



## Navigator | **Server 8**



A subsidiary of Global Graphics PLC.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Xitron, Inc.

The information in this publication is provided for information only, is subject to change without notice and should not be construed as a commitment by Xitron, Inc. Xitron assumes no responsibility or liability for any errors or inaccuracies that may appear in this publication. The software described in this book is furnished under license and may only be used or copied in accordance with the terms of that license.

Certified PDF™ is a trademark of EnFocus Software; patent pending.

Windows, Windows 7, Windows Vista, Windows XP, and Windows 10 Pro are trademarks of Microsoft Corporation.

Harlequin is a registered trademark of Global Graphics Software Ltd.

Navigator is a registered trademark of Xitron Inc.

Other brand or product names are trademarks of their respective owners and are used without intention of infringement.

This product incorporates Apple OpenPlay software. OpenPlay is supplied under the Apple Open Source License reproduced in Appendix A. OpenPlay Source Code may be obtained from <http://sourceforge.net/projects/openplay>.

101-0012-006  
September 2021  
Xitron, LLC

<b>Foreword .....</b>	<b>5</b>
<b>Chapter 1 – About Navigator Server and Client .....</b>	<b>6</b>
1.1 Overview .....	6
1.2 Navigator Server .....	6
1.3 Navigator Clients .....	7
<b>Chapter 2 – Server Installation .....</b>	<b>8</b>
2.1 Introduction .....	8
2.2 Users and Shared Folders .....	8
2.3 Installing an Upgrade to an Existing Navigator Server or RIP Manager System .....	8
2.4 Installing Navigator RIP Only .....	8
2.5 Installing Navigator Server Only.....	9
2.6 Platform Requirements .....	10
<b>Chapter 3 – Navigator Workflow Installation .....</b>	<b>11</b>
3.1 Navigator Workflow .....	11
3.2 Restart your PC .....	11
3.3 RIP Configuration .....	11
3.4 Special Settings for Windows XP Professional, Vista, Windows 7 and newer OS's .....	12
<b>Chapter 4 – Getting Started .....</b>	<b>15</b>
4.1 Launching the Software .....	15
4.2 Launcher .....	15
4.3 Page Setups .....	16
<b>Chapter 5 – Server Configuration .....</b>	<b>17</b>
5.1 Introduction .....	17
5.2 User Management .....	18
5.3 Upgrade Product .....	20
5.4 Manage Actions .....	21
5.4.1 The RIP Action .....	22
5.4.2 The RIP Output Action .....	23
5.4.3 Direct Output Action .....	23
5.4.4 The Copy Action .....	24
5.4.5 The Export Action .....	24
5.4.6 The PrintJob Action .....	25
5.5 Set System Paths .....	26
5.6 Server Settings .....	27
5.7 Custom Field Labels .....	27
5.8 Import Files .....	28
5.8.1 Action Lists and Preflight Profiles .....	28
5.8.2 Stabilizer Document Parameters .....	28
5.9 Creating Preflight Profiles .....	29
5.10 Color and Name Tool – File name recognition and color recognition .....	29
5.11 Install Script .....	29

<b>Chapter 6 – Configuring Network Printers .....</b>	<b>30</b>
<b>Chapter 7 – Client Installation .....</b>	<b>33</b>
7.1 Introduction .....	33
7.2 Installing an Upgrade .....	33
7.3 Installing the PC Client .....	33
7.4 Installing the Mac Client .....	34
<b>Chapter 8 – Client Tutorial .....</b>	<b>37</b>
8.1 Introduction .....	37
8.2 Logging In .....	38
8.2.1 Locate the Server .....	38
8.2.2 User Name .....	38
8.3 Creating Workflows .....	39
8.3.1 General Workflow Configuration .....	40
8.3.2 Hot Folder Configuration .....	41
8.3.3 Configuring the RIP Action .....	42
<b>Chapter 9 – Workflow Configuration Examples .....</b>	<b>43</b>
9.1 Primary Workflows .....	43
9.2 Secondary Workflows .....	44
9.3 Alternative Proofing .....	45
9.3.2 RIPed TIFF proofs .....	45
9.3.3 Raster PDF files for email or Web proofing. ....	45
9.3.4 Sending to networked PostScript printers. ....	45
9.4 Multiple RIP Workflows .....	46
<b>Chapter 10 – Using the Client .....</b>	<b>47</b>
10.1 Sending jobs to Navigator Server .....	47
10.1.1 Drag and Drop .....	47
10.1.2 From an OS X Mac .....	47
10.1.3 From a Windows Application .....	47
10.1.4 Using the New Job Menu Command .....	47
10.2 Custom Column Displays .....	48
10.2.1 Setting Column Widths .....	49
10.2.2 Entering Custom Data .....	50
10.3 Sorting Job Lists .....	51
10.4 Releasing Held Jobs .....	51
10.5 Viewing Jobs by Workflow & Status .....	51
10.6 Viewing Jobs by Search Field Delimiters .....	53
10.7 Previewing Jobs .....	54
10.8 Final Output .....	56
10.9 Deleting & Archiving Jobs .....	56

<b>Chapter 11 – The Navigator Client in Detail .....</b>	<b>57</b>
<b>11.1 Menu Bar Items .....</b>	<b>57</b>
11.1.1 The File Menu .....	57
11.1.2 The Jobs Menu .....	57
11.1.3 The Workflows Menu .....	60
11.1.4 The Help Menu .....	60
<b>11.2 Tool Bar Items .....</b>	<b>61</b>
11.2.1 Job View Section .....	61
11.2.2 Workflow Edit Section .....	61
11.2.3 Job Management Section .....	61
<b>11.3 The Job List Panel .....</b>	<b>63</b>
<b>11.4 Items in the Job View Window .....</b>	<b>63</b>
<b>11.5 File Type Icons .....</b>	<b>65</b>
<b>11.6 Expanded Job View .....</b>	<b>66</b>
<b>11.7 Column Heading Functions .....</b>	<b>67</b>
<b>11.8 Controlling Jobs in the Job View Window .....</b>	<b>68</b>
<b>11.9 Display Windows in Workflow Edit Mode .....</b>	<b>69</b>
11.9.1 Workflow Edit Tabs .....	70
11.9.2 General .....	70
11.9.3 HotFolder .....	71
11.9.4 Copy Action .....	71
11.9.5 Export Action .....	71
11.9.6 PrintJob Action.....	72
11.9.7 RIP Action .....	72
11.9.8 Output Action .....	72
11.9.9 Direct Output Action .....	72
<b>Chapter 12 – Workflow Options .....</b>	<b>73</b>
Chapters for imposition, ink remapping, PDF conversion and preflighting, and scriptable hot folders are available in separate documents on the installation CD and also at Xitron’s web site.	
<b>Appendix A – The Viewer .....</b>	<b>74</b>
A.1 Key Features .....	74
A.2 Configuring the Viewer .....	75
A.3 Using the Viewer .....	75
<b>Appendix B – Upgrades and system backups .....</b>	<b>81</b>
<b>Appendix C – Special Page Setups .....</b>	<b>82</b>
<b>Appendix D – Apple Public Source License .....</b>	<b>83</b>

## Foreword

Thank you for purchasing this quality Xitron product. We hope you will come to rely on Navigator Server as a powerful productivity tool.

The Navigator suite of products may be sold separately or collectively.

The essential components are:

- Navigator Server
- Navigator Client
- Navigator RIP

Both the Server and the RIP have optional modules available to extend functionality.

This manual explains how to install and use Navigator Server and Client and includes example workflow ideas that may help you get the best value from your investment. There are separate manuals available for the RIP and for optional Server and RIP modules. They are available on our web site.

If you need help, contact your supplier or visit our web site at [www.xitron.com](http://www.xitron.com).

# Chapter 1 – About Navigator Server and Client

## 1.1 Overview

Navigator Server is a workflow architecture for prepress and pressroom production. Preflight, Ink Mapping, Color Management, Proofing, RIP, Trapping, Imposition, Automated Press Ink Key Configuration, and other modules are all part of the Navigator Server framework.

Navigator Server provides multiple features for simplifying and empowering prepress workflows.

Particularly valuable for high volume environments is Navigator Server's load balancing capability.

Navigator Client provides a single, simple user interface from which users – from their own desktops – can monitor jobs through various production stages. Users can view, modify, delete, re-process and generally manage their work without leaving their desks and without learning the complex user interface of a RIP.

By using Navigator Server, operators can track thousands of jobs from their Windows or Macintosh clients.

## 1.2 Navigator Server

Navigator Server runs on a PC. It requires Windows 10 Pro. No "Home Edition" versions of Microsoft's operating systems are supported. By default, Navigator Server runs on the same computer as the RIP. However, you may configure more complex multi-computer systems.

Navigator Server handles system security (licensing) and requires a dongle to run. However, for trial purposes, Navigator Server can be configured to share the Navigator RIP dongle for a period of 45 days. You will need a password if you wish to use optional modules during the free trial period.

Clients will run without dongles and the Server will accept as many Clients as are currently permitted by the system. Upgrading to support additional Clients is a simple process of entering a security code into the Server to update the permissions. This Server upgrade menu is called "Product Features." Contact your dealer to purchase additional permission codes.

### Operation without a Navigator Server dongle

Without a dongle but with a local connected RIP providing system security, Navigator Server operates as follows:

For a 45-day trial period, a full standard Job Manager will function.

With the addition of passwords, the Trial Mode can also be used with optional modules.

After the 45-day trial period, users may purchase Navigator Server to continue its use.

### Operation with a Navigator Server dongle

The Navigator Server handles system security (with the exception of connected RIPs). Therefore, Navigator Client platforms do not need dongles. The Server will accept as many Client connections as are currently licensed.

Upgrades to the system can be handled with license codes.

## 1.3 Navigator Clients

Navigator Clients are available for PCs running Windows 10 Pro and Mac OSX 10.4 and higher.

The Client provides the regular user interface to the system, after completion of basic system configuration. Users may connect to the Navigator Server and, subject to their access privileges, create or modify workflows and manage jobs.

The system saves the user's work and job status so the user can connect via another Client on another computer and see their work as they would expect.

### **Clients allow users to:**

- Create, modify or delete workflows.
- See jobs in the system using a number of different views.
- Review jobs that are held at various workflow stages.
- Release, delete or re-submit jobs.
- Soft proof jobs on screen before final output.
- Check traps, separations, spot colors etc.

### **Additional options are available to:**

- Create PDF Files
- Preflight PDF Files and review PDF Preflight Reports
- Participate in a certified PDF workflow
- Remap ink color separations
- Impose pages
- Recombine and descreen TIFF Files for ROOM proofs
- Automatically set ink ducts on a press console

## Chapter 2 – Server Installation

### 2.1 Introduction

The Navigator disk will automatically launch the install screen. Five different buttons are available.

1. **Server & RIP** (Installs our complete workflow with the RIP.)
2. **Server** (Installs Navigator Server components only. No RIP.)
3. **RIP** (Installs the Navigator RIP only. No workflow.)
4. **RIP Plugins** (Installs output device support plugins; e.g. Epson proofers, Screen CTP, etc.)
5. **Documentation** (Launches our documentation in your PDF reader.)

### 2.2 Users and Shared Folders

Navigator Server makes extensive use of shared folders. These are folders on one computer that are accessible over the local area network by other computers. Navigator Clients must have read and write access to these shared folders on the Navigator Server PC. If the proper permissions are not granted, Navigator Clients will not function properly.

In multi box installations (defined as Navigator Server running on a computer separate from any of the RIPs it controls), Navigator Server must have read and write access to the share created by the “RIP Utilities” install on the RIP PCs.

### 2.3 Installing an Upgrade to an Existing Navigator Server or RIP Manager System

“Load over” upgrades will work. This consists of installing the software to the same directory as the old version. See Appendix B for useful and up to date upgrade information.

### 2.4 Installing Navigator RIP Only

If you wish to install the RIP without the Server, insert the DVD and select the “Navigator RIP” option from the installer splash screen.

Once complete, select the “Add Output Devices” tab and follow the on-screen prompts to install any additional plugins.

For more details see the Navigator Installation Guide.

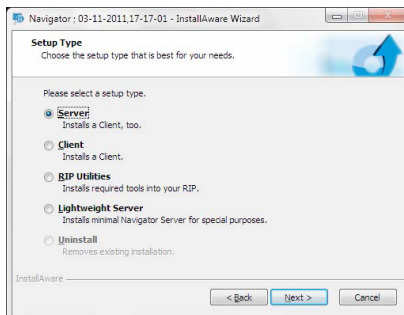


## 2.5 Installing Navigator Server Only

If you are upgrading an existing RIP-only system to use Navigator Server, select the “Navigator Server” option from the installer splash screen. There will be four choices. Choose “Server,” as shown below.

---

### SERVER INSTALL SELECTION



After the Server installation is complete you must establish control of your Navigator RIP. Check that your RIP has a page setup called “Default Page Setup,” which should have been created when the RIP was installed. If you have renamed or deleted this page setup, you must create a new one as follows:

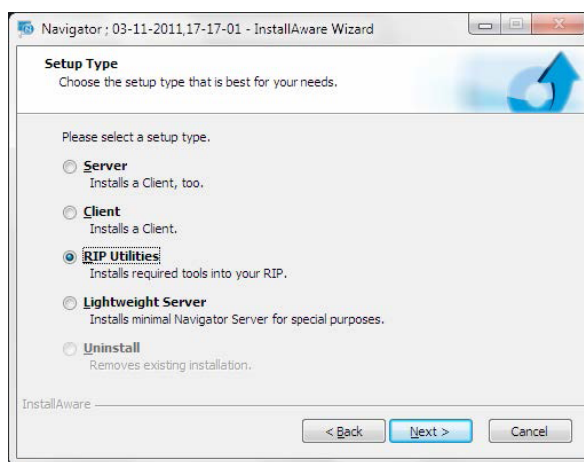
From the RIP’s Page Setup Manager dialog box, click **New**. In the Page Setup Edit dialog box, click **Save As...** Enter the exact name “Default Page Setup” and click **Save**.

To properly manage your workflow, Navigator Server must install several software components on the RIP platform. This step must be carried out on the PC containing the RIP, which may be different from the platform on which you’ve installed the Navigator Server software.

If the RIP is running, quit the application. Launch the Navigator Server Installer as above, but select the “RIP Utilities” radio button.

---

### RIP UTILITIES



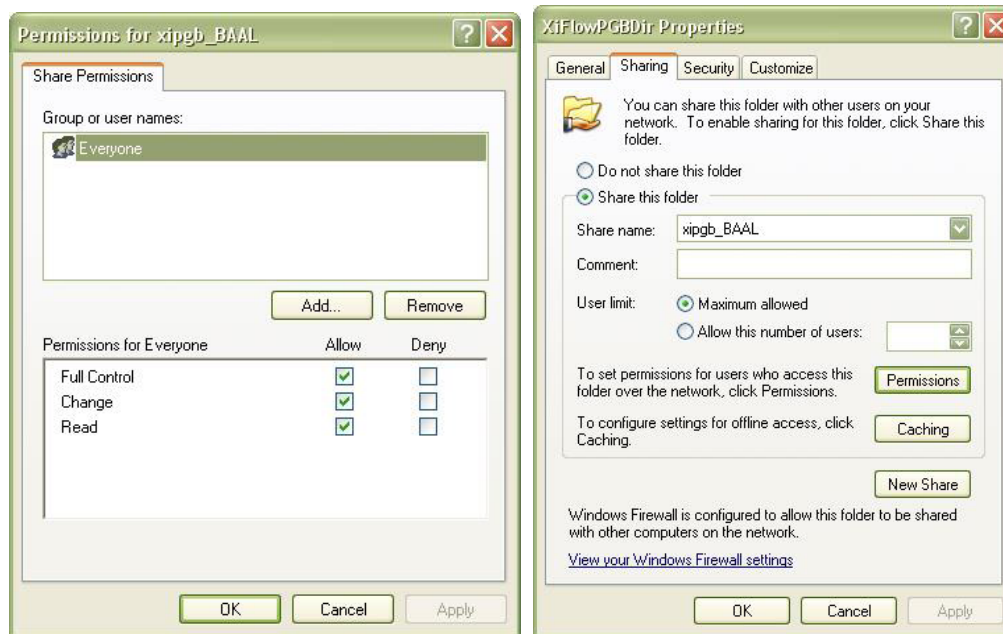
The installation of the RIP Utilities will create a share on the RIP computer. You need to ensure that the share is accessible by Navigator Server. This share is named “xipgb\_<machine-name>.” You may find the correct path to this share by opening a Command Prompt (CMD) and typing “**Net share.**”

Click Permissions and check the boxes that Allow Everyone full permissions, including **Full Control**, **Change**, and **Read**, as shown in the next figure, *Sharing Properties and Permissions*.

See section 3.4 for further information about access rights.

---

## SHARING PROPERTIES AND PERMISSIONS



After completing the sharing setup, launch the RIP.

The RIP Utilities Installer will also create two Input Sockets on your RIP. Navigator Server will use these inputs to communicate with older RIPs.

If you are using a version 7, 8 or 9 RIP, the RIP Utilities Installer will create a connection to the RIP that is invisible to the user.

Repeat this process at each RIP you wish to control through Navigator Server. Keep in mind that Navigator Server, under the “Workflow Actions” menu, must be configured with a RIP action for each RIP you wish to control. Details for this procedure follow.

## 2.6 Platform Requirements

Check the Xitron web site for the current system requirements.

## Chapter 3 – Navigator Workflow Installation

### 3.1 Navigator Workflow

Make sure no security dongles are attached to the PC. After inserting the DVD or mounting the .ISO file, the installation splash screen will appear. Choose **Navigator Workflow** from the menu.

The on-screen prompts will guide you through the entire installation. At times, the system may ask for license codes necessary for certain options. Refer to the code sheet that came with your system and enter the codes as appropriate. If you are not prompted during the installation, enter your license codes at the RIP under the **Navigator, Configure RIP** menu selection.

### 3.2 Restart your PC

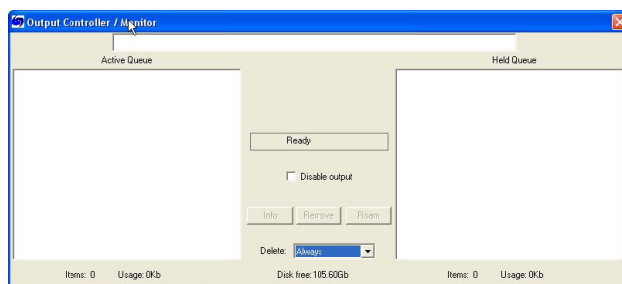
After installing all components and attaching the Navigator dongle, re-start the PC.

### 3.3 RIP Configuration

Navigator Server can be imagined as a replacement for the Harlequin Input and Output Controller windows. Consequently, where you would have formerly set up Inputs in the Input Controller for corresponding Page Setup configurations, you now set up Navigator Server workflows. Output Controller is not needed for its job control, queuing, previewing, or hold and release functions. Navigator Server now handles all these and more. To facilitate this, set the Output Controller to **Delete Always** and uncheck **Disable Output**, as shown below.

---

#### OUTPUT CONTROLLER CONFIGURATION



Configure Page Setups from within the RIP menu by selecting **Navigator, Page Setup Manager**. *Do not delete the default page setups*. Once this initial configuration is completed, users will be able to select these Page Setups from within the Navigator Client application at any Mac or PC on which it is installed. See the Navigator Reference Guide for more information on RIP configuration. All Xitron Manuals are available at [www.xitron.com](http://www.xitron.com).

### 3.4 Special Settings for Windows 10 Pro

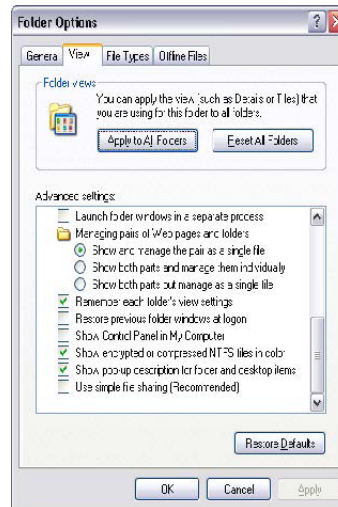
When running Navigator Server – or a RIP connected to Navigator Server – on Windows Operating Systems, it is necessary to adjust various sharing and security settings.

#### Simple File Sharing

The default configuration upon installation of typical Windows OS's is for “simple file sharing” to be enabled. Before continuing, it must be turned off. To do so, follow these steps:

---

#### SIMPLE FILE SHARING



1. Open a window.
2. From the **Tools** menu select **Folder Options...**
3. In the **Folder Options** window, select the **View** tab.
4. Scroll to the bottom of the “Advanced settings:” list.
5. Turn off **Use simple file sharing** as shown in the figure on page 10.

## Configure Shared Folders

Next, it may be necessary to locate all the shared folders on the Windows platform associated with Navigator Server and the RIP(s) that Navigator Server will control. The normal locations of these folders are listed below:

On the RIP computer: the share is located at <rip install directory>/ sw/page buffers/xiflowpgbdir.  
On the Navigator Server computer there are two shares. They are located at <drive letter>:/Navigator /  
Workflows and <drive letter>:/Navigator /Jobs

You can also get a list of the shares on your computer by opening a command prompt and typing **net share**. From the **Start** menu, select **Run**. Type **cmd** and press **Enter**. The command prompt will open. Type **net share** and a list of your shared folders will appear.

To adjust the sharing settings properly for each Navigator Server share, complete the following steps:

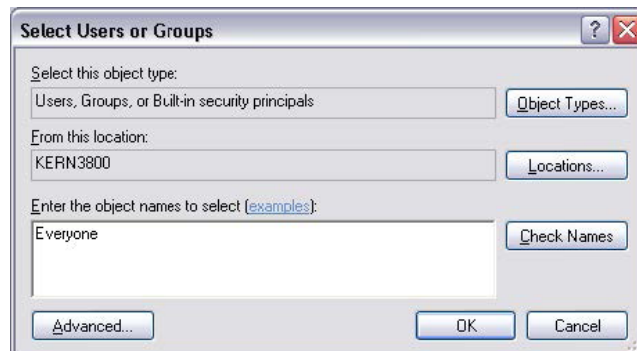
1. Locate each folder listed.
2. Place the mouse pointer over the folder and right-click.
3. From the list that appears, choose **Properties**.
4. From the **Properties** window that appears, select the **Security** tab.

Note: the **Security** tab will not be available if you have not turned off **Simple File Sharing** as indicated earlier.

5. Under the **Group** or **User names** heading, click the **Add...** button.
6. In the **Select Users or Groups** window that appears, type **Everyone** as illustrated below.

---

### SELECT USERS OR GROUPS



7. After completing the **Select Users or Groups** window as shown above, click **OK**. This will return to the Properties screen and **Everyone** will appear in the **Group** or **User names** list.
8. Highlight **Everyone** in the **Group** or **User names** list.
9. In the permissions for **Everyone** list, click the check box to **Allow Full Control**. This will turn on all of the check marks under the **Allow** heading. The figure below shows the proper configuration.

---

## ALLOW FULL CONTROL



10. Click **OK** to close the Properties window.
11. Repeat these steps for all of the shared folders

## Chapter 4 – Getting Started

### 4.1 Launching the Software

Verify the installation of your dongle before launching the application. Without the dongle, the License Manager will not allow the software to run. The dongle must be properly inserted into an available USB port.

The Installer places a Short Cut for either the Navigator Server or the Launcher (depending on installation performed) on your desktop. The Server or Launcher will launch your RIP automatically. **When you wish to start or quit the RIP, start or quit the Navigator Server instead.**

Note: If your system has a Firewall installed you will see a number of alerts the first time the Navigator system starts. Programs that may ask for authorization include SOAR, JAVACORESOAR, PDFSERVER.EXE, XITRON.EXE and others. For each component, permit the software to run, and check the box to make this permission permanent. Once each component has been authorized it will not need further permissions.

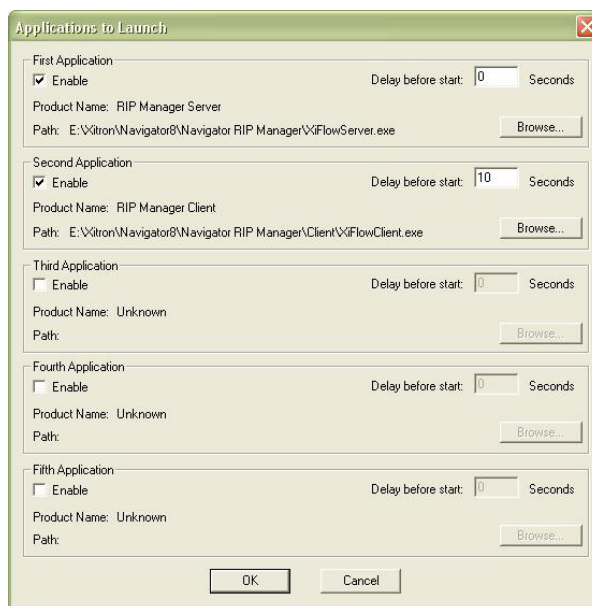
### 4.2 Launcher

You may wish to reconfigure the Launcher not to launch a client at start up. If you do not plan to use a client license on the system server, double-click the Launcher and click **Configure**. The dialog box shown below will appear. Uncheck the **Enable** button for **Navigator Client**.

