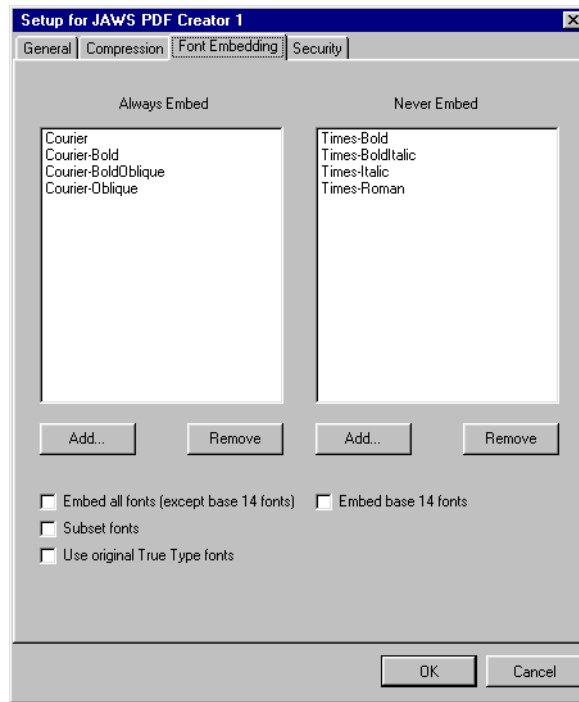


Figure 8.6 Fonts tab

The font embedding settings provide options for how fonts should be used in the PDF, as follows:

Always Embed

Fonts listed in this box are always embedded in the output PDF file. Use the **Add** and **Remove** buttons to manage this list. You should check the terms of your font license agreement before embedding any fonts. Named fonts will be embedded if they are referenced in the original PostScript language file and are available to the application.

Never Embed

Fonts listed in this box are *never* embedded in the output PDF file. Use the **Add** and **Remove** buttons to manage this list.

Embed all fonts (except base 14 fonts)

With this option selected fonts used in the original document are embedded in the PDF document. This means text in the document can be displayed correctly (with no font substitution) on whichever machine views the document.

With this option selected all characteristics for the *entire* font *family* are included in the PDF file. For example, your page may only call for “Helvetica - Regular” but since it is part of a family—which also includes bold, italic, black, condensed and compressed—the information for all font variations are embedded in the PDF document, thereby increasing the overall file size. To limit the increase in file size, you should consider selecting **Subset all fonts**.

Embed base 14 fonts

If this is selected, all base 14 fonts present in the document are embedded in the output PDF file. Selecting this option implicitly adds the base 14 fonts to the Always embed list.

Subset all fonts

With this option selected, only subsets of the original fonts are embedded in the PDF file. This is the preferred setting, since it leads to smaller files. However, since not all members of the font family are available in the PDF, selecting this may inhibit you from cutting and pasting text, and prevent a reader from editing text in the PDF. For example, if your page calls for “Helvetica - Regular”, the bold, italic, black, condensed, and compressed variations of the font will *not* be embedded in the PDF file and, consequently, it may not be possible to edit this text on a users machine unless they already have the font installed.

Use original True Type fonts

This option prevents the module from trying to substitute similar looking (but not exactly the same) Type 1 fonts.

8.3.5 Security settings

The options in the Security dialog box enable security features in your PDF documents. The options that are available for selection in the dialog depend upon the PDF file format that you have selected in the General tab, either PDF 1.3 or PDF 1.4, as described on page 101. The encryption ‘strength’ of the file is also shown in the Security tab, as shown in Figure 8.7.



Figure 8.7 PDF module security settings

Encrypt PDF Files

Select this check box to encrypt the PDF according to the level specified in the Security tab, and to implement the selected security features.

Passwords

Open Document

This text box allows you to specify a password which must be entered before the document can be opened. The user will be prompted for this password when the document is opened.

Change Security

This text box allows you to specify a password that a user must enter before security changes can be made to the PDF document. You may also use this password to open the document.

Note: It is not possible to open a password protected document without entering either the Open Document password or the Change Security password. Because of this, you should always keep a secure record of these passwords.

Security Options

The security options allow you to impose certain restrictions on the PDF to limit how the document can be used. For instance, you can prohibit readers from editing the document, copying text or graphics, or printing the PDF. Select the check boxes for the options that you want to impose, and clear the check box for any option that you want a reader to have access to.

