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Internal Technical Document

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Printers Affected	**GS, GSr, GS Pro and QS Pro**

INTERNAL USE ONLY

JDF Integration Setup

This procedure describes the steps required to set up EFI Fiery XF 4.5.2 or newer to communicate directly with a VUTEk HS100, GS, GSr, GS Pro, or QS Pro printer.

Procedure Overview

This section outlines the general procedure steps.

Introduction

It is recommended to update to the latest available version before enabling the JDF integration. The following table shows the printer software version that is required to prepare the printer for integration.

Table 1: Printer Software Versions

Model	SW Version Required
GS2000	2.1.3* or above
GS3200	2.1.3* or above
GS3250	2.1.3* or above
GS3250X	2.1.3* or above
GS3250LX	2.1.3* or above
GS3250LXr	1.0.3* or above
GS3250r	1.0.3* or above
GS5000r	1.5.1 or above
QS Pro	1.0 or above
GS Pro	3.0 or above

Advantages of Bidirectional Communication between Fiery XF RIP and VUTEk Printers

Bidirectional communication between Fiery XF and the VUTEk printer provides the important advantages listed below.

- Fiery XF receives device-specific settings from the VUTEk GS printer. The options vary depending on the connected device type. You can use these options to set up print-ready jobs. No additional settings are required at the printer.
- Fiery XF sends a message to the VUTEk printer that output files have been created. The VUTEk printer pulls the RTL data to the printer's hard disk. This happens as soon as the RTL file has been created and it is safe for the printer's electronics to transmit the print data. The job appears automatically in the print queue of the VUTEk printer.
- If the printer is not detected by Fiery XF, job processing is aborted and an accompanying error message is displayed.
- Aside from the job content, Fiery XF also sends a lot of metadata to the VUTEk printer. This is required by the printer to output the job properly. In addition to printer-specific print options, Fiery XF provides information about the number of printouts and media information.

The VUTEk printer communicates the job status back to the Fiery XF. The status messages shown in Table 2 can be displayed in Fiery XF. JDF Job status, shown in Figure 1 is located under Job Explorer.

Table 2: Fiery XF Status

Status	Description
Submitting	Fiery XF is sending job information to the VUTEk printer. Fiery XF waits for feedback from the printer that the new job has been added to the database.
Submitted	The print job has been added to the printer database, but the print data is still being uploaded.
Waiting	The print data has been successful uploaded; the job is waiting in the printer's print queue.
Printing	The job is currently being printed. The current print progress is shown as a percentage.
Printed	The print process has been completed.

- When the job has been printed, the VUTEk printer communicates job-specific information, such as media and ink usage, to Fiery XF. This information can be viewed in the **JDF Job Properties** dialog, shown in Figure 2. To open the **JDF Job Properties** dialog, click **Details** on the **Info** pane.