Notice that other applications may be started in order by the launcher as well. This has proven useful in integrating non-Xitron RIPs which rely on device utilities that start in a specific order. The only order restriction is that Navigator client must come after the Navigator Server.

---

#### CONFIGURE THE LAUNCHER



### 4.3 Page Setups

The RIP stores configurations using a system of Page Setups. You will need to create Page Setups in the RIP exactly as you would in a RIP installation without Navigator Server. To create or modify Page Setups, use the Page Setup Manager. If the Page Setup Manager appears grayed out, it may be because the RIP Inputs are enabled (on). Turn them off by clicking the traffic light icon with the red arrow. RIP Inputs do not need to be on when using Navigator Workflow.

Create a new Page Setup using the **New...** button. Select the required output device, resolution etc. and select **Save As...** giving the new page setup a descriptive name. (Do not overwrite the name Default or delete the Default page setup. See the Navigator RIP Operator Manual if you are using the Navigator RIP – or the corresponding manual for any other Harlequin RIP – for details regarding page setups.

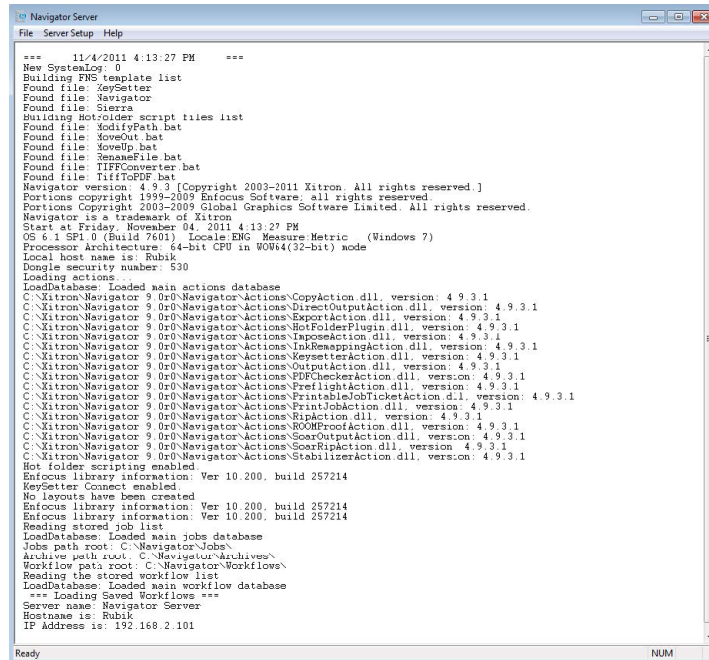


## Chapter 5 – Server Configuration

### 5.1 Introduction

After launching the Navigator Server application, the Server Dialog appears on the Server PC:

#### NAVIGATOR SERVER DIALOG



This window displays information about the Server including its serial number, name and other variables. You may display or hide the Tool Bar and Status bar through the View Menu. To exit the Server, use the **File > Exit** menu selection or the Exit button at the top right corner of the window.

A special user account called Administrator has full rights to configure the Navigator Server. Upon installation, the Administrator password is blank. The only active menu item is **Server Setup > Administrator Login**. Choose this option, and click **OK**, leaving the password field blank. You now have access to the full range of Server features. Xitron strongly recommends setting a password for the Administrator user during initial set-up. Go to **Server Setup > Users** dialog (see section 5.2 below) to set the password. Any further changes to the configuration will require logging in as Administrator and entering the correct password.

The Navigator Server must be configured when it is installed and when changes to the system are required. The most common change after installation is the addition of new Users.

Configuration options are:

- Add, delete, or change Users
- Upgrade product
- Manage Actions (processes managed by the Server)
- Set locations on the system for storing workflows and jobs
- Set Server Name (for cases where there are more than one Navigator Server on the network)
- Set custom field names (for organizing and sorting jobs)

Access these options via the Server Setup menu item, as discussed in detail in the following sections.

## 5.2 User Management

All system users must register with the Server. Depending on the options purchased, the system limits the number of Users who can simultaneously connect. However there is no limit to the number of users who can be defined at the Server. For example, you might have a 5-User system, but 12 employees who work different shifts. You can define 12 different Users at the Server, and any 5 of them can be connected at one time. If you wish to upgrade your system to support more simultaneous Users, this can be done via a password through the Upgrade Product dialog.

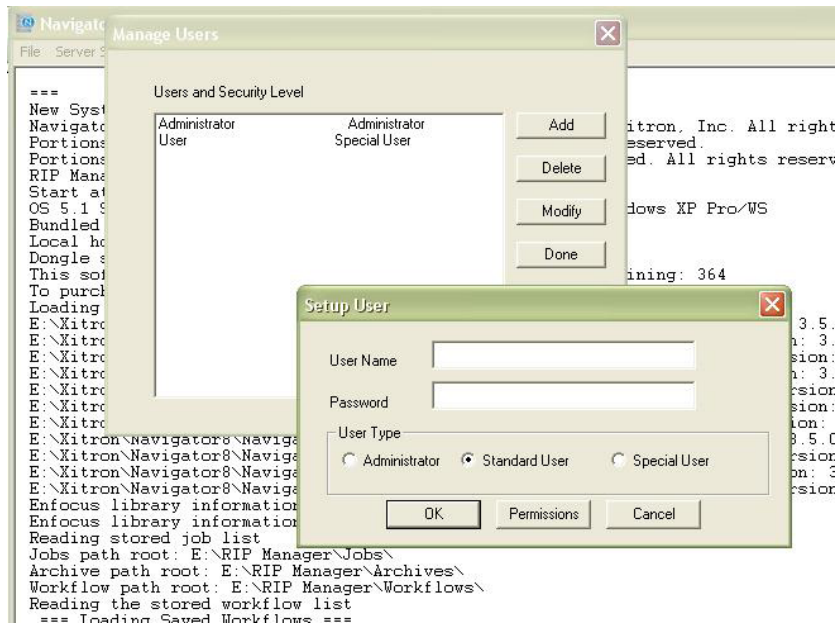
To manage Users select the **Server Setup > Users** menu item.

### To create a new User

Click **Add**, and enter the User name and Password as shown in the next figure labeled *Create a User*.

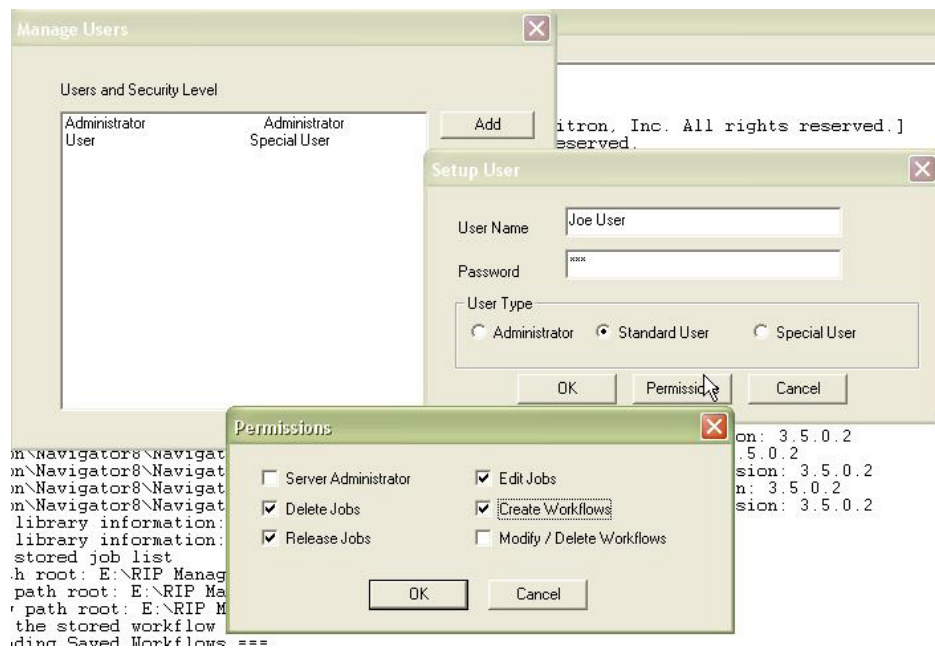
Note that a password is not strictly necessary. If this field is left blank, this User may connect to the system without a password. Specify the User type by clicking one of the Radio Buttons. Choose Administrator or Standard User, or by clicking on the permissions button, create a Special User. The Permissions available are shown in the figure labeled *User Permissions* on page 16.

#### CREATE A USER



---

## USER PERMISSIONS



Depending on the type of User created, certain restrictions will apply. For instance, Administrators have all Permissions allowed while Standard Users can only Delete or Release jobs. Special Users are created if you select any other combination of Permissions. After establishing Permissions, click OK until the system returns to the User dialog shown earlier. Confirm the new User(s) is/are shown correctly.

### To Delete A User

Access the Users dialog (**Server Setup > Users menu**), highlight the User to delete, and click **Delete**.

### To Modify a User Account

Access the Users dialog (**Server Setup > Users menu**), highlight the User to change, and click **Modify**. Make the changes as outlined above for a New User.

When all changes or additions are complete, click **Done** to close the Users dialog.

### 5.3 Upgrade Product

Navigator Server uses a security system based on the combination of a single system-wide dongle and a series of codes to enable or add specific functions. In addition, Navigator Server can run for up to 45 days in Trial Mode. If your system is in Trial Mode, all connected Clients will display the mode, and number of days left, at the top of the Client window.

To convert a Trial Mode system to a full system it will be necessary to obtain codes and a dongle, from your supplier. Connect any new dongle and add codes by navigating to the menu item **(Server Setup > Upgrade Features)**. The following dialog appears:

---

#### ENTERING UPGRADE CODES

Security Number	656	Maximum Clients	10
Security	Demo Dongle	Maximum RLPs	4
Expire Date	10/02/09	Product Version	3
Viewer	FirstPROOF Pro		

Action	Active
Server App	Yes
Hot Folder	Yes
HQN Rip v6	Yes
Output v6	Yes
Print Job	Yes
Null Action	Yes
Client App	Yes

Dongle upgrade code:  -  -

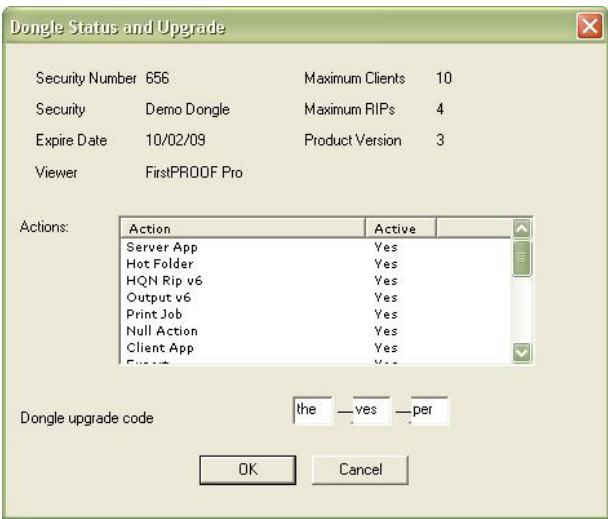
The upper portion of the window displays the dongle Serial Number, the maximum number of simultaneous Client connections, whether or not this system is a Trial (Demo system with an associated expiration date), the maximum number of RLPs that can be managed, and the Product Version number.

In the lower center of the screen is a list of Actions that are available in the software. To the right of each Action is the word “Yes” if the Action is currently active or “No” if it is not. To enable currently disabled Actions, add a new RIP or Client connections, you must first obtain the appropriate code from your supplier.

To install the upgrade, enter the code into the boxes at the base of the dialog and click OK. Upon verification by the system the option will be added or changed.

*Note: You will also need an upgrade code if you have upgraded from one product Version to another. For example upgrading from Version 7.x to Version 8.x will require a Version Upgrade code. If your system requires a Version Upgrade, the following dialog will appear after launching the Server application:*

VERSION UPGRADE



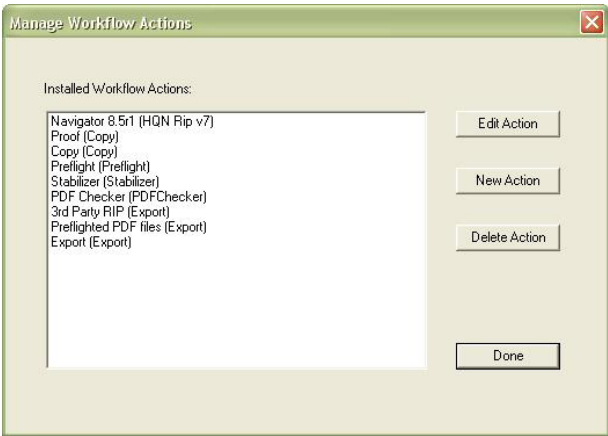
Enter the Version Upgrade code and click OK.

5.4 Manage Actions

“Actions” describe the individual steps or processes Navigator Server uses in the construction of workflows. For example, the RIP Action is a basic action that controls the RIP portion of a Navigator Server system. Other actions are optional, and the choices shown in the dialogs will depend on the version of Navigator Server as well as the options purchased.

To configure Actions, select the menu item (**Server Setup > Actions**). The Actions Manager dialog will appear as shown in the figure on page 21. The install creates several actions. You may wish to create more. Only configured Actions will be available for Users creating workflows.

ACTIONS MANAGER

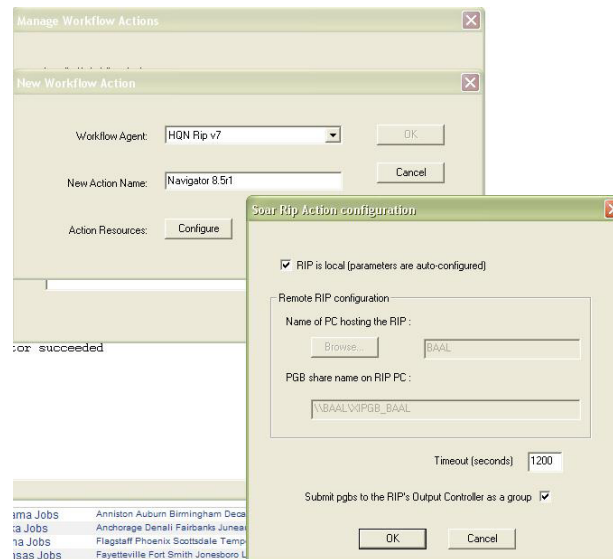


### 5.4.1 The RIP Action

Before configuring the RIP Actions within Navigator Server, verify the RIP Utilities have been installed on the RIP.

From Navigator Server's Actions Manager click **New**, select RIP from the list of Workflow actions, and name the Action. This is the name that users will see from their Client workstations so choose a name that will be helpful to your users; especially if you have more than one RIP. The following figure shows an example of a RIP Action dialog box:

RIP ACTION CONFIGURATION



**Note:** If you are connecting a RIP that resides on the same PC as the Navigator Server, simply check the RIP is local... check box and the configuration will complete automatically.

If you are configuring a RIP Action for a RIP that is not on the same PC as the Navigator server, use the Browse button to locate the shared *xipgb* folder (see Chapter 2) on the RIP. Navigator Server will attempt to communicate with the RIP immediately.

The timeout value is the length of time Navigator Server will wait for a job to be processed by the RIP before reporting an error. If you are processing complex jobs, particularly involving trapping, you may find the system reports an error when in fact the job is still running correctly. If so, set a larger value than 1200 seconds. Click **OK** twice to close the Workflow Actions Manager and return to the Server window.

You may repeat this process with as many RIPs as your Navigator Server is licensed to support. Multiple RIP support can take the form of several unrelated RIPs driving several unrelated devices or load balancing across RIPs driving similar devices.

See section 6.4.3 for more information on multi-rip support.

**NOTE:** The "Submit PGBs to the RIP's Output Controller as a group" selection is a compatibility check box for use with certain device output plug-ins. Currently, the output plug-ins known to require it are Xitron's Presstek plug-in, Presstek's DI, and Presstek's Dimension plug-ins.

## 5.4.2 The RIP Output Action

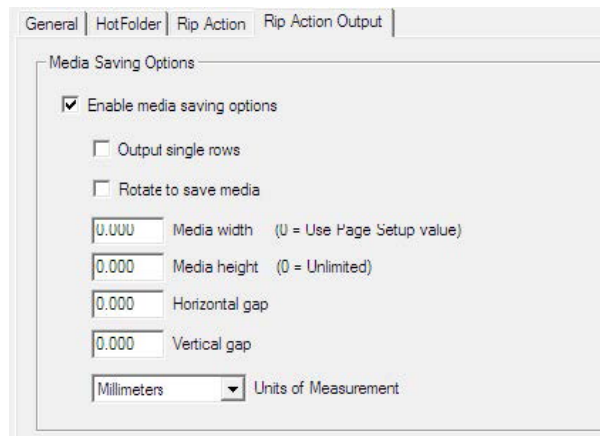
If a RIP Action is configured in the Server (**Server Setup > Manage Workflow Actions**), both RIP Action and RIP Output Action will be enabled. The RIP Output Action will be named by appending 'Output' to the name of the RIP Action.

The purpose of the RIP Output Action is to take input from a RIP Action which is configured to produce output suitable for a particular device, and to send that output to the device. So for the workflow configuration in the Client, a RIP Output Action must be preceded by a RIP Action which is associated with a Page Setup for an output device.

The RIP Output Action configuration page in the Client is shown below.

---

### RIP OUTPUT ACTION CONFIGURATION



The screenshot shows the 'RIP OUTPUT ACTION CONFIGURATION' dialog box with the 'Rip Action Output' tab selected. The 'Media Saving Options' section is expanded, showing a checked 'Enable media saving options' checkbox. Below it are three unchecked checkboxes: 'Output single rows', 'Rotate to save media', and 'Media width' (0.000), 'Media height' (0.000), 'Horizontal gap' (0.000), and 'Vertical gap' (0.000). At the bottom, the 'Units of Measurement' dropdown is set to 'Millimeters'.

From Navigator Server v5.0 onwards, media saving options are provided, if the 'Enable media saving options' checkbox is checked. The options are as follows:

- **Output single rows** – If this option is checked, the media saving engine will produce one or more outputs, each containing a single row of imposed pages. In other words, pages will not be grouped vertically; output will be produced as soon as there are sufficient pages to complete a row.
- **Rotate to save media** – If this option is checked, the media saving engine may rotate pages by 90 degrees to achieve a more efficient layout and use less of the output media.
- **Media width and height** – These fields control the width and height to which the output is constrained.
- **Horizontal and Vertical gap** – These fields control the size of the gutter which will be included between pages by the media saving engine.
- **Units of measurement** – Select the units to be used for the Media width and height, and the Horizontal and Vertical gap settings. Millimeters and Inches are available.

## 5.4.3 Direct Output Action

Direct Output is an alternative RIP Action that supports Harlequin RIPs version 8 and later. Direct Output can be used in the same workflow as the RIP Action or separately. It does not allow for a pause between RIP and output. Commonly it is used for NORM proofing workflows. There are other uses as well. Direct Output supports any output device supported by the RIP. Simply drag it into a workflow and choose a page setup to configure. The simplest workflow possible would be a hotfolder and the Direct Output action alone.

#### 5.4.4 The Copy Action

Use the Copy Action to create a copy of a job file and send it immediately to another workflow. This enables one job file to be used, for example, to create both low resolution and high resolution PDF files for different purposes. (To copy a file outside of Navigator Server, such as a Hot Folder providing input to an Imposition product, use the Export Action). To create a Copy Action, select the menu item **Server Setup > Manage Actions**. Click **New Action**, select **Copy** from the Workflow Agent list box, enter a suitable name and click **OK**. (No additional configuration is necessary when creating a Copy Action.)

It is a good idea to name the copy action for the purpose it will be used. For example, to copy files to a workflow that processes proofs, a good name for the copy action would be “Proof.”

#### 5.4.5 The Export Action

Use the Export action to send job files from Navigator to another location on the network. One example might be to send a low-resolution PDF file to a remote computer for Soft Proofing, but there are many other reasons you may wish to send the job file out of the Navigator System.

The Server Administrator may create Export Actions for each location to which Users send files. Each of these Export Actions will then appear on the Client tools palette for use in constructing Workflows. This is convenient if you wish the Export Action to have a name that describes what the Export is doing. (That is, if your Export Action is sending files to a 3rd party RIP for proofing, you might call it “GMG Proof.”) You may also edit the export path in the client and just use one generic Export Action for many purposes.

To create an Export Action, select the menu item **Server Setup > Manage Actions**. Click **New Action** and select **Export** from the Workflow Agent list box. Enter a suitable name and click **Configure**. From within the Configure dialog, set the default destination location of the Export Action. This default destination may be overridden by the client application. Click **OK** to save the settings and close the Export Action windows.



### 5.4.6 The PrintJob Action

This Action will, by default, take a job and convert it to one or more TIFF images and output them to the Windows Print Spooler and through it to a specified printer connected to the Server PC.

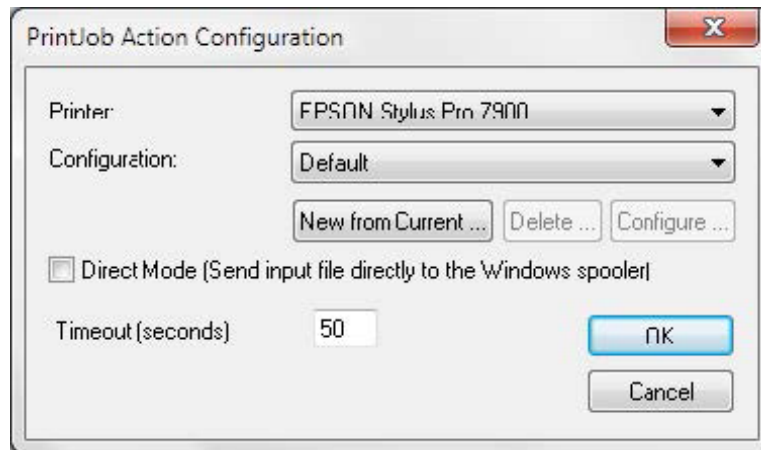
#### Configuration in the Server

Install all appropriate Windows Printer Drivers before using the PrintJob Action for output to local printers.

The initial configuration of PrintJob Action is done in the Navigator Server. In the the New Workflow Action dialog, select 'Print Job' as the Workflow Agent and then press the 'Configure' button. The following dialog is displayed.

---

#### PRINTJOB ACTION CONFIGURATION



This dialog allows you to create and edit printer configurations. One of these configurations must be selected for use when you configure each PrintJob Action in the Navigator Client.

To make a printer configuration, first select the printer from the printer menu. The Configuration menu will be populated with any existing configurations for the selected printer. Select a suitable base configuration (or Default) from the Configuration menu.

Use 'New from Current' to create a new configuration based on your selection, and enter a suitable name for your configuration.

Use the **Configure** button to set the printing preferences for this printer. The properties dialog shown is the same as selecting Printing Preferences from the printer, via the Devices and Printers control panel.

**Direct Mode:** For normal usage this option should be left unchecked; the Action will then process incoming files to TIFF format suitable for passing to the printer driver.

Check this option only if you require jobs to be sent directly to the Windows spooler, bypassing the RIP. If this option is checked, the data being sent **MUST** be the correct format for the printer. For example, if the printer is a PostScript printer, PrintJob can only send PostScript files to the printer.

In addition, even though PrintJob uses the Windows Printer Driver to connect to the printer, in Direct Mode it does not use any of the settings for media, resolution, cassette etc. which are included in the Windows Driver setup. This is because these controls are bypassed by the native language files that PrintJob supports. To obtain correct output you may need to change default settings in the printer itself to specify the cassette, media type, quality and other options.

**Timeout:** Enter the number of seconds the PrintJob Action should attempt to connect to the printer before reporting an error.

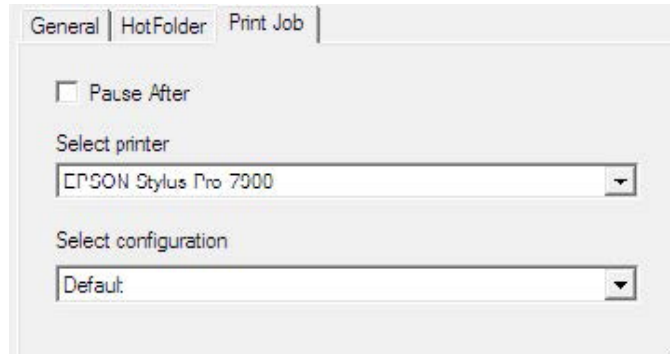
The PrintJob Action Configuration dialog may also be used to edit or delete existing configurations.

## Configuration in the Client

After creating one or more configuration sets in the Server, PrintJob Action must be configured in the Client. Its control dialog is shown below.

---

### PRINTJOB ACTION CLIENT CONFIGURATION



Select the printer, and then one of the configuration sets you made in the Server.