If you enter a Change Security password, the security options can be changed at a later date in the PDF.

8.4 Fonts in PDF Creator

PDF Creator maintains a list of fonts that it can embed and substitute in the PDF documents it creates. To access the fonts list, right-click a PDF Creator module and choose Fonts from the pop up window, to open the Fonts dialog box, shown in Figure 8.8. Using the controls in this window you may add and remove fonts, and determine how fonts will be substituted in PDF documents that are generated.

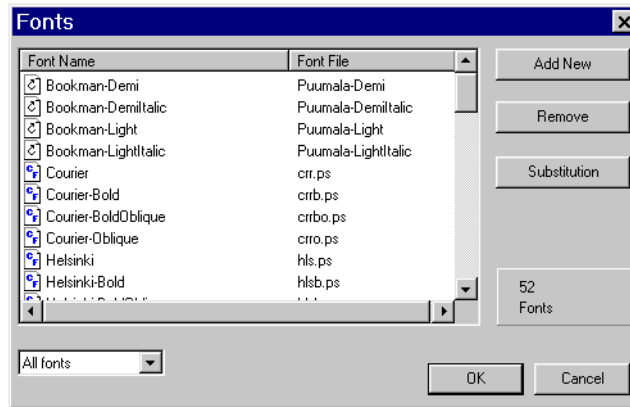


Figure 8.8 Fonts list window

This dialog lets you manage both Type 1 fonts (also known as ATM fonts or PFB format fonts) and TrueType fonts. The core fonts that are installed with PDF Creator are listed in red and may not be removed. The core font set includes clones of the 35 standard PostScript language compatible printer fonts, as well as stub files which refer to them. For example, Helvetica is one of the standard fonts, but the font file for Helvetica is just a stub that substitutes the clone font Helsinki instead.

Use the pull-down menu in the lower left corner of the dialog to select the type of fonts to be viewed. The All fonts option displays all the installed fonts.

Add New

To add fonts to the list click **Add New**. The Add Fonts window opens (Figure 8.9) from where you can browse to the font folder and choose which fonts to install. After restarting the PDF Creator module, the fonts will be available in the master fonts list and can be used in your documents.

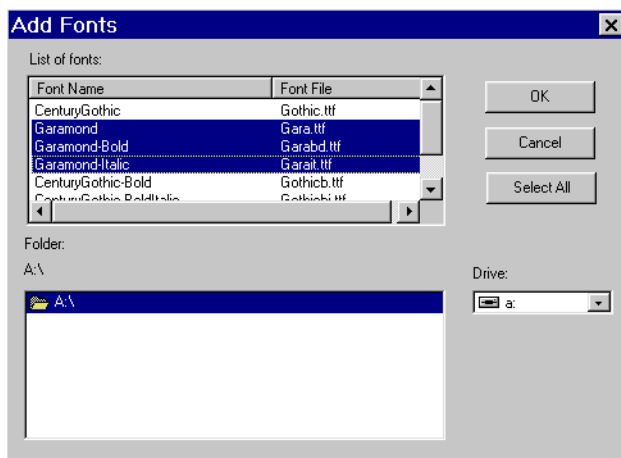


Figure 8.9 Add Fonts window

Remove

Use the **Remove** button to delete selected fonts from the master fonts list. Fonts which have been removed cannot be embedded or substituted in the document. To remove fonts from the list select the items first and then click **Remove**.

Substitution

This option allows you to select which fonts will be substituted (swapped) in the document. Generally, it is preferable to use the exact font that was used in the design of the document. However, there are times when this is not possible; a font may be corrupt; or the original font may not have been sent with the original file. In such cases the only solution is to substitute with a font that is very similar in design to the original specified font.

If substitution were not available, the PDF module would do one of two things: error and refuse to produce the job or substitute a default font that is not even close to the way it should look. Either result is unacceptable.

One solution is to open up all the pages in the original application program and search and replace every occurrence of the problem font. This is not ideal as it is time consuming; you may not have the original application and if you miss one or two occurrences where the font was used the processing time would be wasted.

Having the PDF module offer to do the substitution for you “on the fly” is the best solution because all occurrences are guaranteed to be substituted.

In the Fonts window click the **Substitution** button to open the Create font substitution dialog box (Figure 8.10).