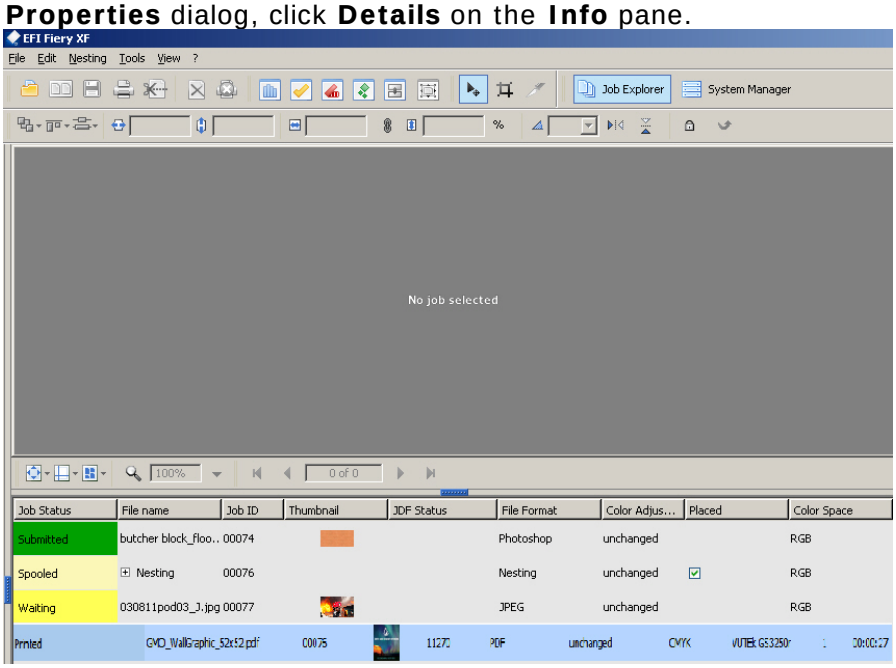


Figure 1: JDF Job Status

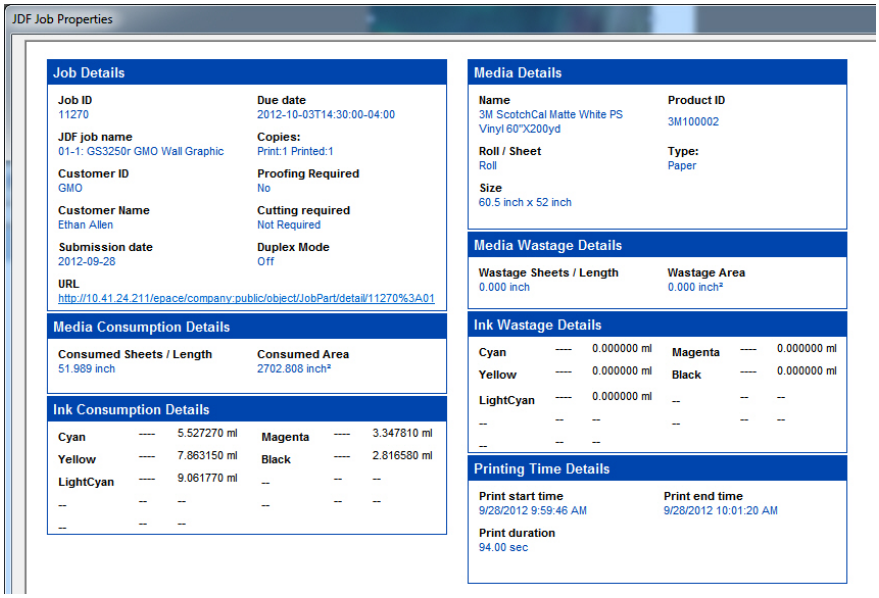


Figure 2: JDF Job Properties

Required System Components

The following system components are necessary. Verify that they are set up properly before you continue.

1. Installation of EFI Fiery XF 4.5.4 or higher
2. EFI Fiery XF 4.5.4 is running on one of the following operating systems:
   - Windows XP Professional
   - Windows 2008 Server
   - Windows 7 (Professional, Enterprise, Ultimate)
3. EFI Fiery JDF Connector must be installed and running on the same PC as EFI Fiery XF
4. Static IP address for the EFI Fiery XF server PC
5. For the integrated communication with the EFI DSF and EFI MIS, EFI Fiery needs a specific JDF license (please contact Fiery support)
6. VUTEk printer software version is configured to enable JDF communication. See Configuration of VUTEk Software.
7. Static IP address of the VUTEk workstation.

Configuration of VUTEk Software

Refer to Table 1 in the Introduction section for printer software version information needed to have the printer prepared for JDF integration.

The IP address of the VUTEk printer is displayed in the network dialog. This dialog could be opened from the **Setup** > **Network** menu as displayed in Figure 3.

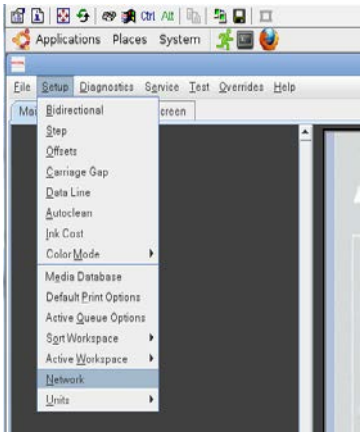


Figure 3: Network Settings

Figure 4 shows the IP address as displayed in the network dialog.