## 5.5 Set System Paths

The Server Administrator can configure the RIP Manager Server, controlling the storage location of Workflows, Job Files, and Archives. By default, these are sub-folders in a folder named “Navigator,” located on the “C” drive of the Navigator Server PC. However, the Administrator may change this to any accessible location. For better performance, Xitron recommends the Jobs and Workflows folders remain on the Navigator Server PC. The Archive folder may be placed on a remote or removable drive.

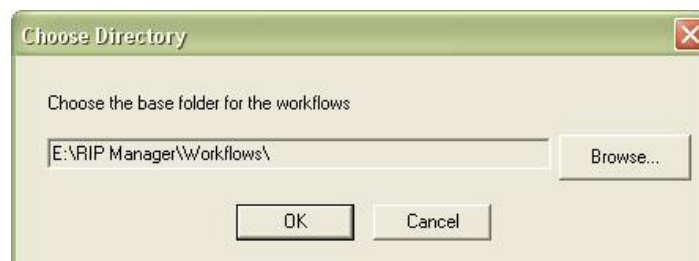
In addition the databases are archived, by default into a folder named “Archived DBs” within the folder containing Navigator Server. These archives are written every 24 hours, and are intended for manual recovery in the case of loss of the Navigator Server PC’s hard drive, so you may wish to set their location to a remote networked drive. If so, please ensure that the drive can be written with a sufficiently high transfer rate.

*Note: When a User creates a Workflow, the system creates a Hot Folder with the Workflow Name inside the System’s Jobs folder. Make sure that there is sufficient space in the designated location to store all the jobs expected to reside on the system at one time. Keeping several days’ or weeks’ worth of jobs on the system is possible only if sufficient drive space exists.*

To set System Paths, select the menu items **Server Setup > Set Base Workflow Path, Set Base Jobs Path, Set Base Archive Path** or **Set Base Database Archive Path**. In either case, the entry box below will appear. Enter the required path to the location you wish to use and click **OK**.

---

### SET SYSTEM PATHS



Click OK to save the settings and close the Path Configuration windows. If you have changed the Workflow or Jobs database locations, the Server will now shut down; restart it to make these changes effective.

## 5.6 Server Settings

To change the network name of a RIP Manager Server (i.e. the name that RIP Manager Client sees), select the menu item **Server Setup > Server Settings**.

The system protects itself by halting job processing if the free disk space falls below a threshold level. By default this is 5 gigabytes. For troubleshooting purposes, you may need to change this. In normal operation the default value is correct.

The client application can set a job to delete “when necessary.” The “when necessary” threshold is defined in terms of the number of jobs in the system and may be modified here.

---

### SERVER SETTINGS



The screenshot shows the 'Server Settings' dialog box. It has a title bar with a close button. Inside, there are three input fields: 'Server name' with the value 'EPN', 'Minimum Disk Free Space in GB' with the value '5', and 'Job Deletion Threshold' with the value '1000'. Below these fields is a checkbox labeled 'Always queue jobs for output in RIP' which is currently unchecked. At the bottom are 'OK' and 'Cancel' buttons.

## 5.7 Custom Field Labels

Navigator Workflow includes a range of features for organizing lists of jobs and related information for users. Some of the most powerful are the Custom Fields. These are four fields that can contain any information the user wishes. This information is then available for display and sorting purposes by each user from within their Clients.

Defined at the Server, Custom Fields can be given appropriate names that apply system-wide. Users can then add information to each field on a per-job basis from any Client.

To define Custom Field names, select the menu item **Server Setup> Edit Custom Field Labels** menu. Enter the Names you wish to use in the four boxes and click **OK**. Name the fields any way you wish. Keep in mind that when a User chooses to display these fields, they will be displayed in order from left to right on the User's screen, with Field # 1 appearing first.

In the following example, the System Administrator has chosen to allow display and job sorting on Customer name, Due Date, and the name of the prepress operator responsible for the job.

---

### CUSTOM FIELD LABELS



The screenshot shows the 'Edit Custom Field Labels' dialog box. It has a title bar with a close button. Inside, there is a message: 'You may edit the column headers for the custom fields.' Below this message are four input fields labeled 'Field 1', 'Field 2', 'Field 3', and 'Field 4'. The values in these fields are 'Customer', 'Due Date', 'Operator', and 'Field 4' respectively. At the bottom are 'OK' and 'Cancel' buttons.

## 5.8 Import Files

The Import Files dialog provides a convenient system for installing additional settings and configuration files into Navigator Server. The files that can be imported are Enfocus Action Lists (\*.eal) and Profiles (\*.ppp), and Stabilizer Document Parameters (\*.dpf).

### 5.8.1 Action Lists and Preflight Profiles

Preflight Profiles may be created at the Server. This process is documented below, in section 5.9. Action Lists and Profiles can be created using PitStop Professional. The procedure for doing so is documented with that product.

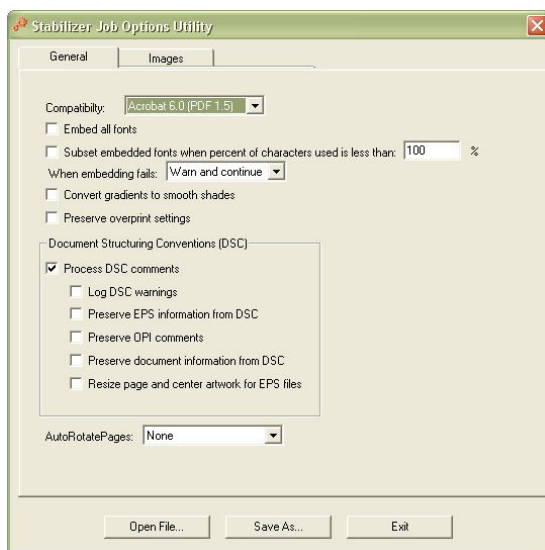
### 5.8.2 Stabilizer Document Parameters

Import Stabilizer Document Parameter files the same way as Action Lists and Profiles.

The PDF utility “JobOptions.exe”, found in the Navigator Server Utilities folder can be used to create Stabilizer settings files as shown below.

---

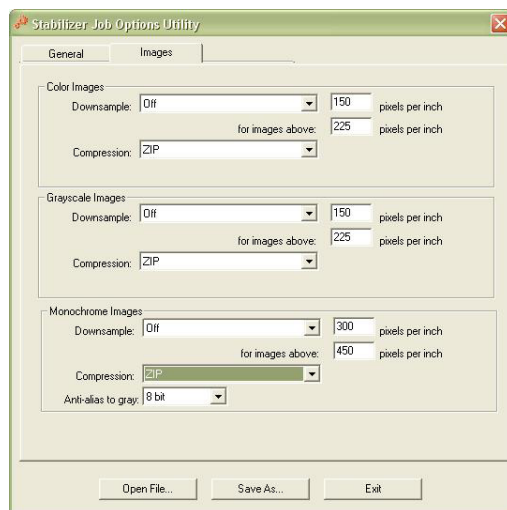
#### CREATING NEW STABILIZER SETTINGS



Select settings suitable for the purpose. The example settings shown above might be used for commercial printing:

---

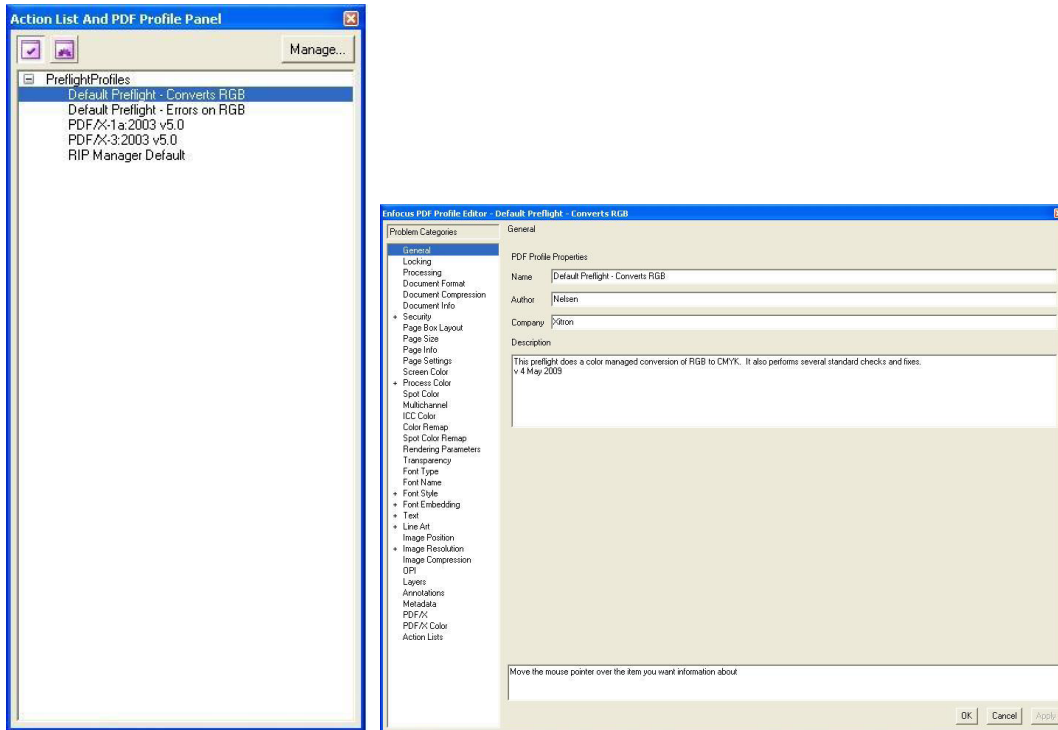
#### CREATING NEW STABILIZER SETTINGS



## 5.9 Creating Preflight Profiles

Navigator has a utility built-in for creating Preflight Profiles. They may also be created in Pitstop Professional from Enfocus. In the server, when you open the editor you may need to browse to the list of our built-in profiles the first time you use the editor. The files are located at <Server install path> /config/PreflightProfiles.

Select the preflight profile you would like to use as the basis for your new profile and click the “manage” button. Under manage choose “New From. . .” and then the preflight profile editor will open with the settings from your selected profile. You may then change it however you wish and save it with a new name.



## 5.10 Color and Name Tool – File name recognition and color recognition

The color and name tool allows the configuration of file name analysis. File name analysis allows Navigator Workflows to group files together in the same job even when they come in separately. This is currently used for TIFF grouping for ROOM proofing, Ink key setting, and TIFF output. This is covered in a separate document on the installation disk and our web site, called “Navigator file name analysis”.

## 5.11 Install Script

Some workflows can be set to process incoming files with a script instead of with workflow actions. This script can be any scripting language installed on the server. This includes Windows batch files as well as Perl, or any scripting language you may prefer. There is a separate document called “Hotfolder Scripting” on the installer disk that covers this in greater detail.

## Chapter 6 – Configuring Network Printers

Navigator Server allows users to print directly to each workflow instead of using hot folders. To do so, follow these steps: Go to the “Add Printer” Wizard and follow the steps as shown in the illustrations below:

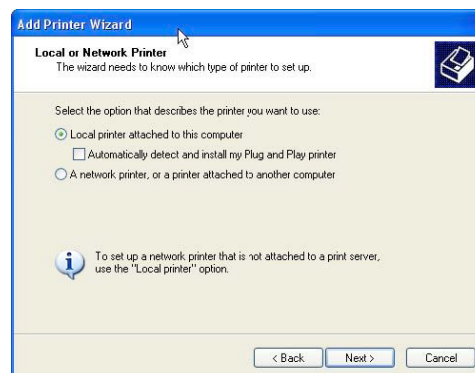
---

### STEP 1: ADD PRINTER WIZARD



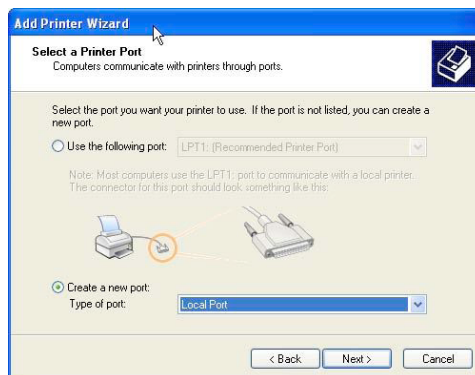
---

### STEP 2: LOCAL PRINTER



---

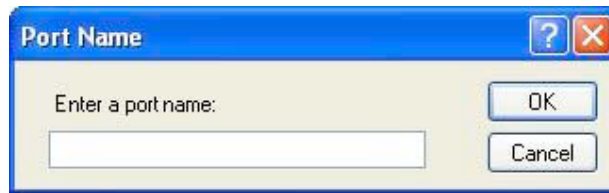
### STEP 3: CREATE A NEW PORT



At step 4 shown below, when prompted to enter a port name, follow this template: <Workflows path>\<workflow name>\print.ps. For example, if you wish to connect to the “DPM 2350 175lpi” workflow, your port name might be C:\Navigator\Workflows\DPM 2350 175lpi\print.ps.

---

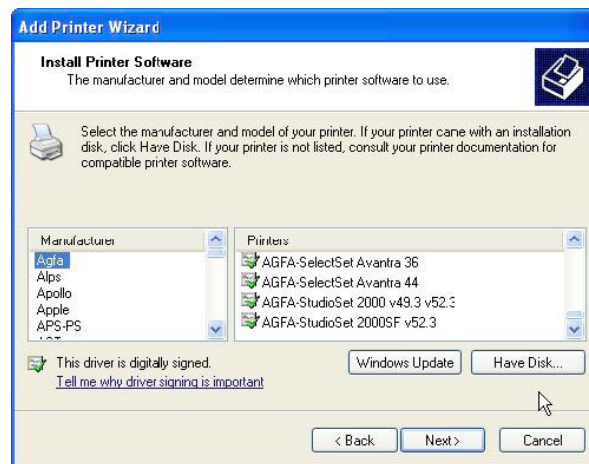
#### STEP 4: NAMING THE PORT



At step 5, click “Have Disk” and navigate to the Xitron RIP PPD, available on the install disk and at <http://www.xitron.com/ppds.htm>.

---

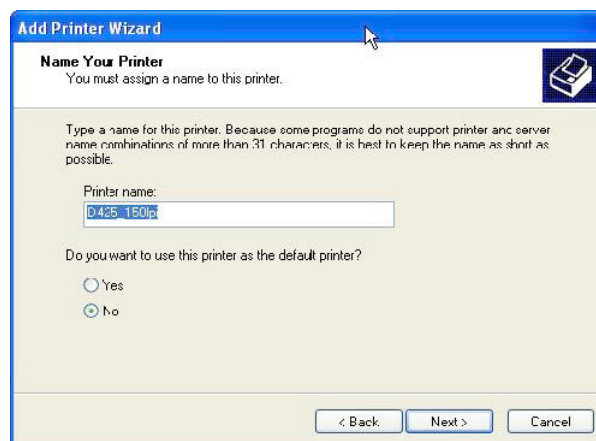
#### STEP 5: DESIGNATING THE PPD



Name your printer to indicate the workflow to which it will connect. In Step 6, we are connecting to the “Dimension425 150lpi” workflow and have truncated the name so that OSX users can see the shared printer.

---

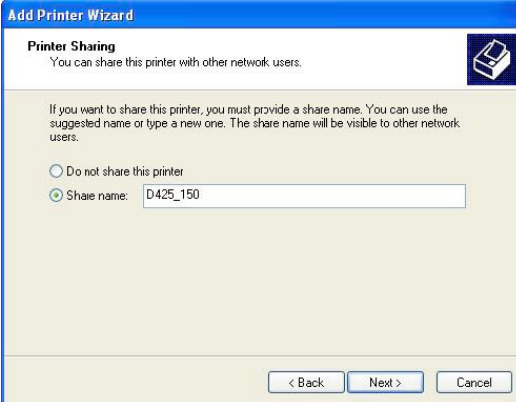
#### PRINTER NAMING



Be sure to share the printer so that everyone on the network can connect to, and use it.

---

## PRINTER SHARING



The image shows a Windows XP-style dialog box titled "Add Printer Wizard". The main heading is "Printer Sharing" with a subtext "You can share this printer with other network users." and a printer icon. Below this, a paragraph explains that a share name must be provided. There are two radio buttons: "Do not share this printer" (unselected) and "Share name:" (selected). The "Share name:" option has a text input field containing "D425\_150". At the bottom, there are three buttons: "< Back", "Next >", and "Cancel".

**Add Printer Wizard**

**Printer Sharing**  
You can share this printer with other network users.

If you want to share this printer, you must provide a share name. You can use the suggested name or type a new one. The share name will be visible to other network users.

☐ Do not share this printer

☒ Share name:

< Back   Next >   Cancel



## Chapter 7 – Client Installation

### 7.1 Introduction

Navigator installs from a dual-mode disk which will function on both PC and Macintosh computers. On PCs, the disk is capable of installing Navigator Server and Navigator Clients. On Macintosh computers, it will install only the Navigator Client. As mentioned earlier, Navigator Server will not run under the Mac OS.

### 7.2 Installing an Upgrade

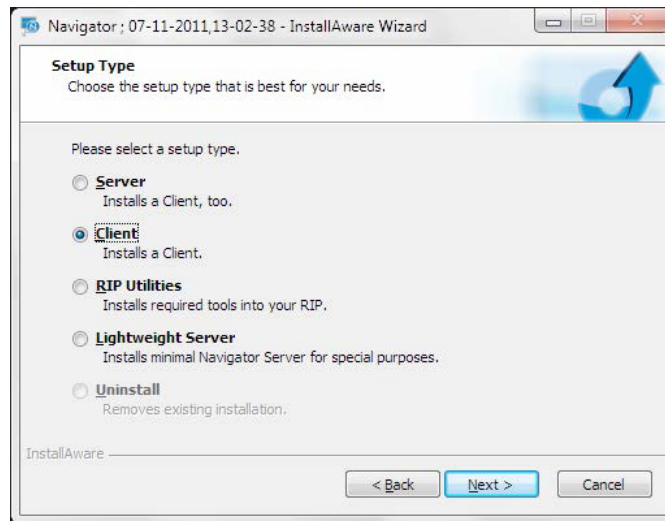
Installing Navigator Server to an existing Navigator Server or RIP Manager installation folder is not recommended. See Appendix B.

Note: If you upgrade one part of the system you must upgrade all parts for correct operation. If you upgrade your Server you must also upgrade all Clients before running the system.

### 7.3 Installing the PC Client

Begin by inserting the Navigator disk into your PC's DVD drive. The install window below will appear:

PC INSTALLER WINDOW



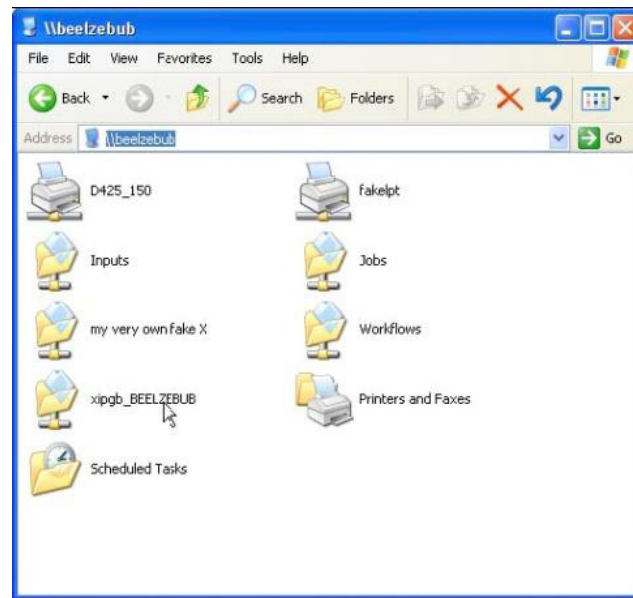
To install the Navigator Client on this PC, click the Client button, and then click **Next**. The installer will prompt you for an install location. During the install process, it will place a shortcut icon on the desktop that you may use to launch the Client, or you may launch it from the Start menu.

After installation of the client application on any computer you may need to mount the **Jobs** and **Workflows** volumes. The installer automatically created these volumes and set them up for sharing. Navigator will automatically mount these, as needed. If you wish to turn off auto-mounting of shares, do so from the Navigator preferences menu in the Client software.

To manually attach the shares from a Windows PC, open any window and type \\<machine name>. After you enter any required password, the window will display shares. Right-click on the **Jobs** volume and choose **Map Network Drive**. Repeat the process for **Workflows**. An example appears on page 35.

---

## MANUALLY ATTACHING SHARES



### 7.4 Installing the Mac Client

To install the Client on OS X, open the disk image file in the Mac client folder on the DVD. At that point you may drag the application to the “applications folder.” A link to the “applications” folder is provided by our installer disk image. (See below) You may want to put a copy of the Navigator Client application in your Dock.

---

## MAC CLIENT INSTALLER

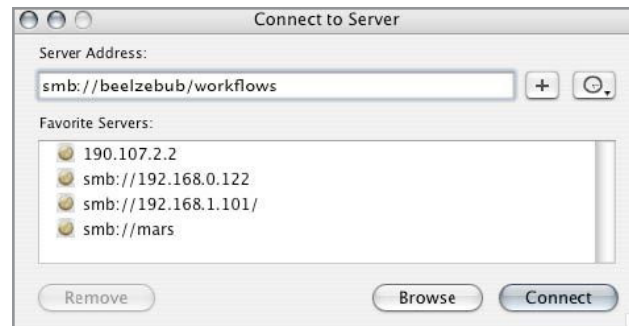


*Note: Remember that OSX Macs are able to mount folders shared by Windows. Navigator will automatically mount these as needed. If you wish to turn off auto-mounting of shares, do so from the preferences menu in the Client software.*

To manually attach the shares from a Macintosh: Through Finder, navigate to the “Go” menu and choose **Connect to Server**. Type `smb://<machine name>/Jobs`. Repeat the process for “Workflows.” The following example illustrates the dialog box.

---

## MOUNTING SHARES ON OSX



## Chapter 8 – Client Tutorial

### 8.1 Introduction

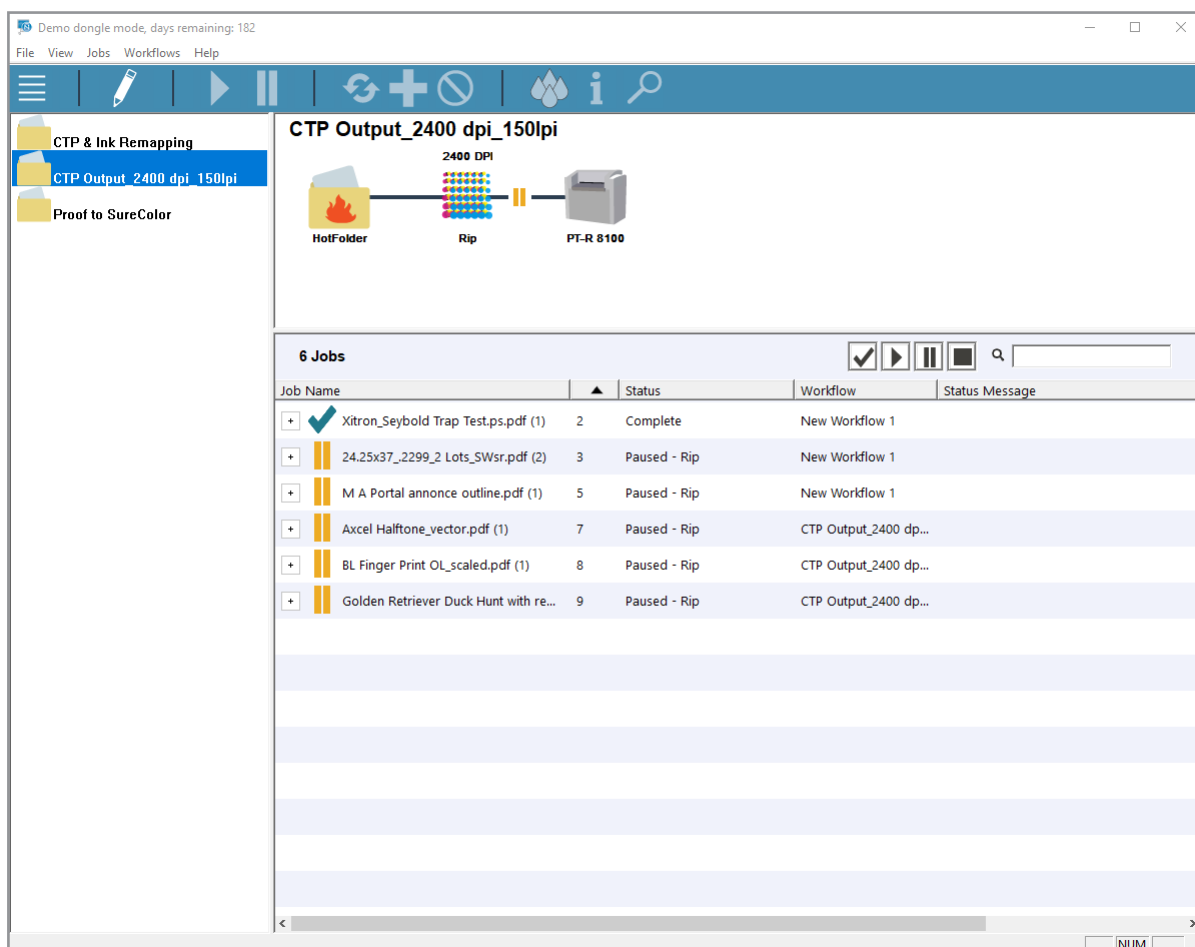
Once the Navigator Server has been set up, the Client can handle all Navigator operations. This Chapter describes how to use the Client for the most common of these operations. It is based on the PC Client, but the Mac version has the same appearance and features. Any significant differences in controls are mentioned in the following text.