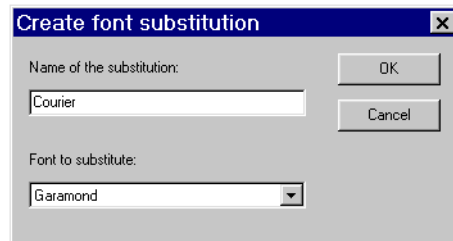


Figure 8.10 Create font substitution dialog box

Name of substitution

Enter the name of the font to substitute (swap out) from the document.

Font to substitute

From the menu choose the font that you want to substitute with (swap in). The fonts in the menu are compiled from the master fonts list.

8.5 PDF Creator Viewer

The Viewer window, shown in Figure 8.11, lists the jobs that have been processed by the PDF Creator module, as well as a list of messages generated by the module.

To access the Viewer, double-click the PDF Creator module or right-click it and choose **View** from the pop-up menu.

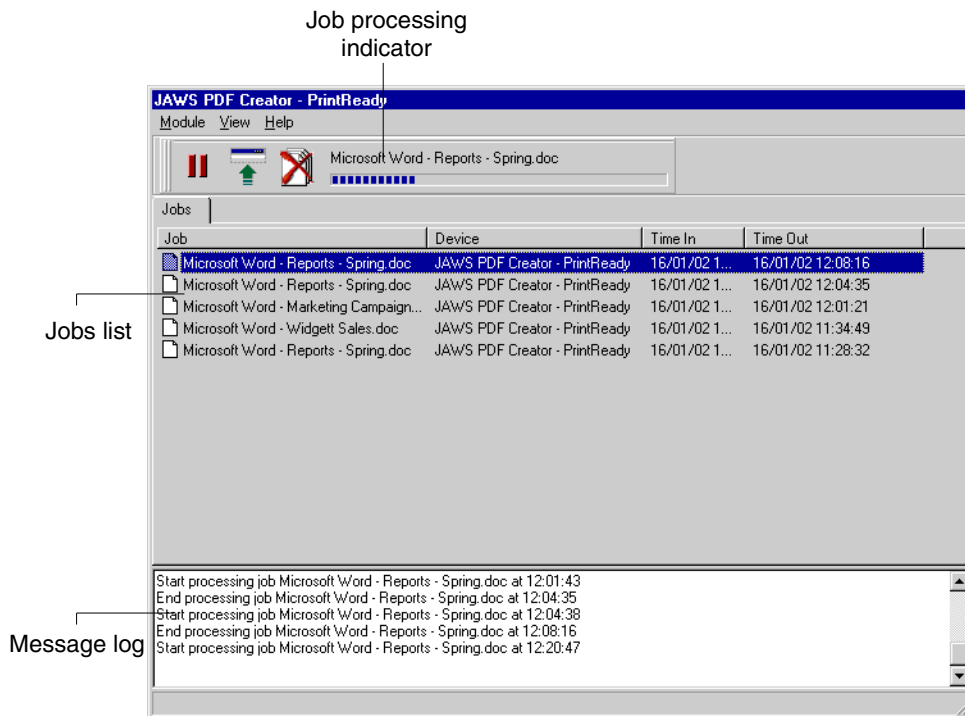


Figure 8.11 PDF Creator Viewer

The features of the Viewer are described next.

8.5.1 Menus

The Menu items are used to access the various options in the Viewer.

Module > Start /Stop

This command starts/stops the PDF Creator module. In Jaws PDF Server, jobs can only be processed by a module that is running; that is, when the module has been started. Stopping a module ceases all processing and stops jobs from being sent to the module. Jobs are queued until the module is restarted.

This command can also be accessed using the **Start/Stop** tool, described in Section 8.5.2, or by pressing **F2**.

Module > Abort Job

This command immediately stops a module from any further processing on the current job. The job is abandoned and processing continues with the next job.

Module > Setup

Choosing this option opens the PDF Creator setup dialog box where module options are configured, such as resolution, font embedding and security, as well as output and backup folder locations. The PDF Creator setup dialog box is described in Section 8.3.

You can also access the setup command by pressing **F5**.

Module > Shut Down

This command shuts down the PDF Creator module on the Design palette. When a module has been shut down the module appears disabled on the Design palette and its icon is removed from the Windows' System Tray. The module code is

also removed from system memory. It may be necessary to shut down a module if the system becomes unstable, or if a system access violation error occurs.

To re-launch the module, right-click it on the Design palette and choose **Launch Module** from the pop-up menu.

View > Hide Window

This menu item closes the Viewer.