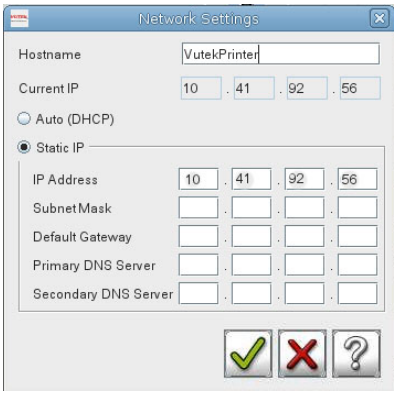


Figure 4: IP Address

Note: You *must* use a static IP.

The **About** dialog in the **VUTEk User Interface Help** menu informs the user as to whether the printer is Workflow integration enabled. This dialog is shown in Figure 5.

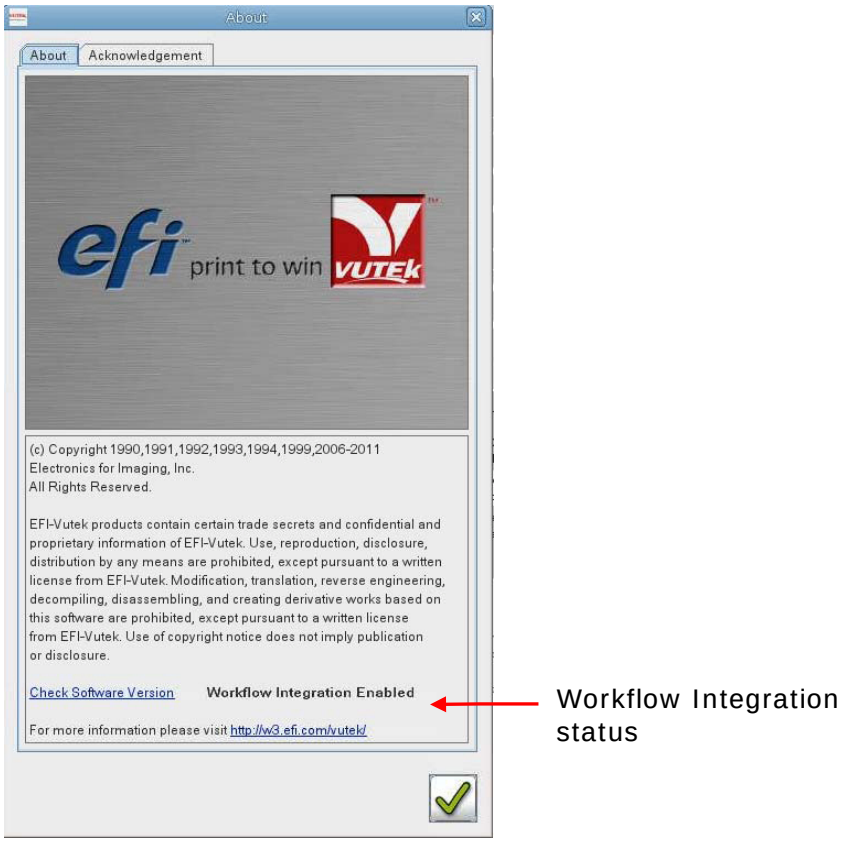


Figure 5: About dialog

Figure 6 shows how to test the connection using an internet browser. You can do this on the printer and at the RIP station.

Example: http://StaticPrinterIP:8013

Note: Your printer IP will be unique. The IP shown is just an example.

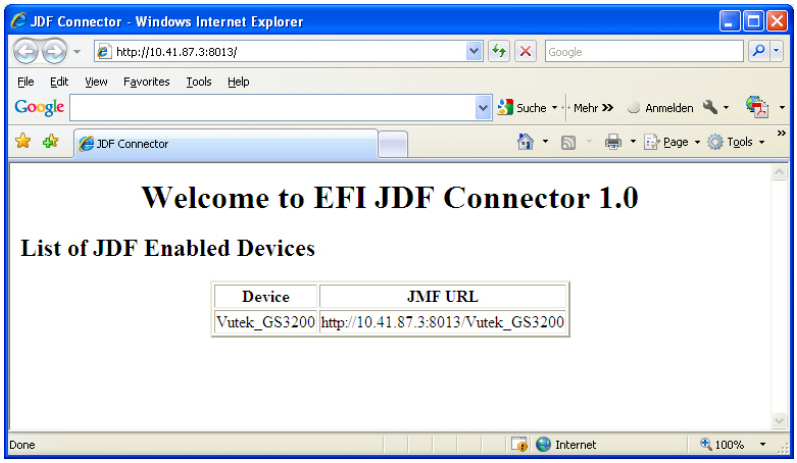


Figure 6: Test Connection Using Internet Browser

Adding Fiery Pro Server Host Information to Printer

Perform the following steps at the printer.