This Chapter is written as a Tutorial. It will guide the User through construction of a simple but useful “Proof, Hold and Output” workflow arrangement, while covering most of the features of the Navigator Client. A detailed list of the controls and their functions is available in Chapter 5 – Navigator Client Detail.

One of the key features of Navigator is the ability of Client users to build workflows using any pre-defined Page Setup on their RIP. This provides a useful separation from basic “house” setup (resolutions, screen rulings etc.) and the handling of particular jobs. In this chapter we make use of two RIP page setups, one for proofing and one for separated, high-resolution platesetter output. To follow this tutorial you will need to select two page setups that are available on your RIP, or create dummy setups for the exercise.

What follows is a typical view of the Navigator Client Graphical User Interface (GUI):

CLIENT GUI



The GUI has a number of regions, noted here starting from the top:

- Menu Bar – Control menus
- Tool Bar – Displays icons of frequently used controls
- (Left window panel) Workflow or Workflow Component “picking” area.
- (Top right window panel) Current Workflow Diagram
- (Lower right window panel) Job List
- Status Bar

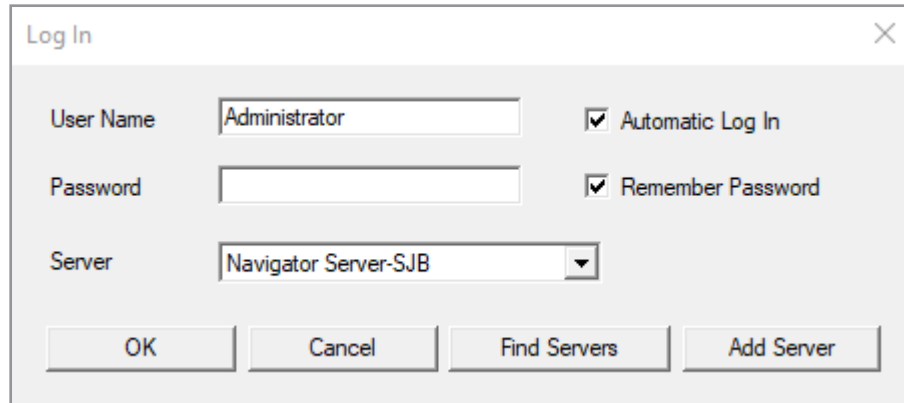
Functionality of these areas will vary according to context, but the general layout remains the same.

There are several steps to creating and using Workflows within Navigator, which will be reviewed in sequence. Not all users have to know all the details of workflow creation. For example, Users can manage workflows created by others without having to learn how to create or modify workflows themselves. Also, the Administrator may limit the permission of users to make changes. If one or more of the controls discussed in this chapter appear “grayed out,” or not useable in the Navigator Client, it may be necessary to verify the User permission settings with the Administrator.

## 8.2 Logging In

After launching the Client application, the following window appears:

LOG-IN WINDOW



### 8.2.1 Locate the Server

The Client will search the Network for Navigator servers, displaying all that it finds in the Server list box. If you cannot see your server, verify that it is running before clicking the Find Servers button. The system will also accept entry of the specific Server name or the IP Address of the Server platform using the Add Server dialog.

### 8.2.2 User Name


Enter your User Name and password, if any. In Navigator, user names and passwords are case sensitive. The computer will remember your password after activating the **Remember Password** box. Similarly, the Client will automatically log in to the server during the next launch after activating the **Automatic Log In** box. Note: Activating either of these check boxes will allow others to use the Navigator Client in the future without supplying a username or password.

Click **OK** and the Client will attempt to Log In to the Server.

### 8.3 Creating Workflows

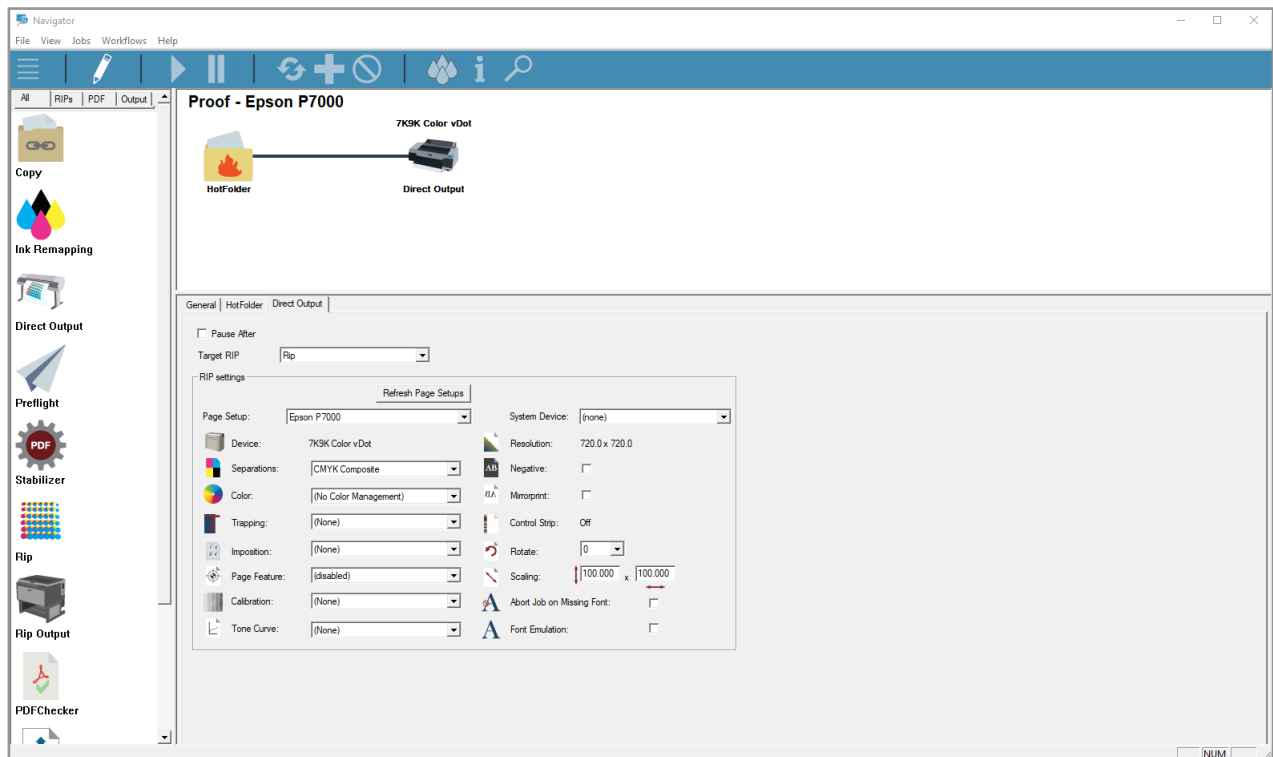
During the first login, if there are no jobs or Workflows in the System, an empty dialog will appear. Therefore, the first necessary step is the creation of a workflow by going to the **Workflows > New Workflow** menu selection. The view will change to the Workflow Edit view, and the New Workflow dialog appears.



You can also change to the Workflow Edit view at any time by using the  icon in the Tool Bar.

Enter a Workflow name in the New Workflow Name dialog and click OK. In this example, the first workflow name is “Proof – Epson P7000”.

#### NEW WORKFLOW: PROOF – EPSON P7000



In the Workflow panel on the left side of the GUI are tabbed areas displaying all the Workflow Actions previously created at the Server. A new Workflow starts with just an input Hot Folder in the Workflow Diagram area. Select the RIP tab and use the mouse to click and drag the RIP Action icon onto the Workflow Diagram. Release the mouse button and the system will add the RIP Action icon to the Workflow Diagram. Next, select the Output tab and drag the RIP Output icon onto the Workflow Diagram. These will combine into the basic Workflow shown above.

### 8.3.1 General Workflow Configuration

Each workflow is configurable through the tabbed menus in the lower portion of the GUI. Under the General tab are the following controls:

**Workflow Name** – changes the name of the selected workflow.

**Priority** – applied to jobs processed through this Workflow. If there are other Workflows competing for the same resource, as is usually the case, then *Normal* priority jobs are processed in the order in which they arrive. *High priority* jobs are processed ahead of any *Normal* priority jobs and *Low* priority jobs are only processed when there are no other jobs waiting on the System.

**Get Ahead** – controls how many jobs the system will schedule at one time for a processing Action. The default value is 5 jobs. This should be changed when load balancing.

**Send To Workflow** – allows completed jobs to be sent to another workflow. This is a common way of linking workflows. Note that Send To Workflow sends the original job file. To copy an intermediate file such as a PDF file created by the Stabilizer to another workflow, use the *Copy Action*.

**Archive** – places jobs in the Archive folder when deleted from the Workflow.

**Delete** – instructs the system when to delete jobs. Selecting *When Necessary* instructs the system to delete the oldest jobs in the system when it reaches a default limit of 250 jobs.

Accept the default settings in the General tab for the moment, and select the *Hot Folder* tab by clicking on the tab itself or by clicking on the Hot Folder Icon in the Workflow Diagram.

---

#### HOT FOLDER CONFIGURATION

The screenshot shows the 'HotFolder' tab of a configuration window. At the top, there are tabs for 'General', 'HotFolder', 'Rip', and 'PT-R 8100'. The 'HotFolder' tab is active. The window contains several sections of controls:

- Pause After:** A checkbox that is currently unchecked.
- Input Folder:** A text field containing the path '\\DESKTOP-TDCRU88\Workflows\CTP Output\_240'. To its right is a 'Browse...' button.
- Generate Thumbnails:** A checkbox that is currently unchecked.
- Use Color and Name Recognition:** A checkbox that is currently unchecked. Below it is a dropdown menu labeled 'GroupByFileType'.
- Process Files using Script:** A checkbox that is currently unchecked. Below it is a dropdown menu labeled 'ExtractMetaData.bat'.
- Job Name:** A section containing a 'Sample Job Name' text field with the value 'My Sample Job'. Below this are three columns of radio button options:
  - Job Name Prefix:** Options are 'Job Title', 'File Name', 'Date and Time', 'Job Number', and 'None' (which is selected).
  - Job Name Body:** Options are 'Job Title', 'File Name', 'Date and Time', 'Job Number', and 'None' (which is selected).
  - Job Name Suffix:** Options are 'Job Title', 'File Name', 'Date and Time', 'Job Number', and 'None' (which is selected).

### 8.3.2 Hot Folder Configuration

The following controls are available for configuration of Hot Folders:

**Input Folder** – This selection is preset to the default job location defined in the Navigator Server setup. To change the Hot Folder location, use the Browse button. Remember that you are browsing from the location where the Navigator Server is installed, not your own workstation.

**Use Color and Name Recognition** – groups multiple TIFF files together as one job. Use with an appropriate configuration file from the Server's Color and Name Tool.

**Process Files using Script** – processes input files with a script. Use in workflows consisting of a hotfolder only. Install scripts with the Server command "Install Script." See separate scripting manual for more detail.

**Job Name** – Several controls allow you to define how the system will name jobs during processing.

The **System Job Name** (the name displayed in the Navigator Client) may contain up to three parts. Each part is set by the three columns of radio-buttons. To construct the Job Name, click on one button from each column. The functions of the buttons are:

**Job Title** – Original document name extracted from the postscript or PDF.

**File Name** – name of the file that contains the job

**Date and Time** – current date and time when the job was accepted into the system

**Job Number** – sequential job number

**Edit Box** – any arbitrary text

**None** – no entry for this part of the name.

Make the selections shown in the illustration on the previous page (or use your own name if you choose). In the example, jobs will be named "Elmo– Title from Job file – Date & Time."

**Pause After** – Activating this check box causes all jobs to enter a hold state after processing. The jobs are then manually released or sent to another workflow. Note that selecting this option causes a yellow pause symbol to appear on the Workflow diagram to indicate the Hold function is active.

Next, configure the **RIP Action**. Go to the RIP Action by clicking on the tab or on the RIP Action icon in the Workflow Diagram.

#### RIP ACTION CONFIGURATION

The screenshot shows the 'RIP ACTION CONFIGURATION' dialog box with the 'General' tab selected. The 'Pause After' checkbox is unchecked. The 'Target RIP' dropdown is set to 'Rip'. The 'RIP settings' section is expanded, showing a 'Refresh Page Setups' button and various configuration options. The 'Page Setup' dropdown is set to 'Epson P7000'. The 'System Device' dropdown is set to '(none)'. The 'Device' is '7K9K Color vDot'. The 'Resolution' is '720.0 x 720.0'. The 'Separations' dropdown is set to 'CMYK Composite'. The 'Color' dropdown is set to '(No Color Management)'. The 'Trapping' dropdown is set to '(None)'. The 'Imposition' dropdown is set to '(None)'. The 'Page Feature' dropdown is set to '(disabled)'. The 'Calibration' dropdown is set to '(None)'. The 'Tone Curve' dropdown is set to '(None)'. The 'System Device' dropdown is set to '(none)'. The 'Resolution' is '720.0 x 720.0'. The 'Negative' checkbox is unchecked. The 'Mirrorprint' checkbox is unchecked. The 'Control Strip' is set to 'Off'. The 'Rotate' dropdown is set to '0'. The 'Scaling' is set to '100.000 x 100.000'. The 'Abort Job on Missing Font' checkbox is unchecked. The 'Font Emulation' checkbox is unchecked.



### 8.3.3 Configuring the RIP Action

There are several controls in the RIP Action configuration dialog:

**Page Setup** – This list box shows all the Page Setups available on the selected RIP. Choose the Page Setup for this Workflow to use. In this example, since this is a Proofing workflow, “Epson 4800” was chosen.

**Pause After** – Causes all jobs to enter a Held state after RIPping, but before output. The jobs are then released manually. Activate this function for the purpose of this example.

**Refresh Page Setups** – Selecting this function forces Navigator to request a new list of Page Setups from the RIP. This is helpful after creating a new Page Setup that did not appear in an earlier list.

**Page setup configuration** – Below the top three controls is a listing of the configuration of your chosen RIP Page Setup. You can override several of these settings from the client either globally or on a job-by-job basis.

**Font Emulation** – If this control is checked, substitute fonts will be used where possible, to replace any missing fonts in the job. This is often preferable to a job being rejected, for instance in the rapid turnaround workflows typical of digital printing. If a font is missing, the RIP will attempt to find the correct font in the job, or installed in the RIP; it will then look for a substitute font already defined in the RIP. Only if none of those are possible will it attempt to emulate missing fonts. This strategy is taken to achieve the closest match possible for any missing fonts.

**Abort Job on Missing Font** – If this control is checked, any job that would otherwise be rendered with one or more missing fonts will be aborted. If Font Emulation is enabled, the RIP will instead emulate missing fonts if possible. If this control is not checked, any missing fonts that cannot be substituted (or emulated, if this option is on) will be replaced with Courier.

This completes the basic Workflow setup. RIP Output has no configurable controls except in a few special cases. These cases are covered in related plug-in manuals.

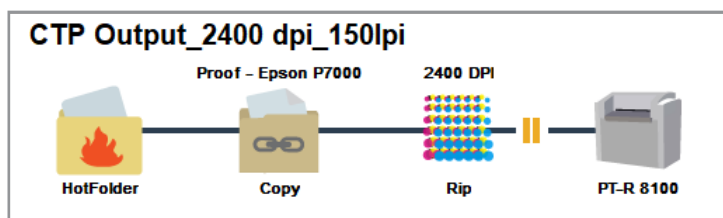
## Chapter 9: Workflow Configuration Examples

### 9.1 Primary Workflows

Your main workflows will contain everything you need to follow your job through the system. They may use secondary workflows to accomplish desired actions, such as proofing, but all of the stages can be tracked from the main, or primary, workflow. Following are examples of two primary workflows.

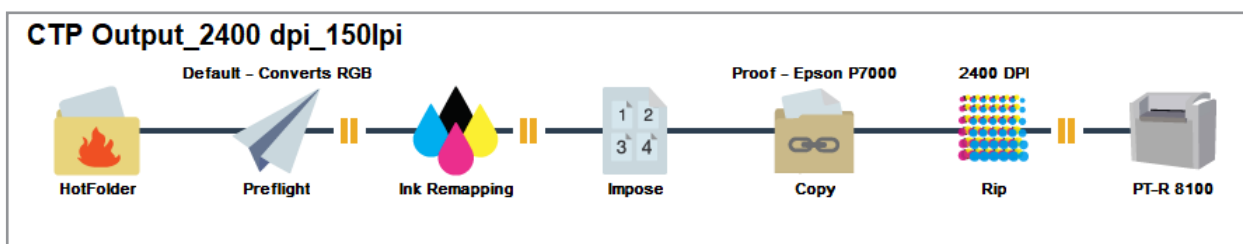
The workflow labeled "CTP Output" contains an input method, followed by a connection to a proofing system, a pause, a connection to the RIP Page Setup for a CTP device, a pause, and finally, output to the platesetter. The Page Setup chosen, created in the RIP, will be listed above the HQN RIP Action icon. All of these steps are controlled within this particular workflow except for the proofing. The proofing is controlled in a secondary workflow or sub-workflow. We will discuss sub-workflows later in this chapter. (This is for example. Proofing may also be accomplished in the same workflow using the Direct Output Action)

EXAMPLE CTP WORKFLOW



"Full CTP Workflow" contains additional actions. The two additional actions constitute a PDF workflow and provide for PDF conversion, problem reporting, and automated problem resolution.

EXAMPLE CTP WORKFLOW



Each pause in the workflow indicates a point where the job will go on hold, indicated with a yellow pause icon in the job list, awaiting user intervention. These pauses are optional after any workflow action.

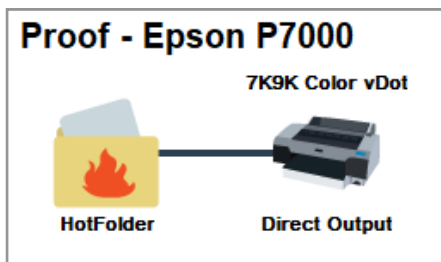
Each of the primary workflows shown requests a proof from the secondary workflow "Proof - Epson P7000" and the file is processed according to that workflow's configuration. In these examples, this request is accomplished with a Copy Action named "Proof." After this, the job goes on hold at the Proof stage and waits for the job approval to come back. When this occurs, the user will manually release the job to the next stage. This is the RIP and Trap stage. After RIP and Trap there could be a final pause, allowing any client user to preview the screened data before releasing it to the imagesetter/platesetter.

## 9.2 Secondary Workflows

The secondary workflow takes over when the primary workflow's main intent is to control the main output device. One of the identifying characteristics of a secondary workflow is the **Delete Always** setting. This indicates that the Primary workflow will track and keep the job. The secondary workflow simply carries out its commands but does not keep any copies of the job. A **Hold After** this stage in the Primary workflow is necessary for job tracking purposes. If you have a hold, then while the proof workflow has the job, the job will show its status in the primary workflow as **Hold – Proof**. In the case of **Proof – Epson**, the proof is a Harlequin RIP plug-in driving an Epson proofer. This workflow simply delivers the job to the correct page setup in the RIP.

---

### SECONDARY WORKFLOW EXAMPLE



The screenshot shows the configuration window for the 'Proof - Epson P7000' secondary workflow. The window has three tabs: 'General', 'HotFolder', and 'Direct Output', with 'General' currently selected. The 'General' tab contains the following settings:

- Workflow Name:** Proof - Epson P7000
- Priority:** Normal (dropdown menu)
- Get Ahead:** 5 (text input)
- Number of Copies:** 1 (text input)
- ☐ Disable Workflow on Job Error

On the right side of the window, there are two sections:

- When Job Ends:**
  - When Job Completes:**
    - ☐ Send to Workflow
    - CTP & Ink Remapping (dropdown menu)
  - Delete:**
    - ☐ Never
    - ☒ When Necessary
    - ☐ When Complete
    - ☐ Always
  - ☐ Archive

## 9.3 Alternative Proofing

Many users will want to proof with the same RIP they use to make their film or plates. A proofer plug-in, such as Xitron's vDot 5, directly supports many inkjet proofers. Users with different proofing needs will find automated support for them in Navigator.

### 9.3.1 Proofing to another RIP

To send jobs to a third-party RIP from within a workflow, set up an **Export** Action at the Navigator Server. This will send to a networked spool folder for the other RIP. Name the **Export** Action after that RIP or after the device the RIP drives. Set up a workflow that looks like the following example:

---

#### THIRD-PARTY RIP EXPORT



### 9.3.2 Ripped TIFF proofs

There are two ways to configure the system for using the same RIP for proofing and final output. You can purchase a proofing plug-in for that RIP (See the workflow **Proof – Epson**) or you can RIP the file as a composite or 1-bit TIFF and deliver it to a proofing RIP that accepts these files via spool folder. For a TIFF proof, you must create a TIFF device page setup in the RIP that outputs to the spool folder of the proofing RIP. The workflow will look just like the Epson proof workflow. The only difference is the output device chosen in the Page Setup.

### 9.3.3 Raster PDF files for email or Web proofing

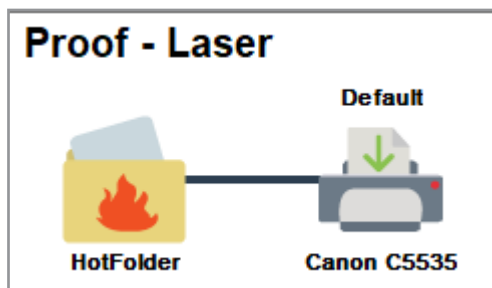
Use the Raster PDF soft proofing plug-in as the output device in your Page Setup. This will provide a Ripped and, if desired, screened PDF file suitable for soft proofing.

### 9.3.4 Sending to networked PostScript printers

The PrintJob Action, by default, simply sends a TIFF version of the job to whichever Windows printer you select. As long as the job size is appropriate for the paper and you are using PostScript files this can be useful. Set up a PrintJob Action in the Server, and then set up a workflow that looks like the one labeled **Proof – Laser** below.

---

#### SENDING TO NETWORKED PRINTERS



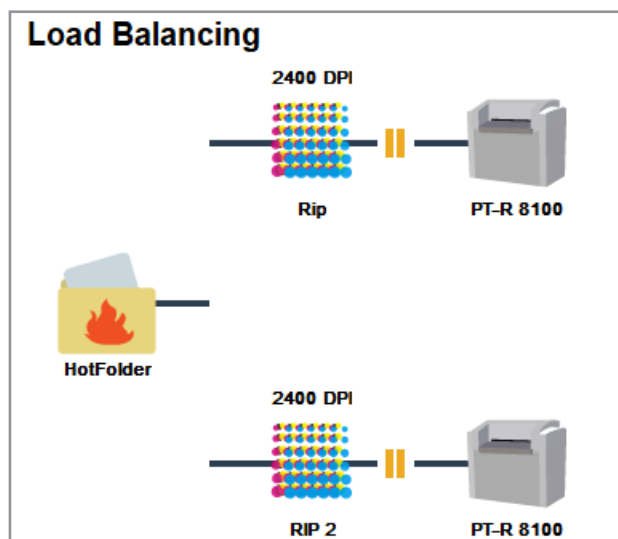
## 9.4 Multiple RIP Workflows

To bring additional RIPs into Navigator Server's control, add them in the Navigator Server under **Manage Workflow Actions**. Each RIP to be controlled by the workflow must be configured with the **RIP Utilities** install. Insert your installation DVD into the RIP computer and choose **Navigator Server**. At the next screen, choose the **RIP Utilities** install. This install will make the RIP available to Navigator Server.

Go to **Manage Workflow Actions** and add another HQN RIP action. See section 3.4.1 for help configuring the RIP Action. In the client you will now have one RIP for every HQN RIP action configured in your server. Make a new workflow and call it "Load Balancing." Drag over two RIPs and two RIP Outputs. The workflow will look like the example shown below.

---

### MULTIPLE RIP WORKFLOW EXAMPLE



Set the "Get Ahead" number to zero for a load balancing workflow or leave it at the default setting for a standard workflow.