View > Toolbar

This command shows/hides the toolbar. The toolbar tools are described next.

8.5.2 Toolbar

The PDF Creator Viewer toolbar contains tools for the most commonly used commands in the Viewer. The toolbar is usually anchored at the top of the Viewer, but it can be pushed off and become free-floating on the desktop. Push the toolbar at its edges to detach it. To place it back in the Viewer, move the toolbar into the Viewer, just under the menus, and release.




Hide

Use this tool to hide the Module View window when the toolbar is anchored, or to show/hide the View list when the toolbar is detached.



Start / Stop

Use this tool to start and stop modules. A module must be started in a workflow before it is allowed to process jobs. The button icon shows the action to perform when the button is clicked, that is, when the button shows  clicking it starts the module.



Abort job

Use this tool to abort the current job in progress. The tool only becomes active when a large enough file is being processed, otherwise the tool remains disabled.

8.5.3 Jobs list

The jobs list area shows all the jobs that have been processed by the PDF Creator modules currently loaded on the Design palette. Each job is presented with the following information:

Job	Job name.
Device	PDF Creator module that processed the job.
Time In	Time the PDF Creator module started the job.
Time Out	Time the PDF Creator module completed the job.

8.5.4 Message log

The View log area of the View window displays messages generated by the module. A message is generated whenever the module is started or stopped, when a job is processed or when an error occurs. These messages allow you to observe job throughput and to help resolve problems. Using the Log tool, described on page 18, you can also output these messages to a log file so they can be viewed later in a text editor.

Appendix A

Jaws PDF Server Setup Tool

Jaws PDF Server Setup can be used to perform general system maintenance and registry updates without having to reinstall the Jaws PDF Server application. Under normal operations you should never need to use the controls in this utility. However, if you encounter problems starting Jaws PDF Server, need to reinstall its printer port, or you want to change the default data path, then you may use the Jaws PDF Server Setup utility to reset them.

To start Jaws PDF Server Setup, open the Jaws PDF Server program group and select Jaws PDF Server **Setup**. The options in the Jaws PDF Server Setup dialog box, shown in Figure 0.1, are each described next.

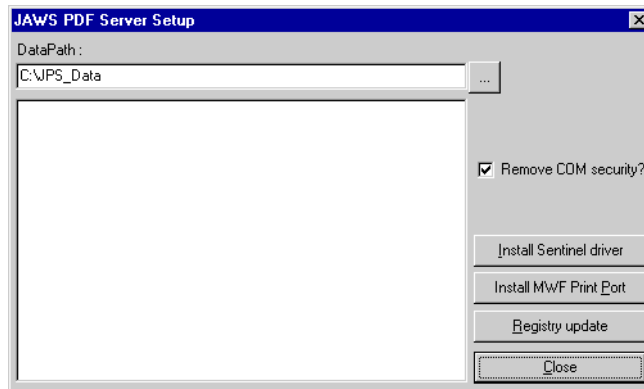


Figure 0.1 Jaws PDF Server Setup dialog box

Data Path

The Data Path may be used to specify a different default location for the data files created by Jaws PDF Server. These files consist of configuration files, scan directories for each SmartInput module, output folders for the generated PDFs, as well as the location for the message log file.

Remove COM Security?

Select this check box to disable COM security on the application server. By default, COM security is implemented in Windows NT/2000 but has the effect of blocking two Jaws PDF Servers from communicating with each other, so preventing them from sharing jobs. See Section 3.9, “Networking Jaws PDF Servers” for more information on sharing jobs across multiple servers.

Note: Removing COM security does not compromise security on the server. Its effects are limited only to the objects under the control of Jaws PDF Server.

Install Sentinel driver

Click this button to reinstall the Sentinel dongle driver. You may need to do this if you are experiencing problems if, when starting Jaws PDF Server, the program reports the dongle security has been violated, even when the dongle is attached and the correct license file is being used. It is a good idea to click the **Registry update** button after reinstalling the Sentinel driver.

Install MWF Print Port

The MWF print port is installed by Jaws PDF Server during the installation process and is used by the Jaws virtual printer when creating PDF files. If, for some reason, the port has been deleted click this button to reinstall it.

Registry update

Click this button to re-register the Jaws PDF Server components in the system registry. Under normal operations you should never have to perform this operation, however, if the dongle persistently reports a security violation then you can try clicking this button to see if it fixes the problem.

Close

Closes the Jaws PDF Server Setup utility.