1. Open the terminal window and type: **sudo gedit /etc/hosts**. This will spawn the **gedit** program and open the host file as root.

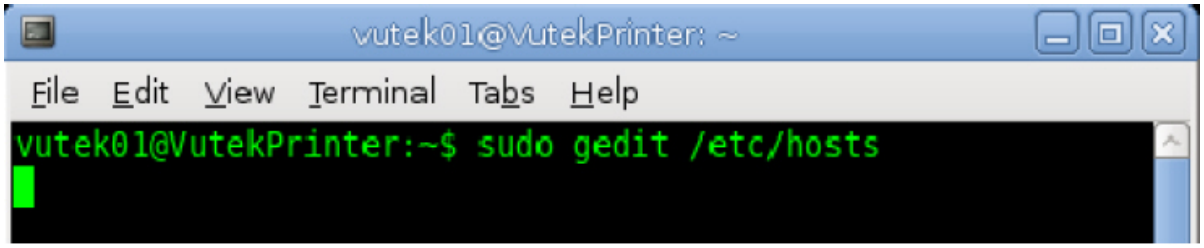


Figure 7: Terminal window at the VUTEk print station

2. Add a new line at bottom of the file specifying the ProServer static IP address and computer name, as shown in Figure 8. Do not modify any existing addresses or names listed in this file. Save the file and close the **gedit** program.

Note: There is a single space between the IP address and computer name.

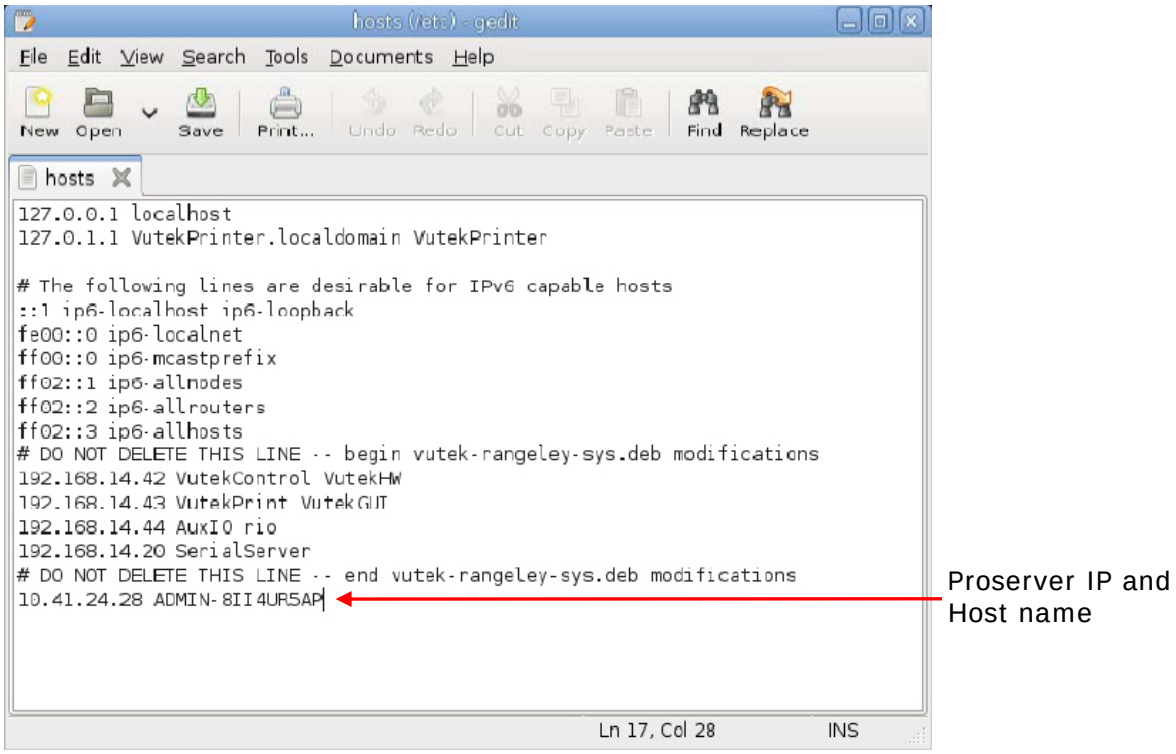


Figure 8: Editing the Host file at the VUTEk print station

3. Save the file.

4. Test the connection by ripping and sending one job from the XF to the printer. The job should show up on the VUTEk printer and reached the waiting state at the XF side.