---

### SETTING THE GET AHEAD NUMBERS

General | HotFolder | Rip | RIP 2 | PT-R 8100 | PT-R 8100

Workflow Name: Load Balancing

Priority: Normal

Get Ahead: 0

Number of Copies: 1

☐ Disable Workflow on Job Error

When Job Ends

When Job Completes

☐ Send to Workflow

CTP & Ink Remapping

Delete

☐ Never

☒ When Necessary


☐ When Complete

☐ Always

☐ Archive

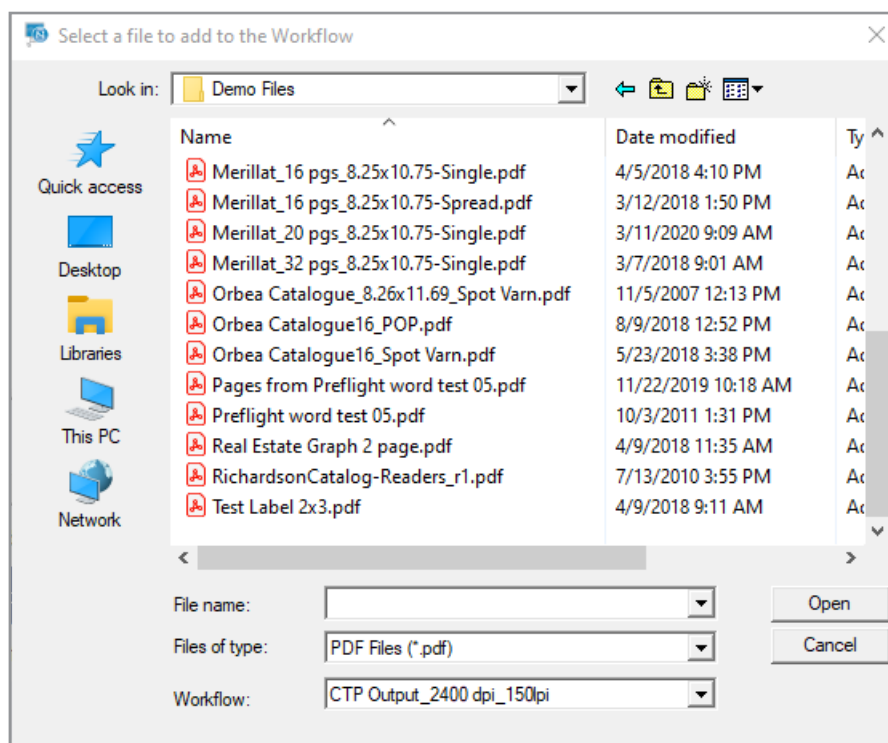
Jobs sent to the load balancing workflow will alternate between idle RIPs. When the RIPs are not idle, Navigator Server will send the next job to the first RIP available.

## Chapter 10: Using the Client

At this point you should have created some workflows and submitted some jobs. Click on the  Job View icon to display a list of jobs in the System.

We can simulate receiving a job in the system using the **File > New Job** menu selection. When you choose New Job the following dialog appears:

### NEW JOB SELECTOR



To send a job to a particular workflow, select it in the Workflow list box, choose a suitable file and click **Open**. (You can also drag-and-drop a file onto the appropriate workflow icon on the left of the **Job Views** dialog.)

The job will then appear in the Workflow. The colored symbol to the left of the job will change from Green (Busy/Processing) to yellow (Held). If the symbol turns Red (error), there is a problem processing the file. Error messages accompanying the error state will help determine the cause.

## 10.1. Sending jobs to Navigator Server

There are many ways to send jobs through Navigator Server for processing. The most convenient will depend on the type of work you do, the platforms you use, and your own preferences.

### 10.1.1 Drag and Drop

If you have, or create from your application and print driver, a PostScript or PDF file of your job, the easiest way to submit it to a Workflow is to drag it onto the client window. You can either drop the job on one of the workflows on the left side of the screen, or onto the large workflow image at the top of the screen. Both have the same effect. The system will place the job in the designated Hot Folder and the workflow will process it as if it had arrived in the Hot Folder from elsewhere.

### 10.1.2 From an OS X Mac

You can use any of the methods discussed here to send jobs from an OS X based Mac. You may print to a shared Windows printer, as discussed below, and you can also save a PDF file directly from the Application into a workflow Hot Folder. You can save the file directly into the workflow hot folder on the Server or place it on your desktop and drag it onto the Navigator client.

### 10.1.3 From a Windows Application

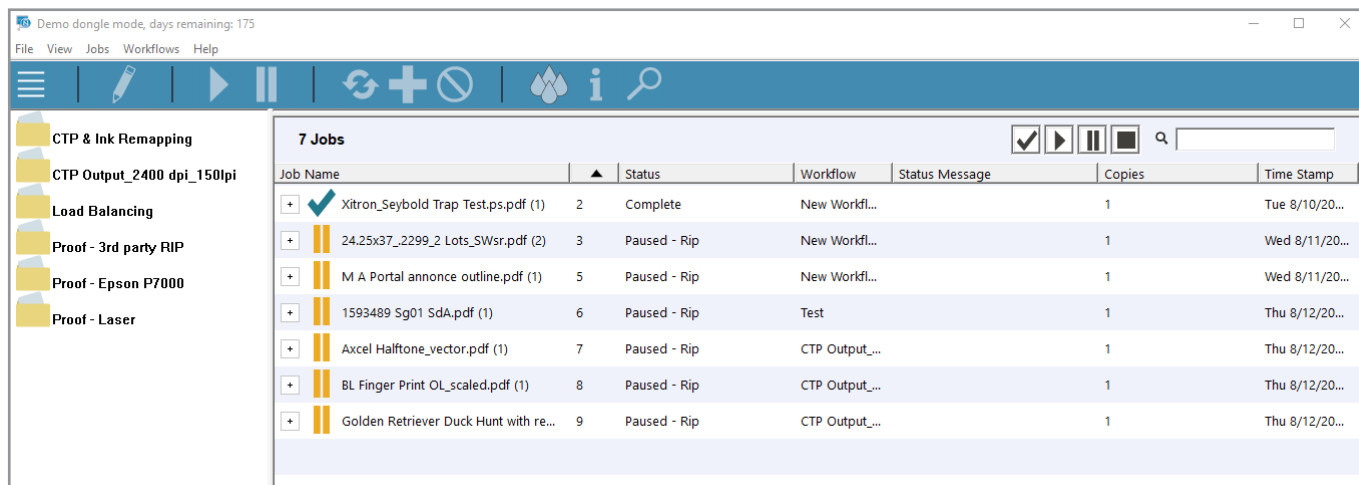
You can print directly from a PC application by simply selecting “Export” from the file menu of the application. After selecting **Export**, select **Create Adobe PDF** and specify the path to the hot folder of the desired workflow.

### 10.1.4 Using the New Job Menu Command

Within the client, selecting **New Job** from the **File** menu allows you to choose a Workflow and then browse for any file that is accessible from your computer. Selecting this file and clicking **Open** will copy this file into the workflow hot folder.

Now you should be able to get jobs into the system. After submitting and processing 16 jobs, the Jobs View looks similar to the following example.

#### JOBS VIEW



Job Name	Status	Workflow	Status Message	Copies	Time Stamp
Xitron_Seybold Trap Test.ps.pdf (1)	Complete	New Workfl...		1	Tue 8/10/20...
24.25x37_2299_2_Lots_SWsr.pdf (2)	Paused - Rip	New Workfl...		1	Wed 8/11/20...
M A Portal announce outline.pdf (1)	Paused - Rip	New Workfl...		1	Wed 8/11/20...
1593489 Sg01 SdA.pdf (1)	Paused - Rip	Test		1	Thu 8/12/20...
Axcel Halftone_vector.pdf (1)	Paused - Rip	CTP Output_...		1	Thu 8/12/20...
BL Finger Print OL_scaled.pdf (1)	Paused - Rip	CTP Output_...		1	Thu 8/12/20...
Golden Retriever Duck Hunt with re...	Paused - Rip	CTP Output_...		1	Thu 8/12/20...

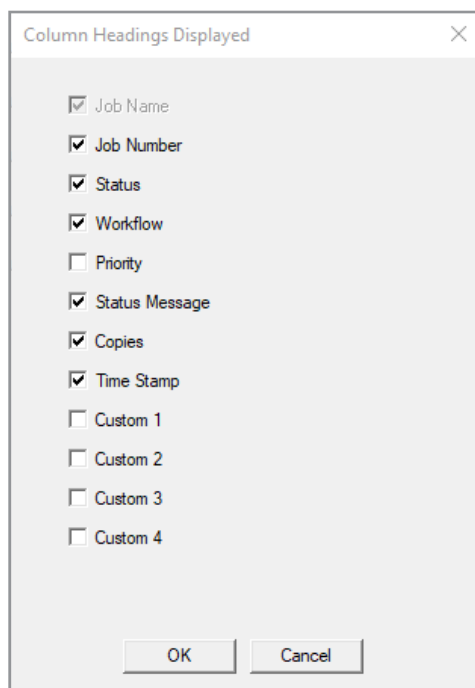
## 10.2 Custom Column Displays

Look carefully at the example labeled, **Jobs View** and compare it with your Client. You will notice that the two columns on the right side, Custom 1 and Custom 2, do not appear on your copy of the Client. These columns are part of the optional job information fields system, and will not appear until properly configured.

These are system-wide field naming and Client display options and there are two steps to configuring them. See the Server configuration chapter above for system-wide naming of the custom fields at the Navigator Server. If you have not configured your custom fields, this is a good time to go back to the Server and make these changes. Once you have configured the custom fields, return to the Client and choose the **Jobs > Column Headings** menu selection, which appears on the following page.

---

### CLIENT COLUMN DISPLAYS



Column Headings Displayed

- ☒ Job Name
- ☒ Job Number
- ☒ Status
- ☒ Workflow
- ☐ Priority
- ☒ Status Message
- ☒ Copies
- ☒ Time Stamp
- ☐ Custom 1
- ☐ Custom 2
- ☐ Custom 3
- ☐ Custom 4

OK Cancel

The top 6 choices are standard on all systems, and of these, the system will always display Job Name. The bottom four choices are the Custom Fields and the names seen here are the names you have defined in the Navigator Server. Simply check the box for each column that you wish the system to display. Columns are arranged in order from left to right as the list reads top to bottom. For all columns displayed you can order the jobs by clicking on the column header. Clicking once will sort the jobs in ascending order and clicking again will re-sort in descending order.

If you change the Custom Column Displays to match the example labeled **Client Column Displays**, you will see the same arrangement in your client as previously shown in the example **Jobs View**.



10.2.1 Setting Column Widths

The widths of the displayed columns are variable. Adjust them at any time by clicking and holding on the boundary between any two column headings and moving left or right. Click over the boundary between the Job Name and Job Number column headings and extend the width of the Job Name column to display the full name as shown below.

COLUMN WIDTHS

7 Jobs

☒☐☐☐☐

Job Name

▲








Status

Workflow

Status Message

Copies

Time Stamp

+ 	Xitron_Seybold Trap Test.ps.pdf (1)	2	Complete	New Workfl...	1	Tue 8/10/20...
+ 	24.25x37_2299_2 Lots_SWsr.pdf (2)	3	Paused - Rip	New Workfl...	1	Wed 8/11/20...
+ 	M A Portal annonce outline.pdf (1)	5	Paused - Rip	New Workfl...	1	Wed 8/11/20...
+ 	1593489 Sg01 SdA.pdf (1)	6	Paused - Rip	Test	1	Thu 8/12/20...
+ 	Axcel Halftone_vector.pdf (1)	7	Paused - Rip	CTP Output_...	1	Thu 8/12/20...
+ 	BL Finger Print OL_scaled.pdf (1)	8	Paused - Rip	CTP Output_...	1	Thu 8/12/20...
+ 	Golden Retriever Duck Hunt with re...	9	Paused - Rip	CTP Output_...	1	Thu 8/12/20...

Notice that the system follows the rules for Job Naming defined during configuration of the Hot Folders within the AppleTalk and Receive & Proof workflows.


Note: A change to the Job Naming rules for these Workflows at this point will not change the Names of jobs already in the system. Changes will affect all new jobs coming into the system after the change is made. Additionally, editing workflows will stop the processing of jobs until the changes are complete and the Client returns to the Jobs View (at the time the Workflow is re-started).

Return to the **Jobs > Column Headings** menu selection, uncheck the **Job Number** box and click **OK**. The system no longer displays the Job Number column, leaving more room for the expanded Job Name column.

10.2.2 Entering Custom Data

Now that configuration of Custom Information is complete, the next step is to enter data into these fields. Data can be entered at any time that a job is Held, and this is the reason the Receive & Proof Workflow has a Hold set at the input Hot Folder stage. All three jobs in the list are now On Hold.

Highlight each of the sample jobs in turn. For each job, choose the **Jobs > Get Info** menu selection.

(Access the same function by highlighting the job, right-clicking and choosing **Get Info**, or clicking the Job Info  button.)

JOB INFORMATION

Job Information - Job ID: 2

Job Name

Xitron\_Seybold Trap Test.ps.pdf

Workflow

New Workflow 1

Status

Complete

Priority

Normal

Custom 1

Custom 2

Custom 3

Custom 4

Job Log

Time Stamp	Step	Message
11:33 - Aug 10	HotFolder	Job created
11:33 - Aug 10	Rip	Rip completed successfully
12:29 - Aug 11	HotFolder	Job resubmitted using new workflow
12:29 - Aug 11	HotFolder	Job submitted to workflow: New Workflow 1
12:30 - Aug 11	Rip	Rip completed successfully
15:41 - Aug 11	HotFolder	Job released to next step
15:44 - Aug 11	HotFolder	Job resubmitted using new workflow

Copy Log

Notes:

OK

Cancel

There are four edit boxes in the center of the dialog. These will be labeled with the same names used when defining the Custom Fields in the Navigator Server configuration – and also the same names that appear in the Column Headings dialog. Enter suitable information for Customer, Due Date, and Operator.

### 10.3 Sorting Job Lists

In the Jobs View window, experiment by clicking the various column headings; Job Name, Job Number, Client (custom), Deadline (custom), etc. This will sort the list of jobs in either forward or reverse order based on the contents of the column.

In practice, the system will sort data by whatever information appears in the standard columns or custom columns. The naming convention used in the Hot Folder configuration also affects sorting. If, for example, Date and Time is set as the first part of the Job Name, you will be able to sort jobs by the date and time they arrive within the workflow.

### 10.4 Releasing Held Jobs

There are many reasons to hold jobs at different stages of the workflow; adding job information as illustrated above is just one example. Once all necessary tasks for a held job are complete, the job will have to be released if further processing is to take place.

To release a job to the next step in its workflow, highlight the job, right-click and select **Release to Next Step**. Alternatively, use the **Jobs > Release to Next Step** menu selection or click the **Release to Next Step** button.

### 10.5 Viewing Jobs by Workflow & Status

The Navigator Client has several ways of presenting information about jobs in the system.

From the Jobs View, clicking on one of the Workflow icons to the left will change the window to reflect that Workflow's diagram, plus a list of only those jobs that are in the System under that workflow.

JOBS VIEW

The screenshot shows the 'JOBS VIEW' window. On the left is a sidebar with workflow icons: CTP & Ink Remapping, CTP Output\_2400 dpi\_150lpi (selected), Load Balancing, Proof - 3rd party RIP, Proof - Epson P7000, and Proof - Laser. The main area displays the 'CTP Output\_2400 dpi\_150lpi' workflow diagram, which includes steps: HotFolder, Preflight, Ink Remapping, Impose, Copy, Rip, and PT-R 8100. Below the diagram is a table titled '6 Jobs'.



Job Name	Status	Workflow	Status Message	Copies	Time Stamp
Xitron_Seybold Trap Test.ps.pdf (1)	Complete	New WorldL...		1	Tue 8/10/20...
24.25x37_2299_2 Lots_SWSr.pdf (2)	Paused - Rip	New WorldL...		1	Wed 8/11/20...
M A Portal announce outline.pdf (1)	Paused - Rip	New WorldL...		1	Wed 8/11/20...
Axcel Halftone_vector.pdf (1)	Paused - Rip	CTP Output_...		1	Thu 8/12/20...
BL Finger Print OL_scaled.pdf (1)	Paused - Rip	CTP Output_...		1	Thu 8/12/20...
Golden Retriever Duck Hunt with re...	Paused - Rip	CTP Output_...		1	Thu 8/12/20...

As an example, clicking (once) on the CTP Output workflow icon shown above will change the view to the example shown above.

## SELECTED WORKFLOW VIEW

Job Name	Status	Workflow	Status Message	Copies	Time Stamp
Xitron_Seybold Trap Test.ps.pdf (1)	Complete	New Workfl...		1	Tue 8/10/20...
24.25x37_2299_2 Lots_SWsr.pdf (2)	Paused - Rip	New Workfl...		1	Wed 8/11/20...
M A Portal announce outline.pdf (1)	Paused - Rip	New Workfl...		1	Wed 8/11/20...
Axcel Halftone_vector.pdf (1)	Paused - Rip	CTP Output_...		1	Thu 8/12/20...
BL Finger Print OL_scaled.pdf (1)	Paused - Rip	CTP Output_...		1	Thu 8/12/20...
Golden Retriever Duck Hunt with re...	Paused - Rip	CTP Output_...		1	Thu 8/12/20...

Similarly:

- The Held button  will display all jobs that are paused, in all Workflows.
- The Completed button  will display all jobs completed, in all Workflows.

These tools, combined with the column sorting options, allow quick management of a large number of jobs without the effort of searching through job lists.

# 10.6 Viewing Jobs by Search Field Delimiters

The client can be limited to show only jobs assigned to a particular prepress operator, or customer, or due date, or anything keyed into a custom field. The search field can also search for job title or error state.

The examples below show the jobs list before any search was entered and the same jobs list after a search was entered.

JOBS LIST BEFORE SEARCH

7 Jobs							<input checked="" type="checkbox"/>					<input type="text"/>
Job Name		Status	Workflow	Status Message	Copies	Time Stamp						
Xitron_Seybold Trap Test.ps.pdf (1)	2	Complete	New Workfl...		1	Tue 8/10/20...						
24.25x37_2299_2 Lots_SWsr.pdf (2)	3	Paused - Rip	New Workfl...		1	Wed 8/11/20...						
M A Portal announce outline.pdf (1)	5	Paused - Rip	New Workfl...		1	Wed 8/11/20...						
1593489 Sg01 SdA.pdf (1)	6	Paused - Rip	Test		1	Thu 8/12/20...						
Axcel Halftone_vector.pdf (1)	7	Paused - Rip	CTP Output...		1	Thu 8/12/20...						
BL Finger Print OL_scaled.pdf (1)	8	Paused - Rip	CTP Output...		1	Thu 8/12/20...						
Golden Retriever Duck Hunt with re...	9	Paused - Rip	CTP Output...		1	Thu 8/12/20...						


JOBS LIST AFTER SEARCH

1 Jobs

</

# 10.7 Previewing Jobs

The Navigator includes an integrated Viewer to preview jobs after RIPPING and before output. This section will illustrate the preview of both composite color images intended for proofing and separated, screened images intended for final output.

Return to the All Jobs  view. Locate or create a job that has been run and held. Double-click on the job (or click on the plus symbol) to expand the job “tree.” Repeat this process on each folder revealed until the whole tree has been expanded. If the job was a four-color job and was allowed to process past the first hold in the CTP Output Workflow, it should look similar to the job shown below

EXPANDED JOB TREE WITH COMPOSITE PGB

+	24.25x37_2299_2 Lots_SWsr.pdf (2)	3	Paused - Rip	New Workfl...	1	Wed 8/11/20...
-	M A Portal annonce outline.pdf (1)	5	Paused - Rip	Ne...	1	Wed 8/11/20...
	HotFolder					
	M A Portal annonce outline.pdf					
	Rip					
	1. M A Portal annonce outline.pdf					
+	Axcel Halftone_vector.pdf (1)	7	Paused - Rip	CTP Output_...	1	Thu 8/12/20...
+	BL Finger Print OL_scaled.pdf (1)	8	Paused - Rip	CTP Output_...	1	Thu 8/12/20...

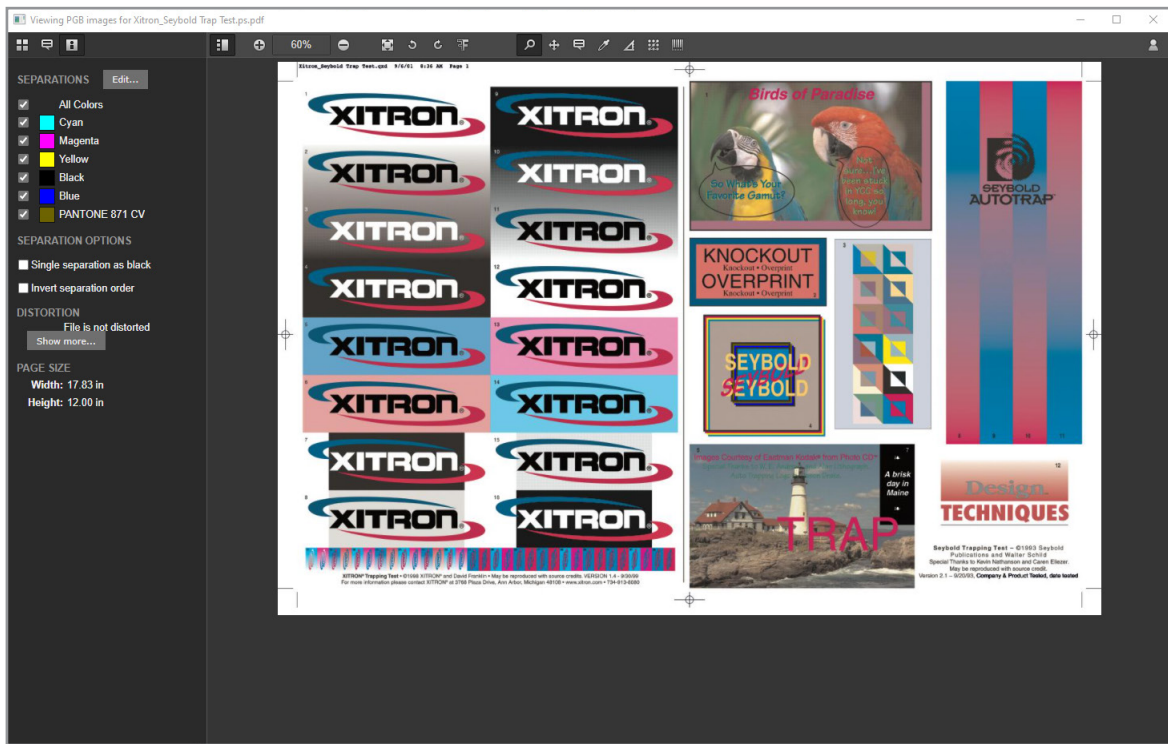
Under the folders you will see two files. The original job file with a “.ps” (PostScrip) or .PDF extension and the RIP Page Buffer file (PGB). The PGB file is identifiable by its location within the RIP folder because only Page Buffer files can appear here. The fact that there is only one PGB file for the job and that it has a multicolored icon as shown above tells us that this is a Composite Page Buffer.

Highlight the PGB file, right-click and select **Open File**; or click on the **Preview**  button; or double-click the PGB file.

The Viewer will launch and a new window will appear (See Appendix A for complete details about the Viewer.) Zoom in and out by selecting the + and – buttons or by clicking on the image. Pan the image by clicking on the **Pan** button, placing the cursor on the image, and holding the mouse button down while moving the mouse

The Preview will be similar to the example shown on page 57.

## PREVIEW IMAGE




Use the Preview to check the job for proper orientation, fonts, dimensions, etc., before releasing it to the next stage (provided the Workflow is set to **Hold** in the RIP Action Configuration tab). Close the Preview window and return to the Job View in the Navigator Client.

This time expand one of the jobs with an orange pause symbol in the Hi Res Workflow.

Because these are separated Page Buffers, the expanded tree will look like the example below.

## EXPANDED JOB TREE WITH SEPARATED PGBS

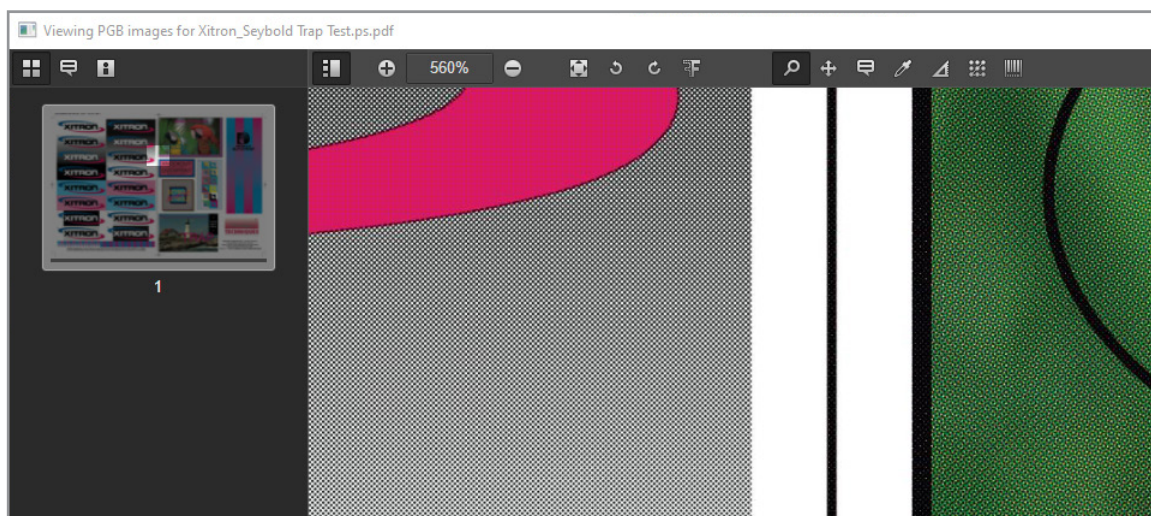
Job Name	Status	Workflow	Status Message	Copies	Time Stamp
[-] ✓ Xitron_Seybold Trap Test.ps.pdf (1)	2 Complete	New Workfl...		1	Tue 8/10/20...
[-] HotFolder					
[-] Rip					
1. Xitron_Seybold Trap Test.ps.pdf (C)					
1. Xitron_Seybold Trap Test.ps.pdf (M)					
1. Xitron_Seybold Trap Test.ps.pdf (Y)					
1. Xitron_Seybold Trap Test.ps.pdf (K)					
1. Xitron_Seybold Trap Test.ps.pdf (Blue)					
1. Xitron_Seybold Trap Test.ps.pdf (PANTONE 671 CV)					
[+] 24.25x37_2299_2 Lots_SWsr.pdf (2)	3 Paused - Rip	New Workfl...		1	Wed 8/11/20...
[+] M A Portal announce outline.pdf (1)	5 Paused - Rip	New Workfl...		1	Wed 8/11/20...
[+] Axxel Halftone_vector.pdf (1)	7 Paused - Rip	CTP Output...		1	Thu 8/12/20...
[+] BL Finger Print OL_scaled.pdf (1)	8 Paused - Rip	CTP Output...		1	Thu 8/12/20...

Again highlight one of these PGBs and select the **Preview**  button.

With a file created for final output to an imagesetter or platesetter, the preview image will show the screening used during the RIPing process. It is also possible to display individual colors or combinations to review traps, knockouts and overprints.

---

## PREVIEW WITH SCREENED IMAGE



*For more details on the viewer see Appendix A.*

## 10.8 Final Output

After approving the job based on the preview image, output the separations to the plate or film device by right-clicking the job and selecting **Release** to next step.

## 10.9 Deleting & Archiving Jobs

To delete jobs from the system, highlight them (select a group of jobs together using the mouse and the shift or Ctrl. key on the PC, or holding the mouse button and dragging the mouse over the files on the Mac). You can then either right-click and choose Delete or use the Jobs menu to access the Delete selection. Also, after highlighting you may delete jobs by using the Delete key on the keyboard, or the Delete Jobs button in the client window.

Earlier, we activated the Archive check box in the General tab of the High Res Workflow. Therefore, after deleting jobs from this Workflow, the system automatically archived them. To retrieve these jobs, path to the System Archive location set during Navigator Server configuration. Within the Archive folder, Navigator creates dated folders for each month that jobs were archived. Within each monthly folder are dated folders for each day. Jobs archived today will be in a folder labeled with today's date. Re-introduce these jobs to Navigator by using the **File > New Job** menu selection and fetch the job from the Archive folder.

*NOTE: The system archives the original files (PostScript, PDF), pre-flighted files and other intermediate steps. The system does NOT archive the RIPed page buffer files.*



## Chapter 11 – The Navigator Client in Detail

### 11.1 Menu Bar Items

#### 11.1.1 The File Menu

The File menu contains the following items:

##### New Job

This selection opens the New Job Window for associating files with a workflow and importing jobs for processing. When using this method to submit jobs, choose the job for processing and the workflow that will process it.

##### Login

This selection allows a user to log into the Server. It is only an option when there is no user already logged in to the system.

##### Logout

This selection allows a user to log out of the Server. It is only available if a user is logged in.

##### User Info

This selection opens a dialogue supplying the following information about the current user: User Name, User Rights / Permissions, Name of the Server to which the Client is connected.

##### Reset Preferences

This selection resets Client Preferences to factory defaults.

##### Exit


Selecting Exit closes the Client.

#### 11.1.2 The Jobs Menu

The Jobs menu contains the following items:

*NOTE: The items listed below are only valid in relation to a Job within the Workflow. They will only become available after highlighting (selecting) a job in the Client Job List.*

**Get Info** – This selection opens the Job Information Window.

> This function is also available by right-clicking on a job and choosing **Get Info**  from the pop-up menu, or by clicking the **Get Info** button on the Tool Bar.

The **Job** Information Window provides an overview of the job. It can be used to change the job name reported in Navigator Client and enter data into the Custom Fields. Other information displayed includes Job Status, the Workflow name where the job resides and a log of the job's progress through the system.

##### Flag

This marks a job so that it may not be deleted. In order to delete a flagged job, it must first be “un-flagged.” This may be useful for repeat work.

## Delete

Selecting Delete after highlighting a job will cause the system to delete the selected file. Use delete to remove any job or sub-file within a job.

For example, it is possible to use delete to remove an unwanted PGB (RIPed page or separation) file, or an unwanted color at the last minute before sending the job to output. Note: Deleting a sub file will remove it from the system entirely.

- > Delete will only be available after highlighting an appropriate file in the Job List.
- > This function is also accessible by right-clicking on a job and choosing **Delete** from the pop-up menu or by clicking the **Delete** Button on the Tool Bar.

## Edit Workflow for This Job

This will put the Navigator Client in Edit Workflow mode for making changes to the workflow of the selected job ONLY. (On the Mac client, this reads **Edit Workflow**)

- > This function is also accessible by right-clicking on a job and choosing **Edit Workflow for this Job** from the pop-up menu.

This is a powerful tool that allows changes to the workflow settings only of a specific job. For example, if a job errors when sent as a PostScript file, running it through the Stabilizer to create a PDF file may allow it to run. Using this option, a user can add a Stabilization Action to the workflow of the selected job. By releasing only the file in the “Hot Folder” to the next step, the system will re-process the job, this time with a Stabilization Action. Similarly, if a PDF job errors, a user can add a Preflight Action to the selected job’s Workflow without having to create an entirely new Workflow to perform the specialized Preflight task required.

## Pause Job

Choosing this selection will cause the system to pause processing of the selected job.

- > This function will only be available if the selected job status is such that a pause is a logical step. For instance, **Pause Job** will not be available if the Job’s Status shows **Completed**.
- > This function is also accessible by right-clicking on a job and choosing **Pause Job** from the pop-up menu.

## Copy

This menu item will open a list of established Workflows in the system. Choosing one of the Workflows listed will cause the system to process a copy of the job using the selected workflow. The original Job remains unchanged.

- > This function is also accessible by right-clicking on a job and choosing **Copy** from the pop-up menu or by clicking the **Copy** Button on the Tool Bar. Using the PC client, a user can also drag and drop the job while holding down the **Control Key**. Using a Mac, the same function is available using the **Option Key**.

## Restart Job

This menu item will open a list of established Workflows in the system. Choosing one of the Workflows listed will cause the selected job to restart from the beginning, using the original input file, through the new Workflow selected.

- > This function is also accessible by right-clicking on a job and choosing **Restart Job** from the pop-up menu or by clicking the **Restart Job** Button on the Tool Bar. In addition, simply dragging the job onto a new Workflow will have the same effect.

### Release to next step

This selection releases the selected job from a Hold or Pause Status to the next process specified in the Job's Workflow.

- > This function is also accessible by right-clicking on a job and choosing **Release** to next step from the pop-up menu or by clicking the **Release to next step** Button on the Tool Bar.

### Send selected file to next step

Releases the selected file from within a job – an individual PS/PDF/PGB (a RIPed page or separation) – file to the next process specified in the Job's Workflow.

For example, if it is necessary to release only one of the pages or separations of a job to the Output Action for imaging, it is possible to highlight the desired page or separation and, by choosing **Send selected file to next step**, only release that separation or page for output.

- > **Send selected file to next step** will only be available after highlighting an appropriate file in the Job List.
- > This function is also accessible by right-clicking on a job and choosing **Send selected file to next step** from the pop-up menu.

### Set Priority

This menu item will open a list of Job Priority settings (Low, Normal and High). Choosing one of these priority settings will change the priority for the selected job.

- > This function is also accessible by selecting the job, right-clicking and choosing **Select Priority**.

### Open File

Choosing this menu item will open the selected file in the proper editing/viewing program. For example, after highlighting a PDF file and selecting **Open File** the PDF file will open in Adobe Acrobat for review and editing, provided Acrobat is available on the system. Similarly, The Viewer will launch after highlighting a PGB file (a RIPed page or separation) and selecting **Open File**.

- > **Open File** will only be available after selecting an editable or viewable file type in the Job List window.
- > This function is also accessible by right-clicking on a job and choosing **Open File** from the pop-up menu, by clicking the **Open File** Button on the Tool Bar, or double-clicking on the PGB or PDF file. (PDF files will only open if you have Adobe Acrobat or Acrobat Reader installed on the system.)

*See Appendix A for a description of the Viewer and Viewer functionality.*

The following two items are for configuration preferences and are not job related. They are available at all times.

### Column Headings

This selection opens a dialogue allowing the user to turn on and off the column headings that display job information in the Job List Window Panel.

### 11.1.3 The Workflows Menu

#### New Workflow

This menu selection begins the process of creating a new workflow.

#### Cancel Any Changes

Cancels all changes made in creating or editing Workflows during the current editing session. This option will be grayed out (unavailable) if the user is not in Workflow Edit Mode.

Note: If you leave the Workflow Editing mode by changing to a Job View mode, all changes made during Workflow Editing are automatically saved and applied to all future jobs.

#### Copy Workflow

This selection opens a sub menu listing all of the Established Workflows in the the system. Choosing one of the listed Workflows will copy its parameters to a new Workflow. The user must provide a new name for the copied Workflow. After copying and naming a Workflow it will immediately be available for editing. This function is also accessible by right-clicking on a workflow icon in the Left Window Pane (Workflow list) and selecting **Copy Workflow** (Control-click on a Macintosh).

#### Edit Workflow

This selection opens a sub-menu listing all of the Established Workflows in the the system. Choosing one of the listed Workflows will allow editing of the parameters for that workflow. The system will save changes when exiting Workflow Edit mode using the “Edit workflow Icon” in the Tool Bar or by changing from the Workflow Edit mode to a Job View mode. This function is also accessible by right-clicking on a workflow, and selecting **Edit Workflow** (Control-click on a Macintosh), or double-clicking on the Workflow name.

### 11.1.4 The Help Menu

#### About

Selecting this displays the release version and Copyright information for the Navigator Client.

## 11.2 Tool Bar Items

The tool bar uses graphic buttons to represent the most commonly used Navigator Client functions. From left to right, the three sections are; Job View, Workflow Edit, and Job Management.

### 11.2.1 Job View Section

The View All Jobs Button:



Clicking this button will place the Client in Job View Mode. The left panel of the Client window will display icons for each of the established Workflows. The right panel of the Client window will display a list of all jobs in the system.

### 11.2.2 Workflow Edit Section

The Edit Workflow Button:



Clicking this button will put the Client into Edit Workflow mode. (Or, if you are already in Edit Workflow mode it will return you to Jobs View mode.) The currently selected or last selected Workflow will be the one the system opens for editing. This function is also accessible by right-clicking on a workflow, and selecting **Edit Workflow** (Control-click on a Macintosh).

The left window panel in the client will display a list of Available Workflow Components called Actions. The upper right window panel will display a graphical representation of the selected Workflow configuration. The lower right window will display the configuration tabs for the selected workflow.

### 11.2.3 Job Management Section

Release to Next Step Button



Releases the selected job from a hold applied in the Workflow Configuration (or a manual Pause) to the next process specified in that Workflow. This selection will be gray and inaccessible without first highlighting a job in the Job View Window.

This function is also accessible by right-clicking on a job and choosing **Release to next step** from the pop-up menu or by selecting **Release to next step** from the Jobs Menu (Control-click on a Macintosh).

Delete Button



This function deletes the selected file. Delete can remove any job or sub-file within a job.

For example, it is possible to use delete to remove an unwanted PGB (RIPed page or separation) files, or an unwanted color, before sending the job to output. Caution; deleting a sub file will remove it entirely from the system

> Delete will only be available after highlighting an appropriate file in the Job List.

This function is also accessible by right-clicking on a job and choosing **Delete** from the pop-up menu or by selecting **Delete** from the Jobs Menu, or by using the **Delete** key on the keyboard .

### Restart Job Button



Clicking this Button will open a list of established Workflows in the system. Choosing one of the Workflows listed will cause the selected job to restart from the beginning using the chosen Workflow.

This function is also accessible by right-clicking on a job and choosing **Restart Job** from the pop-up menu or by selecting **Restart Job** from the Jobs Menu (Control-click on a Macintosh). In addition, dragging the job onto the new Workflow has the same effect.

### Copy Job Button



Clicking this Button will open a list of established Workflows in the system. Choosing one of the Workflows listed will cause the system to process a copy of the selected job by the Workflow chosen without affecting the original job.

This function is also accessible by right-clicking on a job and choosing **Copy Job** from the pop-up menu or by selecting **Copy Job** from the Jobs Menu (Control-click on a Macintosh). In addition, dragging the job with the Control key (PC) or Option Key (Mac) has the same effect.

### Get Information Button



Clicking this button opens the Job Information Window.

This function is also accessible by right-clicking on a job and choosing **Get Info** from the pop-up menu (Control-click on a Macintosh).

The Job Information Window provides an overview of the job. It can be used to change the job name reported in Navigator Client and enter data into the Custom Fields (see Section 5 of the Navigator Server User Guide). Other information displayed includes Job Status, the Workflow name where the job resides and a log of the job's progress through the system.

### Open File Button



Choosing this menu item will open the selected file in the proper editing/viewing program. For example, after highlighting a PDF file and selecting **Open File**, the PDF file will open in Adobe Acrobat for review and editing, provided Acrobat is available on the system. Similarly, The Viewer will launch after highlighting a PGB file (a RIPed page or separation) and selecting **Open File**.

> **Open File** will only be available after selecting an editable or viewable file type in the Job List window.

> This function is also accessible by right-clicking on a job and choosing **Open File** from the pop-up menu, by clicking the **Open File** Button on the Tool Bar, or double-clicking on the PGB or PDF file. (PDF files will only open if you have Adobe Acrobat or Acrobat Reader installed on the system.)

*See Appendix A for a description of the Viewer and Viewer functionality.*

# 11.3 The Job List Panel

The Job List Panel will take up the entire right side of the Client window or the lower right side of the Client, depending on the Mode the Client is in. When viewing All Jobs, the Job List Panel will take up the entire right side of the Window.

## JOB LIST PANEL

6 Jobs						<input checked="" type="checkbox"/>				<input type="text"/>
Job Name			Status	Workflow	Status Message	Copies				
+ Xitron_Seybold Trap Test.ps.pdf (1)		2	Paused - Rip	CTP Output_...		1				
+ 24.25x37_2299_2 Lots_SWsr.pdf (2)		3	Paused - Rip	New Workfl...		1				
+ M A Portal announce outline.pdf (1)		5	Paused - Rip	Ne...		1				
+ Axcel Halftone_vector.pdf (1)		7	Paused - Rip	CTP Output_...		1				
+ BL Finger Print OL_scaled.pdf (1)		8	Paused - Rip	CTP Output_...		1				
+ Golden Retriever Duck Hunt with registration marks.pdf (1)		9	Paused - Rip	CTP Output_...		1				

Four main functions are possible from within the Job View Window; searching for jobs, reviewing and sorting Job information, opening editable or viewable files and controlling Job files.

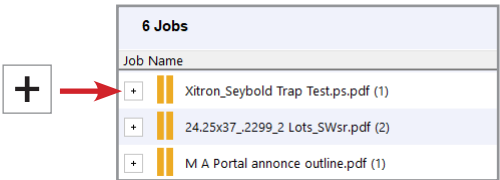
The Job View Window appears in columns and rows. The columns provide different information about each job. Columns are configurable and adjustable for size. Each row in the Job View Window will contain information about a specific job or items contained within the Job, if the Job Information has been expanded.

# 11.4 Items in the Job View Window

## COLUMN HEADINGS

Job Name		Status	Workflow	Status Message	Copies	Time Stamp
----------	--	--------	----------	----------------	--------	------------

## EXPANSION BUTTONS



Found at the far left of the Job information row, these buttons are used to expand (+) or contract (-) the information for the selected job.

## Job Status Icons

- Green indicates the Job is Scheduled, Idle or Running.
- Yellow indicates that the Job is Paused or on hold.
- Red indicates that the job caused an error.
- Blue indicates that the job is complete. This icon will appear as a blue circle on the Mac Client.

If the Job View has been set to show the expanded view, the Job Status icons on the PC will point downward as illustrated under Expanded Job View below.

Location Icons

Location icons indicate the location of files used by – or generated during – the processing of a job. Each location is specified by a location icon followed by the name of the Action completed to create the file found in that location.

LOCATION ICONS

Job Name			Status
-	Xitron_Seybold Trap Test.ps.pdf (1)	2	Paused - Rip
+	HotFolder		
+	Preflight		
+	Ink Remapping		
+	Impose		
+	Copy		
+	Rip		
+	24.25x37_.2299_2 Lots_SWsr.pdf (2)	3	Paused - Rip
+	M A Portal announce outline.pdf (1)	5	Paused - Rip

The expanded Location Tree shown above illustrates the various steps and files produced in a workflow that includes the HotFolder, Preflight, Ink Remapping, Impose, Copy, RIP, etc.



## 11.5 File Type Icons

File Type icons appear in a number of different styles and colors. Rather than display them all, four representative types are shown below:

### PostScript File Icon



Identifies the file as PostScript

### PDF file Icon



Identifies the file as PDF

### Preflight Report Icon



Identifies the file as a Preflight Report File. The system generates Preflight reports in PDF, viewable in any PDF viewing or editing software.

### RIPed CMYK Separation Icon



Identifies a RIPed CMYK or Gray separation. The color of this icon will change depending on the separation color.

### RIPed Pantone Color Separation Icon



Specifies a RIPed Pantone Spot Color separation

### RIPed Composite Page Buffer

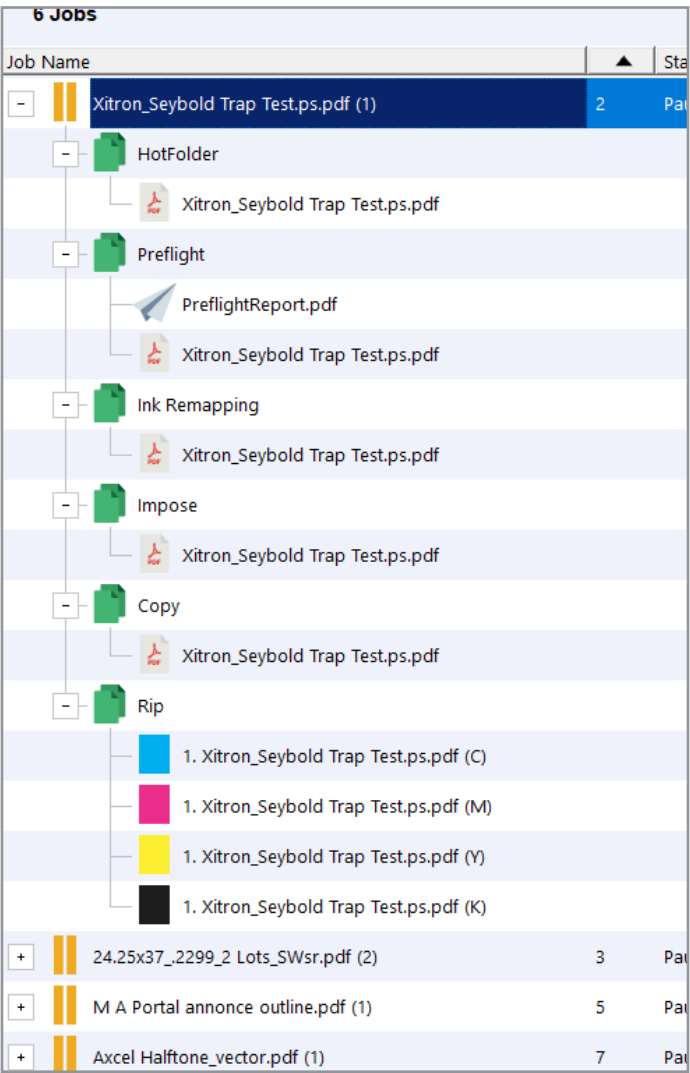


Specifies a RIPed composite page buffer, usually for a proofing device

# 11.6 Expanded Job View

Below is an example of an expanded job view displaying various job elements with Job View icons.

EXPANDED JOB TREE



# 11.7 Column Heading Functions

The Job View window contains a number of headings. There are standard heading fields that are not changeable and heading fields that are configurable to suit the information needs of a company’s internal procedures.

## Standard Headings/Columns

Standard Column Headings can be turned on and off using the Jobs/Column Headings menu but they cannot be altered. The one exception is the Job Name heading which is always on. See Chapter 3 for more information about turning the display of Job View Columns on and off.

## Job Name

Displays the Job Name as specified in the Workflow Configuration “Hot Folder” tab or as set in the Jobs Information window (see above and Chapter 3 for more information.)

## Job Number

Displays the Job Number. This is a continuously incremented number applied sequentially to jobs as they arrive in the Navigator Server system.

## Status

This column displays processing status of the job. It will show if the job is held, processing (RIPing, Stabilizing, etc.), paused, post-processing, or completed.

## Workflow

Displays the Workflow the Job is currently assigned to / processed by.

## Priority

Displays the priority setting for the job. Job priorities can be set to Low, Medium, and High. They can be set for individual jobs or for all jobs coming into the system from a particular workflow. Priority will directly affect the order in which Navigator Server processes jobs. See Section 8.3.1 for more information about setting job priority.

## Status Message

This column displays messages that may clarify the Job’s status, such as error messages sent by the RIP.

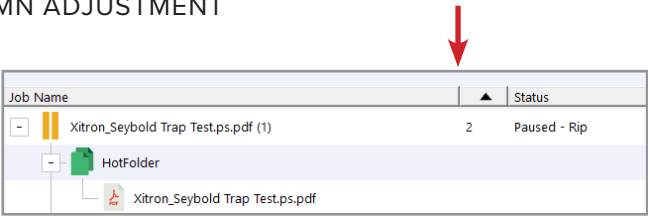
## Configurable Headings

There are four configurable headings. The view of these headings can be switched on and off in the same manner as the standard column headings. The naming of these fields is performed in the Navigator Server.

## Adjusting Column/Heading Size

The size of each column is adjustable by clicking and holding the mouse on the left division or gutter between the columns. (An example using the Job Name Column appears by the arrow below.) While holding the mouse button down, drag the column gutter left to decrease the size of the column view and right to increase it.

COLUMN ADJUSTMENT



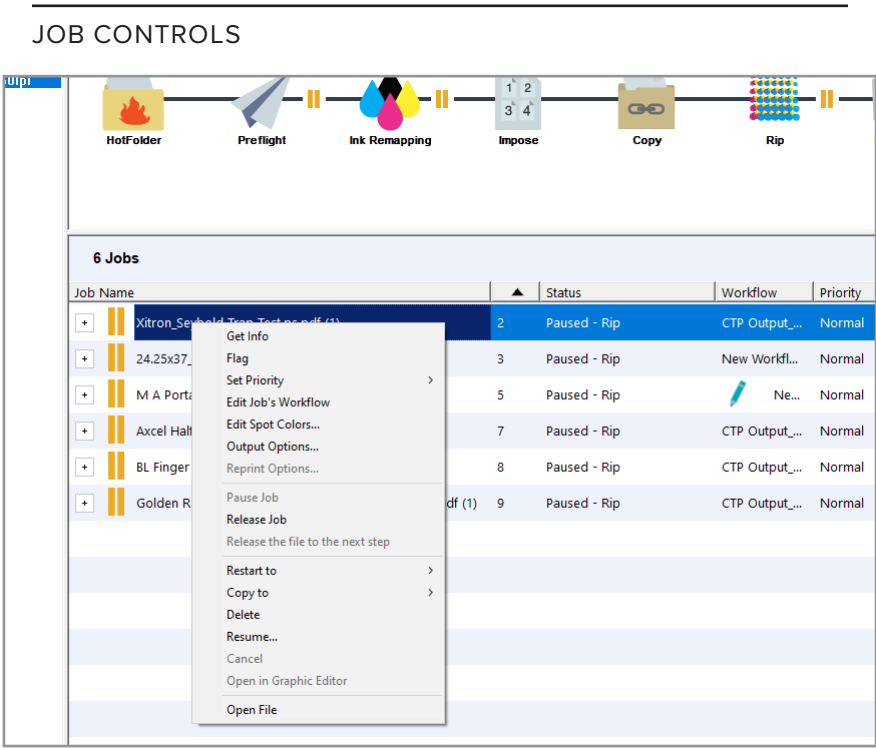
It is possible to make a column disappear by dragging the gutter too far to the left. If this occurs, go to the Jobs/Column Headings menu and switch off the column that has disappeared. Switch it back on and the column will return.