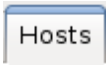
An alternative way to add the Fiery pro Server Host Information to the printer is described in the following steps.

1. On the printer desktop, click to open the **System** menu and navigate to **Administration**>**Network**.

Figure 9: Navigate to Network Settings

2. In the **Network Settings** Dialog, click the 

button. The **Authenticate** dialog box displays.
3. Enter the password **vutek01** and click on the 

button.
4. Click on the 

tab and click on 

. The **Host Alias Properties** dialog box displays.

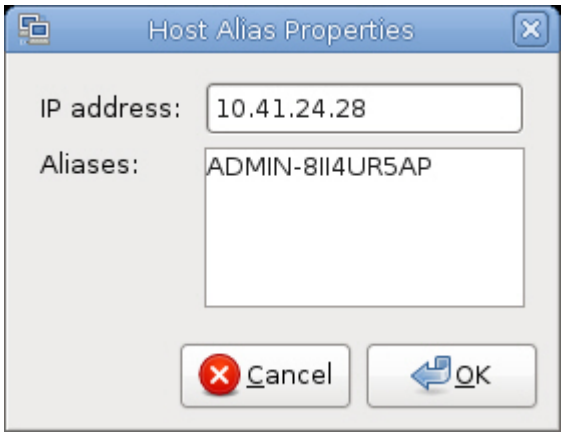


Figure 10: Host Alias Properties Dialog

Note: The IP address shown is for example only. Each ProServer address will be unique.

5. Enter the **Fiery ProServer IP** address in the text field.

6. Enter the host name in the **Aliases** text field.
7. Click 

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8. Close the **Network Settings** window 

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Setting Up for Bidirectional Communication using the EFI Fiery XF System Manager

The Device Setup pane has been modified in EFI Fiery XF 4.5.3, as shown in Figure 11.

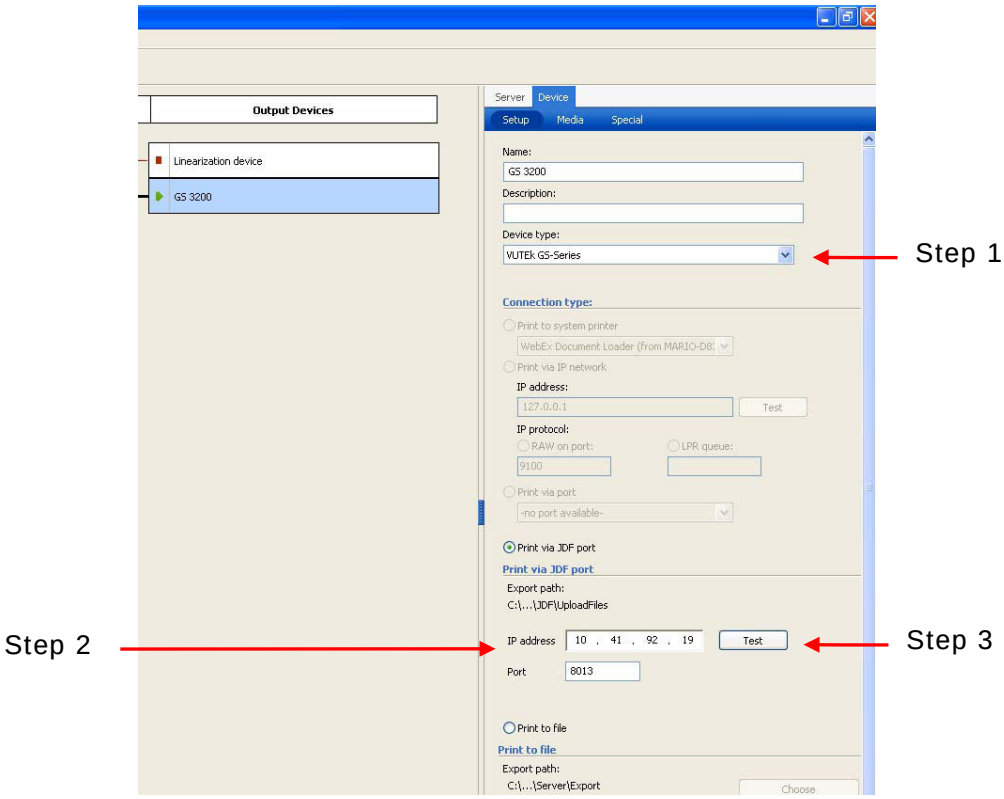

Figure 11: Device Setup Pane

Use the steps below to set up a JDF connection to the printer.

1. Define a name for the printer and select **Device Type**.
    A. Select **VUTEk GS-Series** to set up a connection to a VUTEk GS2000, GS3250, or a GS3250LX.
    B. Select **VUTEk GS-Series White** to set up a connection to any printer model listed in step A which also has a white ink option.
    C. Select **VUTEk GSr** to set up a connection to a VUTEk GS3250r or a GS5000r.
2. Type the printer IP address in the appropriate edit box to define the JDF settings. The correct IP port number is 8013.
3. Click **Test** to make sure that the connection has been correctly set up.

Important: All output devices must be set to print via JDF port.

4. In the **Device Setup** pane, click on the **Media** tab.
5. Select the media and calibration set you are going to use.

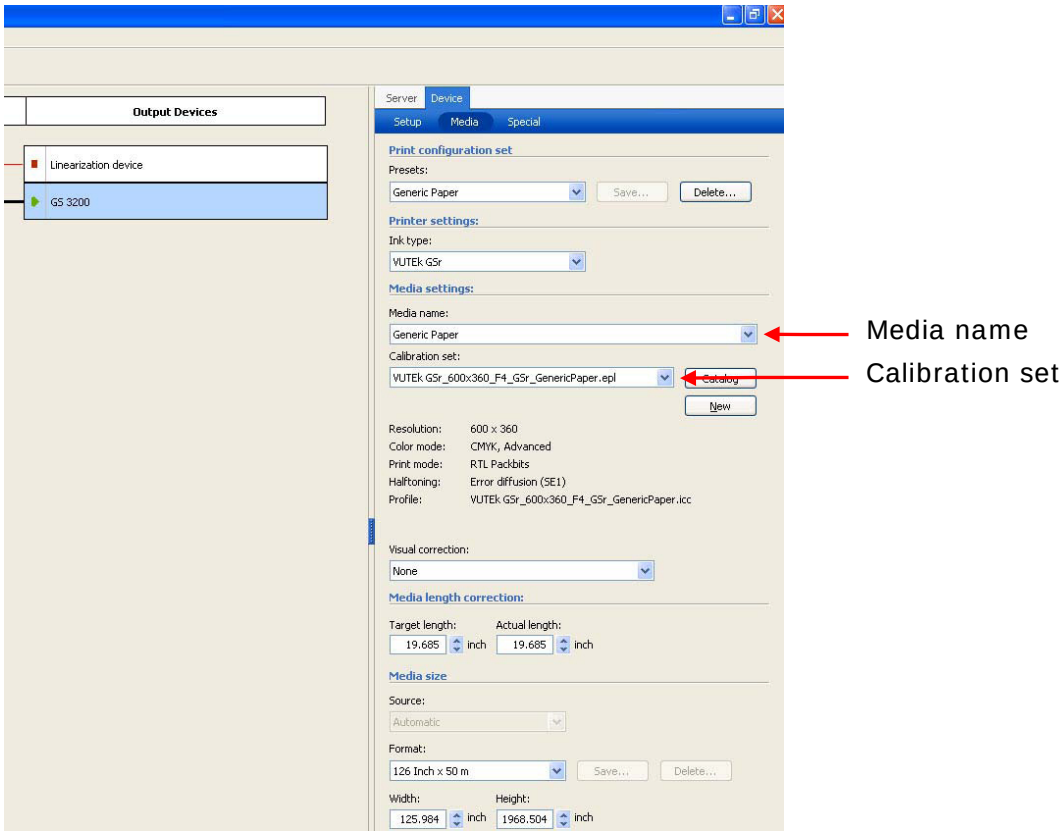

Figure 12: Media Tab

6. Click on the **Special** tab and make any VUTEk-specific settings.

When a successful connection between EFI Fiery XF and the VUTEk printer has been established, the VUTEk printer automatically communicates printer-specific settings to EFI Fiery XF. The printer-specific settings are displayed on the **Special** tab. You can now create a print-ready job in EFI Fiery XF.