## Sorting On Job Heading

Clicking on a column heading will sort jobs according to the information in that column. A small arrow will appear in the column heading to indicate if the sort is in ascending or descending order. Clicking on the column heading again will change the sort order to the opposite of its previous setting.

# 11.8 Controlling Jobs in the Job View Window

Workflow functions for each Job are controllable from within the Job View window. Clicking the mouse while on a job or a sub-file of the job will highlight the Job or sub-file, and right-clicking on the job or a sub-file of the job will open the Job Functions Menu (Control-click on the Mac).

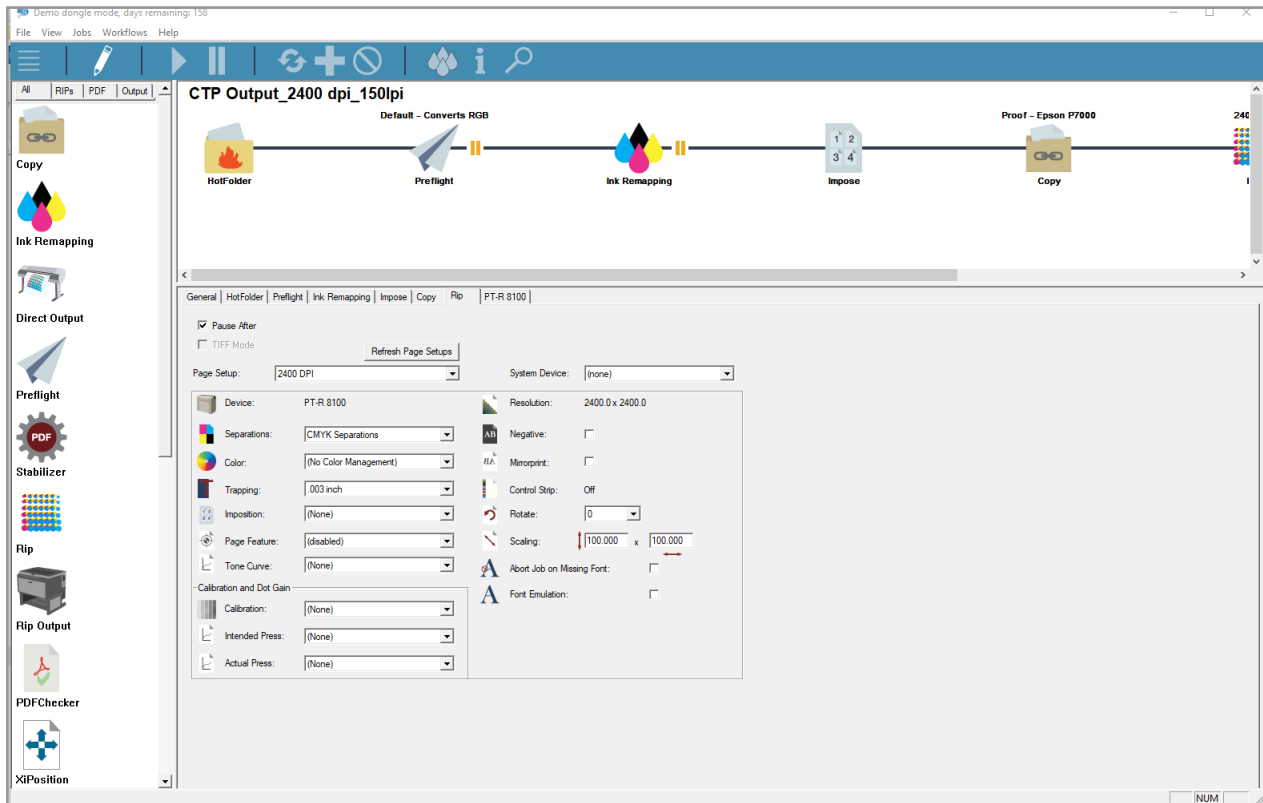


The functions of this pull-down menu are the same as the corresponding functions in the Jobs Menu found in the menu bar. See the explanation of Jobs Menu functions earlier in this chapter for a description of each menu selection.

## 11.9 Display Windows in Workflow Edit Mode

Any time a user creates or edits a workflow, the Client reverts to workflow edit mode. The Client window changes to show RIP Actions, PDF Actions and Output Actions to the left, the selected Workflow Diagram on the top right and the Workflow Edit Tabs on the bottom right.

### WORKFLOW EDIT MODE



The Workflow Edit Tabs appearing will depend on which components were selected for a particular Workflow. As a system grows, users can add new Actions and these will have their own Tabs. To select a tabbed dialog, simply click on the named tab.

## 11.9.1 Workflow Edit Tabs

### 11.9.2 General

The General Tab contains the following Workflow configuration settings:

#### Workflow Name

Use this selection to enter or change the selected workflow name.

#### Priority

Three selections are available which will determine processing priority: Low, Normal and High.

#### Get Ahead

This number represents the number of jobs the system will “pre-schedule” for processing. If, for instance, there are 10 new jobs in a workflow and the Get Ahead is set for 5, the system will schedule five of the jobs for processing. The remainder of the new jobs will be in “idle” mode. As each job finishes processing, the system will add the next new job, keeping the total of scheduled jobs at 5 or less, until all jobs complete.

To optimize the workflow, change the Get Ahead entry to the desired number.

Get Ahead is also available when more than one RIP action is set in the same workflow. By using multiple RIP Actions (attached to different RIPs) it is possible to “load balance” the RIPs. Setting a Get Ahead value will make sure that one of the RIPs will never be sent more jobs than the other RIP in excess of the established Get Ahead number.

That is, with a Get Ahead of 5, the system will pre-schedule five jobs for both RIPs. If one RIP is significantly faster, it is possible for jobs to remain scheduled for the slower RIP after the faster one finishes. In this case, a lower number (zero) is more conducive to equal distribution of jobs between two RIPs of different speeds.

#### When Job Completes Section

This special section tells Navigator Server what to do with job files after all processing in the selected Workflow is complete. There are three choices as described below:

#### Send to Workflow

This is a very powerful tool for setting up complex workflows. By choosing to send a job to another Workflow after completion in the specified Workflow, the system can perform multiple tasks on the same job without user intervention.

For instance, it is possible to link a workflow set up for proofing to a workflow set up to drive an imagesetter. In this way jobs can be proofed and then imaged without having to reprint the job or manually restart the job.

#### Archive

Enabling this option will tell the system to Archive completed files. The system will store the original file in the Archive folder specified in the Navigator Server. Archiving will take place according to the deletion settings in the Navigator Server. Turning on Archive when “Send to workflow” is selected will have no effect.

#### Delete

After checking this selection, the system will delete files either immediately upon completion or as necessary after reaching a limit of jobs. This limit is editable in the “Server Settings” dialog box in Navigator Server.

### 11.9.3 HotFolder

The Hot Folder tab contains the following options:

#### Input Folder

This field specifies the folder a workflow watches to bring jobs into the system. Navigator Server establishes a default folder for each workflow a user creates. In most cases this default folder will be sufficient and no additional configuration is necessary. With the PC Client, the default folder is changeable using the Browse button.

The Restore Defaults button resets the Input Folder to its default setting.

#### Hold After

Checking this box will cause the system to immediately place newly arriving jobs using this workflow on hold.

Once held, users can make changes to the Job's Custom Information Fields, or restart jobs in a different workflow.

#### Sample Job Name

This field shows an example of the how job names will appear in the Navigator Server system with the words "My Sample Job" representing the incoming job name. As you add or remove options to the job naming template this example field will reflect the changes.

#### Job Name Prefix, Body and Suffix

The three settings, Prefix, Body and Suffix will add information to the displayed job name in the Client. Any mixture of the available settings is acceptable, including a custom prefix and custom suffix field. Prefix and suffix settings can also be disabled. However, there must always be a setting for body.

### 11.9.4 Copy Action

#### Copy file to

This function will copy any file to another workflow. RIP Manager creates an entirely new job based on the file copied.

For example, consider a RIP Manager workflow containing a Stabilizer Action set to convert PostScript to PDF, followed by a Copy File Action, a RIP Action, and an Output Action. If the original file submitted to RIP Manager is a PostScript file, the Stabilizer will convert it to a PDF. The Copy File Action (because it immediately follows the Stabilizer Action) will copy the resulting PDF file – as a new job – to whatever workflow the user set up in this **Copy file to** selection. This could be used to move the PDF to a workflow creating a proof based on the PDF while the original PDF continues on to RIPing for high-resolution output.

The only limitations to the Copy Action are those established by the RIP Manager Actions and the creativity of the RIP Manager user.

#### Hold After

Checking this box will cause the system to place jobs on hold immediately after the Copy Action.

Once held, the user can edit or view the sub-job created by the Copy Action, provided the proper viewing and editing software is present on the Client computer and viewing and editing is appropriate for the sub-job type. For example, if a full version of Adobe Acrobat resides on the Client computer, the user can view and edit PDF jobs.

### 11.9.5 Export Action

Export Action paths are configurable in either the client or the server. The reasons for choosing one over the other are covered in the Server configuration section on Export Actions. The Export Action will copy whatever final file the preceding action creates, to a folder specified. If you need to have a single file both Exported and processed by another workflow, then you could precede the Export Action with a Copy Action. The Copy Action will send a copy of the file to the other Workflow and the Export Action will then export the original file.

### 11.9.6 PrintJob Action

By default, the PrintJob Action will take a job, convert it to TIFF, and output it to the Windows Print Spooler – which will send it to the printer specified.

If the 'Direct Output' option is checked in the PrintJob Action configuration dialog in the Server, it is important that the file being sent out through the PrintJob Action be of the proper type for the target printer. For example, if a user configures the PrintJob Action to send files to a PostScript Level 2 printer, the file being sent must be in PostScript Level 2 or earlier format to prevent errors from occurring.

### 11.9.7 RIP Action

There are several options in the RIP Action tab: Page Setup, Hold After and Refresh Page Setups. Each is explained below.

#### Page Setup

The selections in the Page Setup pull-down menu represent the Page Setups (RIPing parameters) set in the RIP associated with the selected RIP Action. All Page Setups established in the target RIP will be available and display here.

Selecting one of the Page Setups listed will instruct RIP Manager to send jobs entering this workflow through the RIP using the parameters in the specified Page Setup. Typically, users will configure the system with at least one workflow for each Page Setup on the RIP.

#### Hold After

Checking this box will cause the system to place RIPed jobs using this workflow on hold. (Once held, users can preview jobs using the viewer before releasing them for further processing.

#### Refresh Page Setups

Clicking this button causes RIP Manager to fetch a new page setup list from the RIP. Use this after creating a new page setup that does not appear in the list.

#### Page Setup Configuration

You may view or change the settings of your chosen RIP Page Setup from the RIP tab either globally or for individual jobs.

### 11.9.8 Output Action

Output Actions are not configurable, except in the case of certain output devices. These cases are covered in their respective plug-in manuals. Regardless of their configurability, Output Actions are an important visual cue in the Workflow Diagram. Output Actions represent the device to which the RIPed files will be output. If there is more than one imaging device attached to the RIP, the system will determine the final output based on the RIP's Page Setup. See the RIP documentation for details on configuring Page Setups and selecting output devices.

### 11.9.9 Direct Output Action

The Direct Output action is configurable to the extent that you choose a RIP page setup. Direct Output is a variant RIP action which allows for no pause between ripping and output.



## Chapter 12 – Workflow Options

Chapters for **imposition**, **ink remapping**, **PDF conversion and preflighting**, and **scriptable hot folders** are available in separate documents on the installation CD and also at Xitron's web site.

## Appendix A – The Viewer

### A.1 Key Features

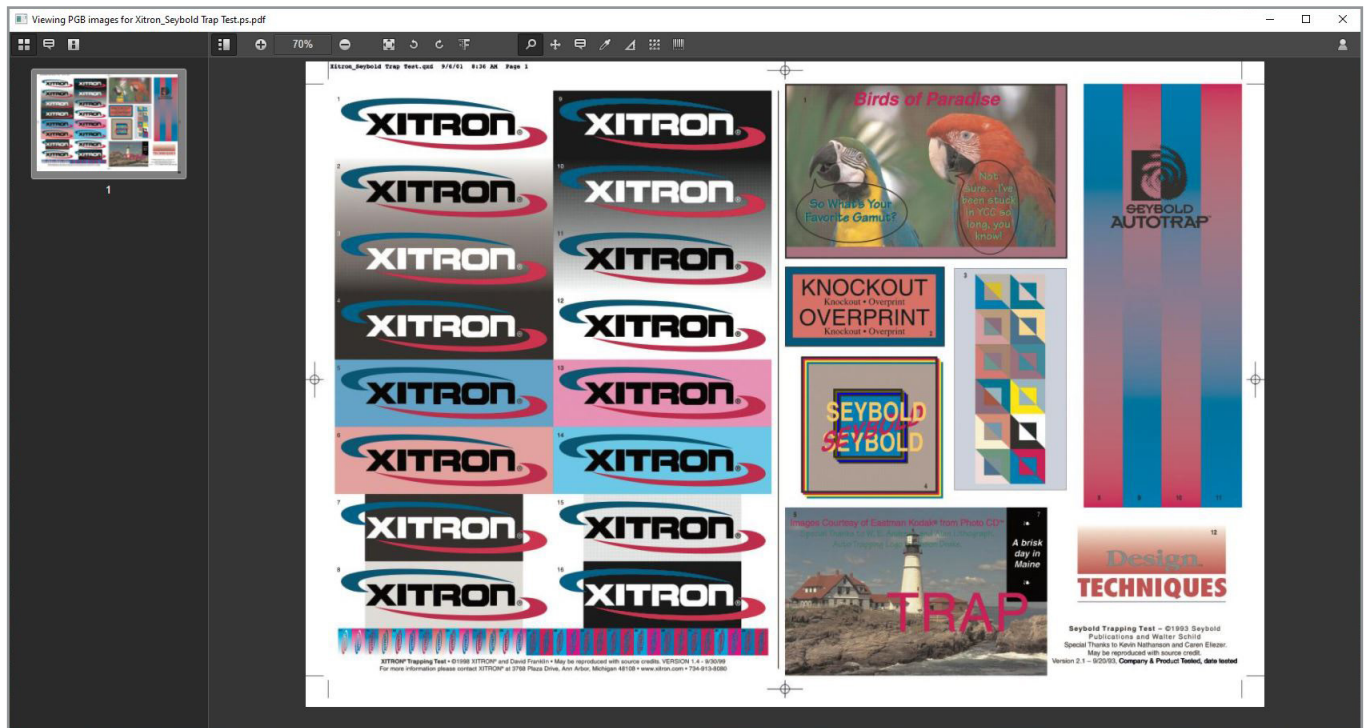
- Multiple scale factors – can zoom in and out.
- Intelligent ordering of files into jobs, pages and separations.
- Can rotate, mirror and negate the view
- Can view Traps and Rulers
- Accurate color mixing and display

### PageBuffer Files

This appendix makes reference to PageBuffer files and it is helpful to understand what these files are and where they reside.

Harlequin RIPs generate PageBuffer files to store Ripped (bitmap) data. The RIP accesses these files when viewing or outputting jobs. Each page or flat to be output is held in one PageBuffer file, so the system stores multiple-page jobs in multiple PageBuffers. Some PageBuffer files (usually lower resolution proofing output) contain all the colors in a page or flat while others, (usually high resolution screened output) contain only a single color.

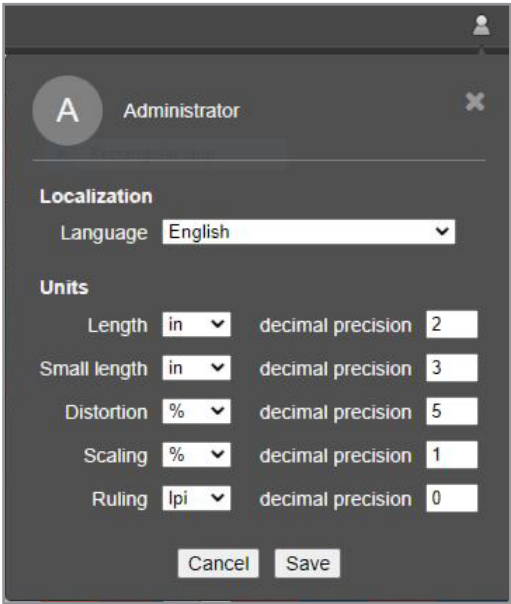
To access the Viewer, highlight a paused (or completed) job in the workflow. Right-click and select **Open File** from the drop-down menu, or simply click the Viewer Icon in the Client interface toolbar. The viewer window will appear, similar to the following:



## A.2 Configuring the Viewer

Click the Icon in the upper right corner of the viewer to set language and units of measurement. Click **Save** to save the settings to the user profile.

### VIEWER CONFIGURATION SETTINGS



## A.3 Using the Viewer

The Viewer is divided into two windows. The section on the left will display thumbnail images of each job. The section on the right will display the rendered (RIPed) image. Across the top of both windows are buttons that will be used to change the viewed image or report key information about the job. Hovering over one of the buttons will cause the viewer to display a label describing the button's use.

### VIEWER TOOL BAR



Starting from the left and moving across the toolbar, the button's functionalities are as follows:



#### Thumbnail

Shows Thumbnail images of the job being viewed. This is the default selection.



#### Notes

This functionality is reserved for future product enhancements.



#### Separations

Lists all the color separations found in the job, including spot colors if they are present. By default, all separations are clicked "On" when the job is first being viewed. Un-checking the boxes next to each color will turn those colors off in the main viewing window. More information about the separations dialog can be found later in this document.



#### Show Sidebar

Toggles the thumbnail window on or off.



#### Zoom In

Clicking this button causes the viewer to zoom in on the image. The maximum zoom is 51,200%. The current setting is displayed as a numerical percentage just to the right of the zoom button. Typing a number here will cause the viewer to zoom to that percentage.



#### Zoom Out

Clicking this button will cause the viewer to zoom out. The smallest percentage allowed is 20%.



#### Fit

Clicking this button will return the image to the largest size that will fit in the viewer window.



#### Rotate Left

This button causes the image to rotate 90 degrees counter-clockwise.



#### Rotate Right

This button causes the image to rotate 90 degrees clockwise.



#### Mirror

Clicking this button will cause the viewer to display the job as a mirror image.



#### Zoom

Clicking this button will change the cursor into a magnifying glass. By positioning the cursor over a specific spot in the job and clicking, the viewer will zoom in with that spot as the center.



#### Pan

Clicking this button will change the cursor to a four-pointed arrow. Clicking on the image and dragging in any direction will pan the image in that direction.



#### Notes

This functionality is reserved for future product enhancements.



#### Densitometer

This button is used to take a spot density reading. The cursor will change to a plus sign and the viewer will display a window with density readings whenever the mouse is clicked on the image.



#### Measure

This tool is used to measure distances between objects in displayed in the job. Click once at the first position and again at the second. The viewer will display the distance between the two points.



#### Measure Halftones

When clicked, this button turns the cursor into a plus sign, with which the user can click and drag over a halftone area. When released, the viewer will show the screen frequency, angle, and dot percentage of the halftone area being measured.

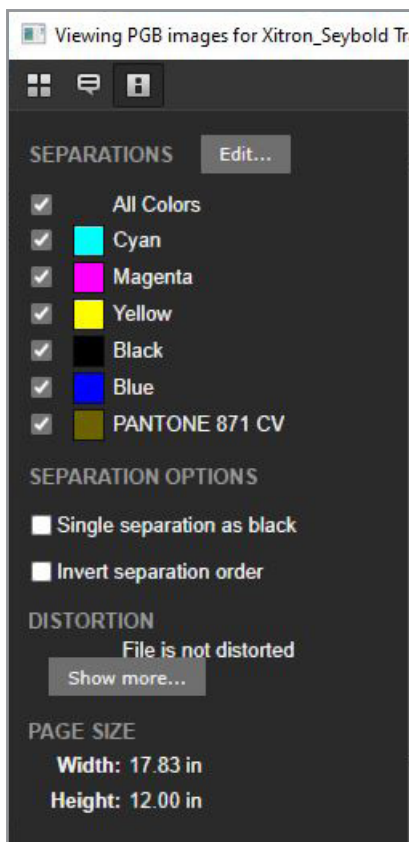


#### Detect Barcodes

Use this button to check the accuracy of any bar codes embedded as part of the job. After clicking the button, use the cursor to draw a rectangle over the bar code and release. The bar code scanner will read the bar code and display the barcode type, text, and character count.

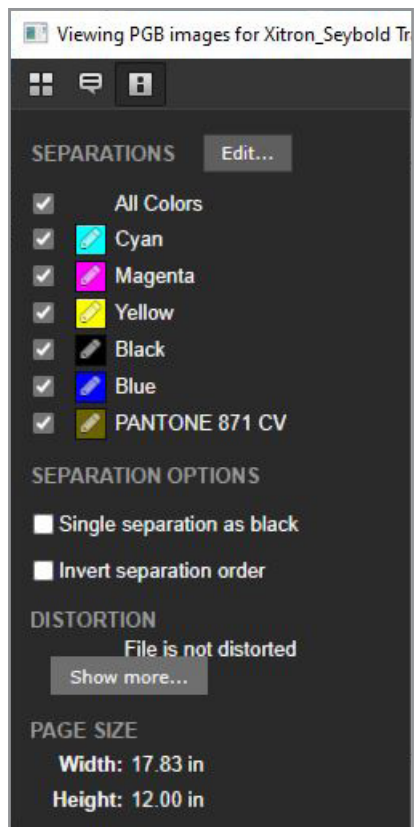
## The Separations Window

While viewing jobs, it is possible to modify how the various separations are displayed. As mentioned earlier, clicking the Separations button will present a window with all separations noted, along with a checkbox next to each. Clicking the checkboxes on or off will also turn the corresponding separations on and off in the display. An example can be seen below.

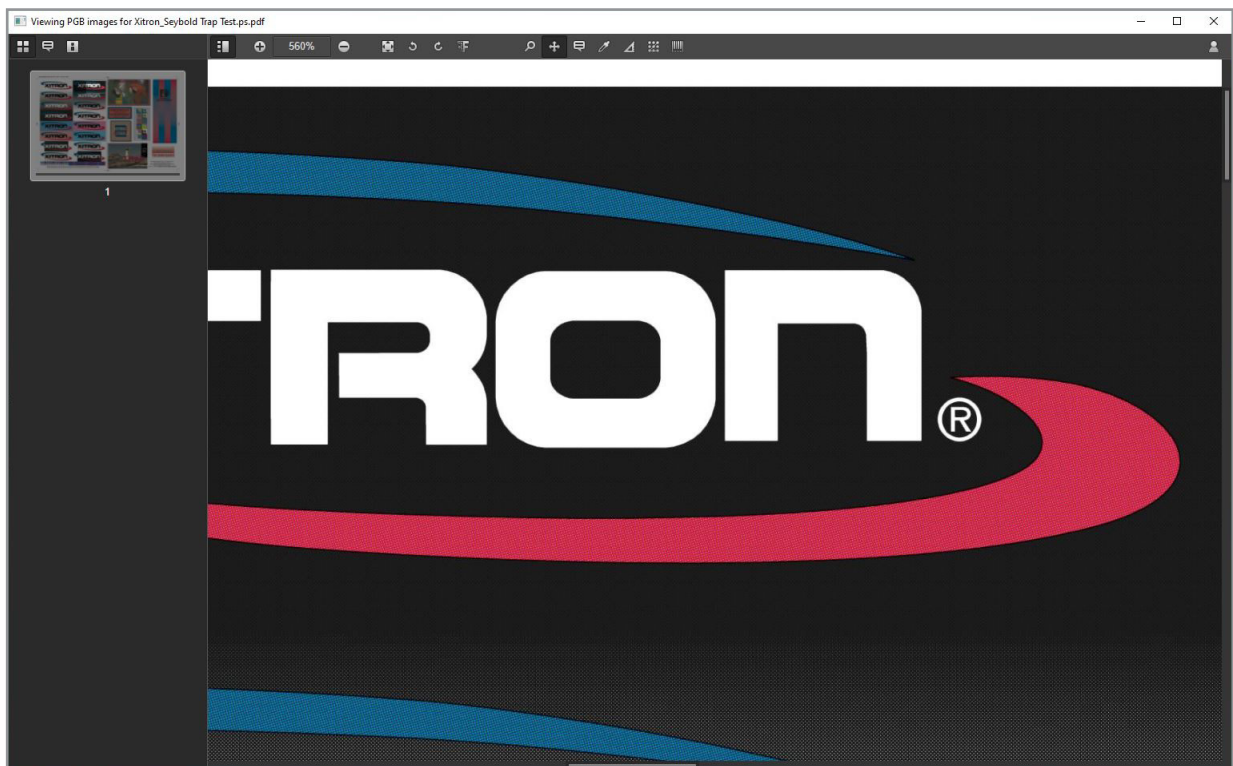


It's also possible to change the color makeup of each of the separations, including any spot colors found in the job. To do so, click the **Edit** button located at the top of the separations window. A pencil icon will appear in each of the separation color blocks. Clicking the icon for Cyan, Magenta, Yellow, or Black will post a window noting that those colors are "managed." To continue with changes, click the Color Managed box and a color picker will appear. Click to get an approximation of the color desired, and click **Save**.