The new print options are shown in Figure 13.

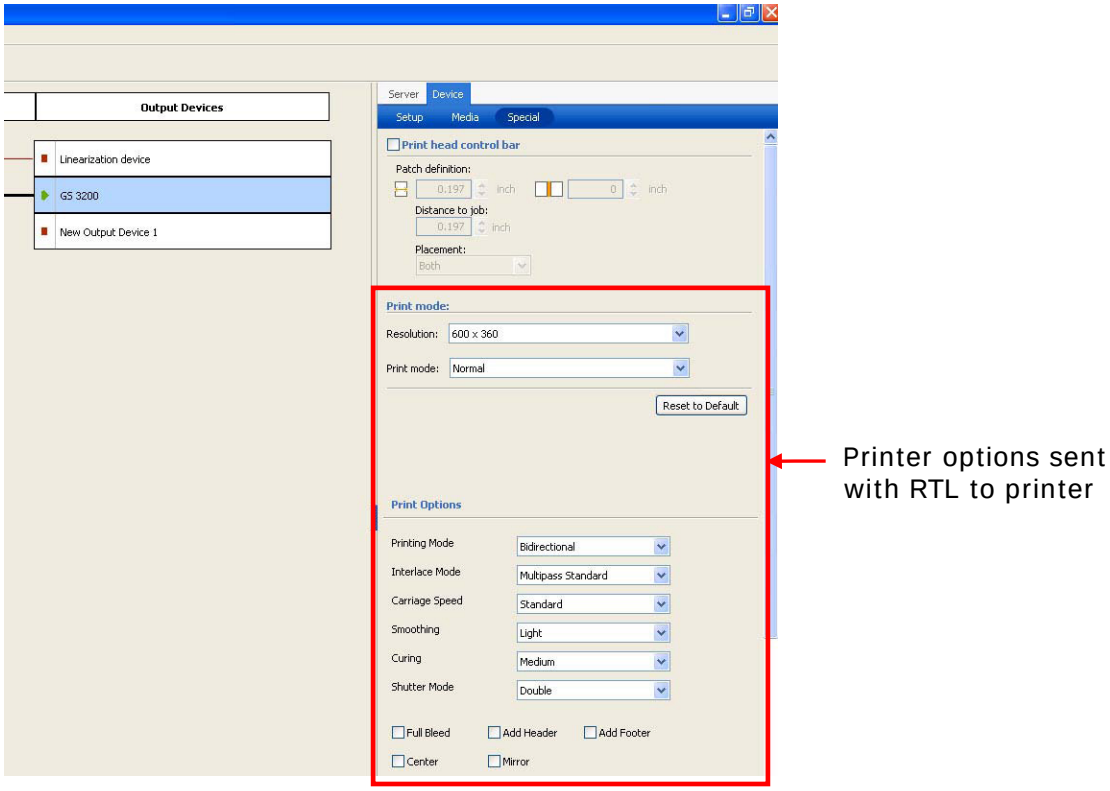

Figure 13: Special Tab- Successful connection

If the connection was not successful, the Special tab remains empty, as shown in Figure 14. If the print options are not populated, check for JDF connection using your internet browser.

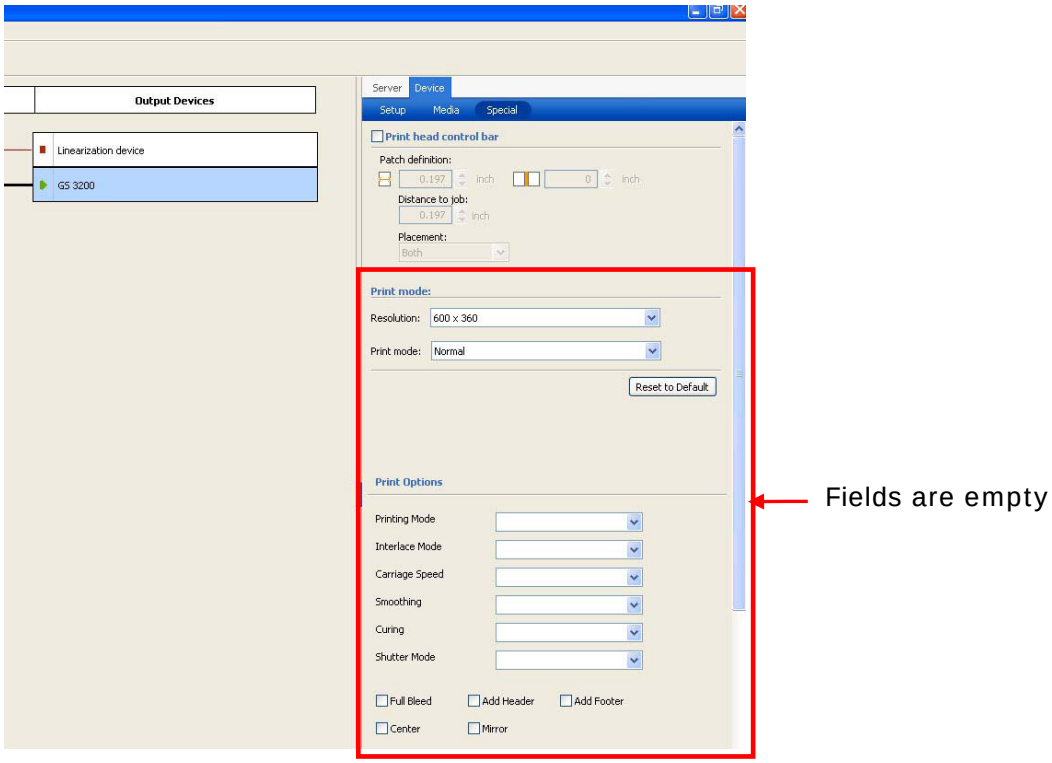

Figure 14: Special tab- Unsuccessful connection

JDF http Folder Registration

Since the JDF port module is now able to communicate with the VUTEk printer, it is no longer necessary to have a separate output folder for each VUTEk printer. The jobs may be written to one folder, and the EFI Fiery XF server sends a link to the proper print data to the connected VUTEk printer. By default, the output folder is located in the EFI Fiery XF working folder.

It is possible to define a different location for the JDF file. You can do this by choosing the command **JDF http folder registration** in the **Edit** menu of **System Manager** and browsing to another folder, as shown in Figure 15. For performance purposes, it is recommended that you choose a folder located on a different hard disk.

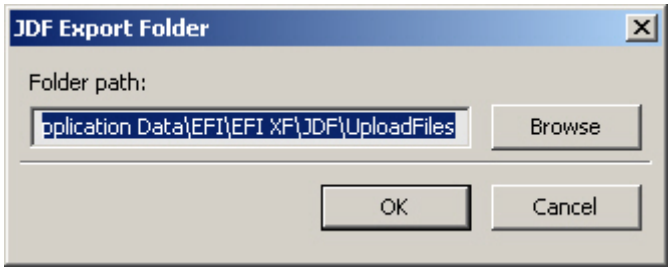

Figure 15: JDF http folder registration window

Note: For each output device listed, you will need to click **OK** on the **JDF http Folder registration Dialog**.

Fiery Pro Server Windows Requirements

1. Switch off the system firewall. If this is not allowed by the customer, please ensure that the following exceptions are added to the firewall setting.

Note: Most of the exceptions are automatically added from the Fiery XF setup.

Note: Depending on whether you have a newer or older version Proserver, you may not need to disable the system firewall. In newer versions, the required ports are already open.

Table 3: Port Assignments

Ports	Reason
8020, 8022, 8030, 8032	JDF Integration
27000-27009	License Management / Cut Server
50005-50026	General communication between the XF Server and Client/Job Monitor
8010	Used in conjunction with a proxy server
4108	Used in conjunction with the Epson Spectroproofer
60000	Used for license management / Cut Server