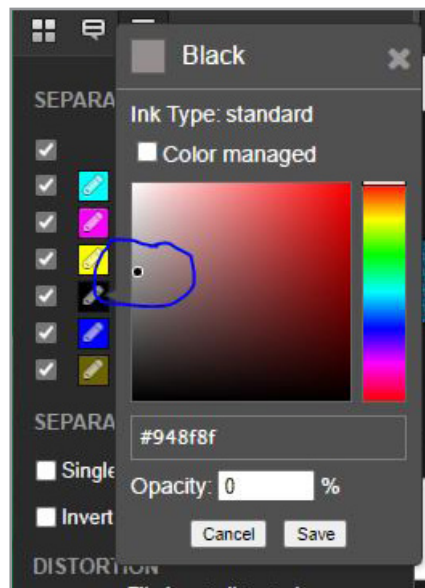
The same steps can be used to modify the appearance of spot colors, except the Managed Color dialog will not appear. These changes are for appearance only and will not affect the final output. An example of the editing window can be seen here:



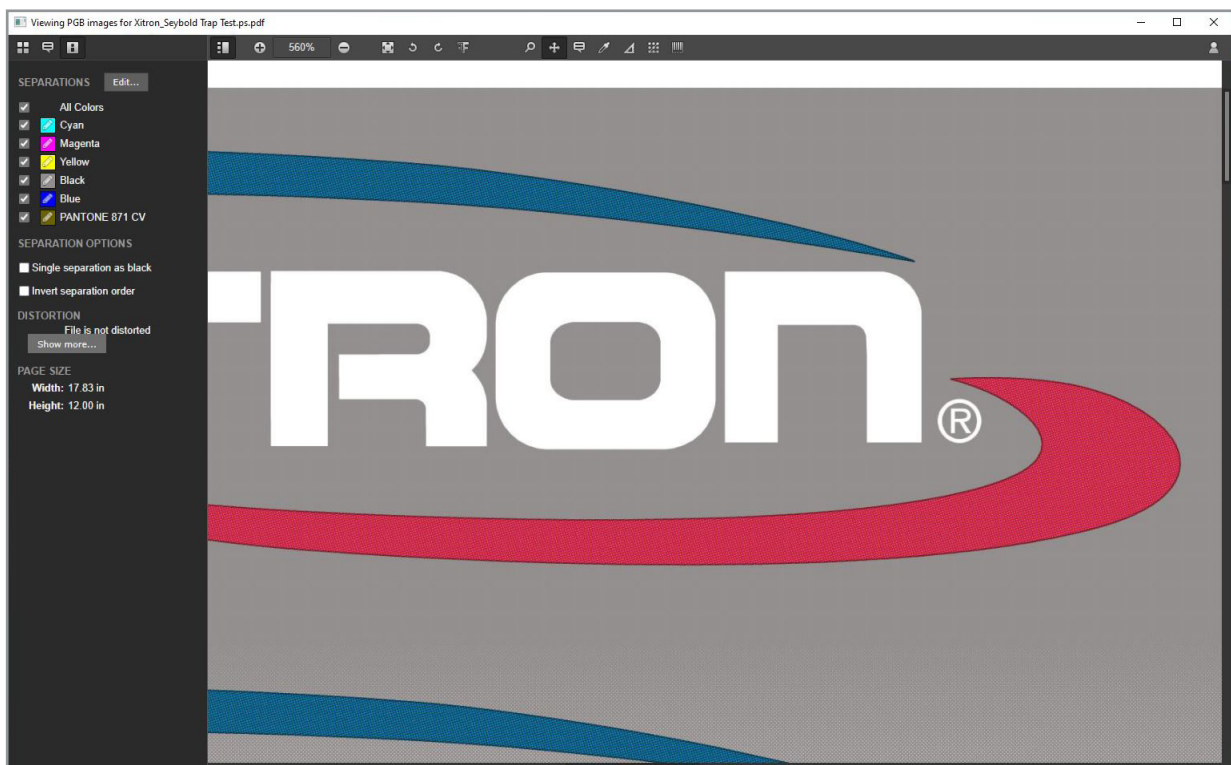
There may be times when it will be necessary to change the look or opacity of colors using the tools discussed above. For example, if a job contains areas of black ink adjoining colors that require a trap, it might be difficult to see the traps and verify their placement. An example is shown below:



Under these circumstances, cutting back the black ink in the viewer should help. Here is an example of the setting:



The result (shown below) is that it is much easier to see that the trap exists.



As mentioned earlier, these changes do not affect output. They only affect the display of the job in the viewer.

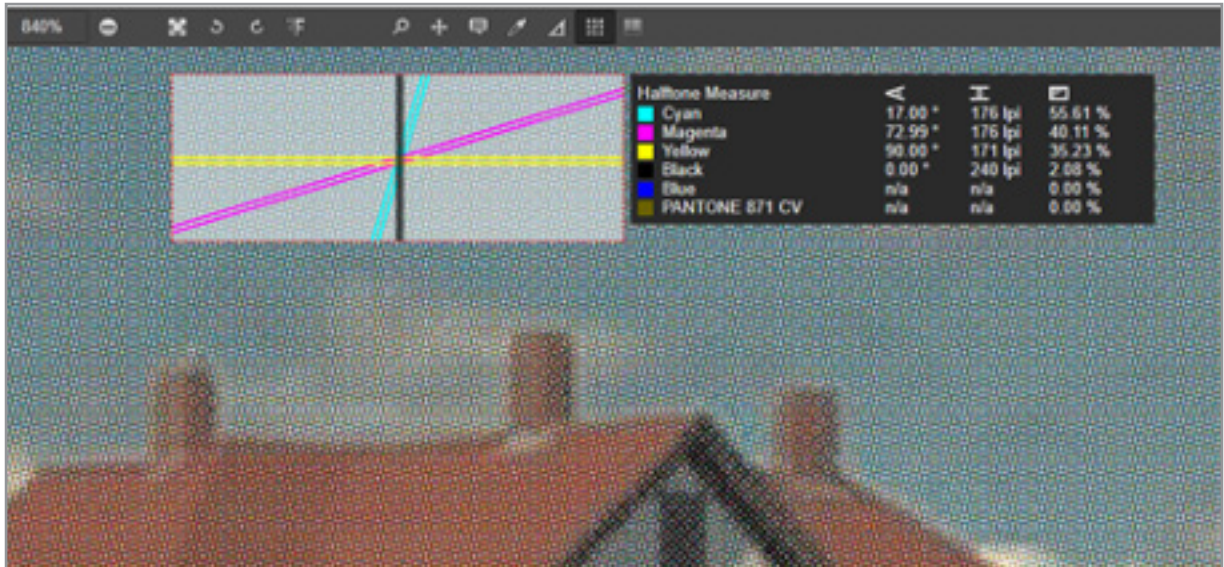
To exit the Viewer, simply click the **X** in the upper right corner of the window.



## Measure, Measure Halftones, and Preferences

The **Measure** tool can measure width, height, and an angled measurement. You may have to click on the preferences to change the units (mm, inches, etc.) to your preference. If you cannot see the account/preferences icon, extend the window frame to the right, until it appears.

The **Measure Halftone** button will give you the most information of all the tools. Here you can draw a marquee square (any size), and it will display the screen angles, line screen, and total ink coverage of that square.





## Appendix B – Upgrades and system backups

It is important to know where the system stores job and workflow data for the purposes of software upgrades and system backups.

1. At the root level of the Navigator Server installation there are three files which contain information about the system configuration : xiflow.jobs, xiflow.actions and xiflow.wf.
2. Files associated with the system, but not contained within the installation folder include the actual job data, archived jobs, and the hot folders used for job input. These are usually at c:/Navigator/Workflows, c:/Navigator/Jobs, and c:/Navigator/Archives, but you may check in the Navigator Server to find out for certain.

There is a multi-level backup system in place to allow Navigator Server to automatically recover if these three databases ever become corrupted. As a further precaution, if the Server ever reports “Failed to load ‘X’ information. Press OK to continue using backup information or CANCEL to quit.”, with ‘jobs’, ‘workflow action’ or ‘workflow’ in place of ‘X’ depending on whether the Jobs, Actions or Workflows database is at fault”. If at this point you opt to quit the Server, please contact your support provider to investigate the problem with the assistance of the log files. If instead you choose to use the backup, your most recent changes (if any) will be lost.

Load over installations of Navigator Server are possible. Navigator RIP does not handle load over installations. They require the use of the Migrate Utility. (See separate manual for Migrate Utility)

The way to do a “clean install” of a Navigator Workflow system, including Server and RIP, is described below.

1. Install the new version of Navigator Workflow to an entirely new folder. (Use the Workflow installer.)
2. Install all required RIP plugins.
3. Run the Global Graphics “Migrate” Utility to transfer the RIP settings from the old version of the RIP.
4. Copy the “.jobs”, “.actions”, and “.wf” files from the root level of the old Server installation to the new one.
5. Start the system.

To do a loadover install, follow these instructions:

1. Install the new version of Navigator RIP to an entirely new folder. (Use the RIP installer only.)
2. Install all required RIP plugins.
3. Install required RIP Utilities.
4. Run the Global Graphics “Migrate” Utility to transfer the RIP settings from the old version of the RIP.
5. Install the new version of Navigator Server into the same folder as the old version.
6. Start the system.

In either case, upgrades generally require an upgrade of each client application as well.

## Appendix C – Special Page Setups

The following Actions make use of the RIP and require the Page Setups mentioned below.

### **KeySetter**

Requires a Page Setup named “KeySetter”, configured as specified in Section 4.1 of the KeySetter User Guide.

### **PrintJob**

Requires a Page Setup named “PrintJob”, set to output to the TIFF plugin, and with separation style “Composite” selected.

### **PrintJobTicket**

Requires a Page Setup named “PJT”, set to output to the TIFF plugin, and with separation style “Halftone” selected. Within the Halftone separation style, please ensure that “(Other colors in job)” is set to “Yes” or “Not blank”.

Any other required settings in these Page Setups will be configured automatically by the corresponding Action.

## Appendix D – Apple Public Source License

### APPLE PUBLIC SOURCE LICENSE

Version 1.1 – April 19, 1999

Please read this License carefully before downloading this software. By downloading and using this software, you are agreeing to be bound by the terms of this License. If you do not or cannot agree to the terms of this License, please do not download or use the software.

1. General; Definitions. This License applies to any program or other work which Apple Computer, Inc. ("Apple") publicly announces as subject to this Apple Public Source License and which contains a notice placed by Apple identifying such program or work as "Original Code" and stating that it is subject to the terms of this Apple Public Source License version 1.1 (or subsequent version thereof), as it may be revised from time to time by Apple ("License"). As used in this License:

1.1 "Affected Original Code" means only those specific portions of Original Code that allegedly infringe upon any party's intellectual property rights or are otherwise the subject of a claim of infringement.

1.2 "Applicable Patent Rights" mean: (a) in the case where Apple is the grantor of rights, (i) claims of patents that are now or hereafter acquired, owned by or assigned to Apple and (ii) that cover subject matter contained in the Original Code, but only to the extent necessary to use, reproduce and/or distribute the Original Code without infringement; and (b) in the case where You are the grantor of rights, (i) claims of patents that are now or hereafter acquired, owned by or assigned to You and (ii) that cover subject matter in Your Modifications, taken alone or in combination with Original Code.

1.3 "Covered Code" means the Original Code, Modifications, the combination of Original Code and any Modifications, and/or any respective portions thereof.

1.4 "Deploy" means to use, sublicense or distribute Covered Code other than for Your internal research and development (R&D), and includes without limitation, any and all internal use or distribution of Covered Code within Your business or organization except for R&D use, as well as direct or indirect sublicensing or distribution of Covered Code by You to any third party in any form or manner.

1.5 "Larger Work" means a work which combines Covered Code or portions thereof with code not governed by the terms of this License.

1.6 "Modifications" mean any addition to, deletion from, and/or change to, the substance and/or structure of Covered Code. When code is released as a series of files, a Modification is: (a) any addition to or deletion from the contents of a file containing Covered Code; and/or (b) any new file or other representation of computer program statements that contains any part of Covered Code.

1.7 "Original Code" means (a) the Source Code of a program or other work as originally made available by Apple under this License, including the Source Code of any updates or upgrades to such programs or works made available by Apple under this License, and that has been expressly identified by Apple as such in the header file(s) of such work; and (b) the object code compiled from such Source Code and originally made available by Apple under this License.

1.8 "Source Code" means the human readable form of a program or other work that is suitable for making modifications to it, including all modules it contains, plus any associated interface definition files, scripts used to control compilation and installation of an executable (object code).

1.9 "You" or "Your" means an individual or a legal entity exercising rights under this License. For legal entities, "You" or "Your" includes any entity which controls, is controlled by, or is under common control with, You, where "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of fifty percent (50%) or more of the outstanding shares or beneficial ownership of such entity.

2. Permitted Uses; Conditions & Restrictions. Subject to the terms and conditions of this License, Apple hereby grants You, effective on the date You accept this License and download the Original Code, a world-wide, royalty-free, non-exclusive license, to the extent of Apple's Applicable Patent Rights and copyrights covering the Original Code, to do the following:

2.1 You may use, copy, modify and distribute Original Code, with or without Modifications, solely for Your internal research and development, provided that You must in each instance:

- (a) retain and reproduce in all copies of Original Code the copyright and other proprietary notices and disclaimers of Apple as they appear in the Original Code, and keep intact all notices in the Original Code that refer to this License;
- (b) include a copy of this License with every copy of Source Code of Covered Code and documentation You distribute, and You may not offer or impose any terms on such Source Code that alter or restrict this License or the recipients' rights hereunder, except as permitted under Section 6; and
- (c) completely and accurately document all Modifications that you have made and the date of each such Modification, designate the version of the Original Code you used, prominently include a file carrying such information with the Modifications, and duplicate the notice in Exhibit A in each file of the Source Code of all such Modifications.

2.2 You may Deploy Covered Code, provided that You must in each instance:

- (a) satisfy all the conditions of Section 2.1 with respect to the Source Code of the Covered Code;
- (b) make all Your Deployed Modifications publicly available in Source Code form via electronic distribution (e.g. download from a web site) under the terms of this License and subject to the license grants set forth in Section 3 below, and any additional terms You may choose to offer under Section 6. You must continue to make the Source Code of Your Deployed Modifications available for as long as you Deploy the Covered Code or twelve (12) months from the date of initial Deployment, whichever is longer;
- (c) if You Deploy Covered Code containing Modifications made by You, inform others of how to obtain those Modifications by filling out and submitting the information found at <http://www.apple.com/publicsource/modifications.html>, if available; and
- (d) if You Deploy Covered Code in object code, executable form only, include a prominent notice, in the code itself as well as in related documentation, stating that Source Code of the Covered Code is available under the terms of this License with information on how and where to obtain such Source Code.

3. Your Grants. In consideration of, and as a condition to, the licenses granted to You under this License:

- (a) You hereby grant to Apple and all third parties a non-exclusive, royalty-free license, under Your Applicable Patent Rights and other intellectual property rights owned or controlled by You, to use, reproduce, modify, distribute and Deploy Your Modifications of the same scope and extent as Apple's licenses under Sections 2.1 and 2.2; and

(b) You hereby grant to Apple and its subsidiaries a non-exclusive, worldwide, royalty-free, perpetual and irrevocable license, under Your Applicable Patent Rights and other intellectual property rights owned or controlled by You, to use, reproduce, execute, compile, display, perform, modify or have modified (for Apple and/or its subsidiaries), sublicense and distribute Your Modifications, in any form, through multiple tiers of distribution.

4. Larger Works. You may create a Larger Work by combining Covered Code with other code not governed by the terms of this License and distribute the Larger Work as a single product. In each such instance, You must make sure the requirements of this License are fulfilled for the Covered Code or any portion thereof.

5. Limitations on Patent License. Except as expressly stated in Section 2, no other patent rights, express or implied, are granted by Apple herein. Modifications and/or Larger Works may require additional patent licenses from Apple which Apple may grant in its sole discretion.

6. Additional Terms. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations and/or other rights consistent with the scope of the license granted herein ("Additional Terms") to one or more recipients of Covered Code. However, You may do so only on Your own behalf and as Your sole responsibility, and not on behalf of Apple. You must obtain the recipient's agreement that any such Additional Terms are offered by You alone, and You hereby agree to indemnify, defend and hold Apple harmless for any liability incurred by or claims asserted against Apple by reason of any such Additional Terms.

7. Versions of the License. Apple may publish revised and/or new versions of this License from time to time. Each version will be given a distinguishing version number. Once Original Code has been published under a particular version of this License, You may continue to use it under the terms of that version. You may also choose to use such Original Code under the terms of any subsequent version of this License published by Apple. No one other than Apple has the right to modify the terms applicable to Covered Code created under this License.

8. NO WARRANTY OR SUPPORT. The Original Code may contain in whole or in part pre-release, untested, or not fully tested works. The Original Code may contain errors that could cause failures or loss of data, and may be incomplete or contain inaccuracies. You expressly acknowledge and agree that use of the Original Code, or any portion thereof, is at Your sole and entire risk. THE ORIGINAL CODE IS PROVIDED "AS IS" AND WITHOUT WARRANTY, UPGRADES OR SUPPORT OF ANY KIND AND APPLE AND APPLE'S LICENSOR(S) (FOR THE PURPOSES OF SECTIONS 8 AND 9, APPLE AND APPLE'S LICENSOR(S) ARE COLLECTIVELY REFERRED TO AS "APPLE") EXPRESSLY DISCLAIM ALL WARRANTIES AND/OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES AND/OR CONDITIONS OF MERCHANTABILITY OR SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. APPLE DOES NOT WARRANT THAT THE FUNCTIONS CONTAINED IN THE ORIGINAL CODE WILL MEET YOUR REQUIREMENTS, OR THAT THE OPERATION OF

THE ORIGINAL CODE WILL BE UNINTERRUPTED OR ERROR- FREE, OR THAT DEFECTS IN THE ORIGINAL CODE WILL BE CORRECTED. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY APPLE OR AN APPLE AUTHORIZED REPRESENTATIVE SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS WARRANTY. You acknowledge that the Original Code is not intended for use in the operation of nuclear facilities, aircraft navigation, communication systems, or air traffic control machines in which case the failure of the Original Code could lead to death, personal injury, or severe physical or environmental damage.

9. Liability.

9.1 Infringement. If any portion of, or functionality implemented by, the Original Code becomes the subject of a claim of infringement, Apple may, at its option: (a) attempt to procure the rights necessary for Apple and You to continue using the Affected Original Code; (b) modify the Affected Original Code so that it is no longer infringing; or (c) suspend Your rights to use, reproduce, modify, sublicense and distribute the Affected Original Code until a final determination of the claim is made by a court or governmental administrative agency of competent jurisdiction and Apple lifts the suspension as set forth below. Such suspension of rights will be effective immediately upon Apple's posting of a notice to such effect on the Apple web site that is used for implementation of this License. Upon such final determination being made, if Apple is legally able, without the payment of a fee or royalty, to resume use, reproduction, modification, sublicensing and distribution of the Affected Original Code, Apple will lift the suspension of rights to the Affected Original Code by posting a notice to such effect on the Apple web site that is used for implementation of this License. If Apple suspends Your rights to Affected Original Code, nothing in this License shall be construed to restrict You, at Your option and subject to applicable law, from replacing the Affected Original Code with non-infringing code or independently negotiating for necessary rights from such third party.

9.2 LIMITATION OF LIABILITY. UNDER NO CIRCUMSTANCES SHALL APPLE BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR RELATING TO THIS LICENSE OR YOUR USE OR INABILITY TO USE THE ORIGINAL CODE, OR ANY PORTION THEREOF, WHETHER UNDER A THEORY OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), PRODUCTS LIABILITY

OR OTHERWISE, EVEN IF APPLE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDY. In no event shall Apple's total liability to You for all damages under this License exceed the amount of fifty dollars (\$50.00).

10. Trademarks. This License does not grant any rights to use the trademarks or trade names "Apple", "Apple Computer", "Mac OS X", "Mac OS X Server" or any other trademarks or trade names belonging to Apple (collectively "Apple Marks") and no Apple Marks may be used to endorse or promote products derived from the Original Code other than as permitted by and in strict compliance at all times with Apple's third party trademark usage guidelines which are posted at <http://www.apple.com/legal/guidelinesfor3rdparties.html>.

11. Ownership. Apple retains all rights, title and interest in and to the Original Code and any Modifications made by or on behalf of Apple ("Apple Modifications"), and such Apple Modifications will not be automatically subject to this License. Apple may, at its sole discretion, choose to license such Apple Modifications under this License, or on different terms from those contained in this License or may choose not to license them at all. Apple's development, use, reproduction, modification, sublicensing and distribution of Covered Code will not be subject to this License.

12. Termination.

12.1 Termination. This License and the rights granted hereunder will terminate:

(a) automatically without notice from Apple if You fail to comply with any term(s) of this License and fail to cure such breach within 30 days of becoming aware of such breach; (b) immediately in the event of the circumstances described in Section 13.5(b); or (c) automatically without notice from Apple if You, at any time during the term of this License, commence an action for patent infringement against Apple.

12.2 Effect of Termination. Upon termination, You agree to immediately stop any further use, reproduction, modification, sublicensing and distribution of the Covered Code and to destroy all copies of the Covered Code that are in your possession or control. All sublicenses to the Covered Code which have been properly granted prior to termination shall survive any termination of this License. Provisions which, by their nature, should remain in effect beyond the termination of this License shall survive, including but not limited to Sections 3, 5, 8, 9, 10, 11, 12.2 and 13. Neither party will be liable to the other for compensation, indemnity or damages of any sort solely as a result of terminating this License in accordance with its terms, and termination of this License will be without prejudice to any other right or remedy of either party.

13. Miscellaneous.

13.1 Government End Users. The Covered Code is a "commercial item" as defined in FAR 2.101. Government software and technical data rights in the Covered Code include only those rights customarily provided to the public as defined in this License. This customary commercial license in technical data and software is provided

in accordance with FAR 12.211 (Technical Data) and 12.212 (Computer Software) and, for Department of Defense purchases, DFAR 252.227-7015 (Technical Data -- Commercial Items) and 227.7202-3 (Rights in Commercial Computer Software or Computer Software Documentation). Accordingly, all U.S. Government End Users acquire Covered Code with only those rights set forth herein.

13.2 Relationship of Parties. This License will not be construed as creating an agency, partnership, joint venture or any other form of legal association between You and Apple, and You will not represent to the contrary, whether expressly, by implication, appearance or otherwise.

13.3 Independent Development. Nothing in this License will impair Apple's right to acquire, license, develop, have others develop for it, market and/or distribute technology or products that perform the same or similar functions as, or otherwise compete with, Modifications, Larger Works, technology or products that You may develop, produce, market or distribute.

13.4 Waiver; Construction. Failure by Apple to enforce any provision of this License will not be deemed a waiver of future enforcement of that or any other provision. Any law or regulation which provides that the language of a contract shall be construed against the drafter will not apply to this License.

13.5 Severability. (a) If for any reason a court of competent jurisdiction finds any provision of this License, or portion thereof, to be unenforceable, that provision of the License will be enforced to the maximum extent permissible so as to effect the economic benefits and intent of the parties, and the remainder of this License will continue in full force and effect. (b) Notwithstanding the foregoing, if applicable law prohibits or restricts You from fully and/or specifically complying with Sections 2 and/or 3 or prevents the enforceability of either of those Sections, this License will immediately terminate and You must immediately discontinue any use of the Covered Code and destroy all copies of it that are in your possession or control.

13.6 Dispute Resolution. Any litigation or other dispute resolution between You and Apple relating to this License shall take place in the Northern District of California, and You and Apple hereby consent to the personal jurisdiction of, and venue in, the state and federal courts within that District with respect to this License. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded.

13.7 Entire Agreement; Governing Law. This License constitutes the entire agreement between the parties with respect to the subject matter hereof. This License shall be governed by the laws of the United States and the State of California, except that body of California law concerning conflicts of law.

Where You are located in the province of Quebec, Canada, the following clause applies: The parties hereby confirm that they have requested that this License and all related documents be drafted in English. Les parties ont exigé que le présent contrat et tous les documents connexes soient rédigés en anglais.

#### EXHIBIT A.

"Portions Copyright © 1999 Apple Computer, Inc. All Rights Reserved. This file contains Original Code and/or Modifications of Original Code as defined in and that are subject to the Apple Public Source License Version 1.1 (the "License"). You may not use this file except in compliance with the License. Please obtain a copy of the License at <http://www.apple.com/publicsource> and read it before using this file.

The Original Code and all software distributed under the License are distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, AND APPLE HEREBY DISCLAIMS ALL SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. Please see the License for the specific language governing rights and limitations under the License.