

# Adobe®

# JDF Solutions



## Reliable JDF Job Ticketing with Adobe Creative Suite 2

JDF – Job Definition Format – is well-known in the print production community, but virtually unknown within the graphic design community. That is about to change. JDF technology has been integrated into Adobe® Creative Suite 2 software, and for the first time content originators will have the ability to use this industry standard job ticketing format to describe their jobs electronically, right on the desktop.

### What is JDF?

JDF is an XML-based file format standard for information exchange in the graphic arts environment. In the context of Adobe Creative Suite 2, JDF is a job ticketing, or job intent, file format, designed to bridge the communication gap between creative professionals and the print production team.

It's difficult to overstate the importance of standards. In 1985, Adobe PostScript® technology ushered in the era of desktop publishing. Before then, every system was completely and totally proprietary. Operators were burdened with steep learning curves, and the expertise gained on one piece of equipment could not be applied to another. PostScript, the device-independent page description standard changed all that, and giant strides were made.

The PDF standard marked another milestone. Documents created in any application, on any computer platform, suddenly became accessible to all. Today, PDF files are ubiquitous in the graphic arts environment because they are viewable, small, and most importantly, *portable* from one computer to the next, one stage of production to the next.

In the same way, JDF is a device-independent, vendor-neutral format. It is an international standard, developed by a consortium of graphic arts vendors too numerous to list, but initiated and led by Adobe, Agfa, Heidelberg, and MAN Roland. Whereas PostScript describes *pages* and PDF describes *documents*, JDF describes *jobs*.

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### GLOSSARY

#### CIP3/CIP4

CIP4 is the International Cooperation for the Integration of Processes in Prepress, Press and Postpress (CIP4). CIP4 today is an international, worldwide operating standards body located in Switzerland. The purpose of the association is to encourage computer based integration of all processes that have to be considered in the graphic arts industry, in particular the specification of standards, such as the Job Definition Format.

#### Computer Integrated Manufacturing (CIM)

Computer integrated manufacturing is a vast concept for digitizing, automating and integrating print production processes. Advances in technology have led to workflow being widely viewed as a digital continuum, from file creation to final output. This shared vision meets with the industry's move toward CIM and implementation of the JDF (Job Definition Format) specification.

#### Extensible Markup Language (XML)

XML stands for EXtensible Markup Language, a markup language much like HTML that was designed to describe data. XML tags are not predefined. XML uses a Document Type Definition (DTD) or an XML Schema to describe the data.

## JDF Files Are Extensible

While there are similarities between PostScript and PDF, on the one hand, and JDF, on the other, there are also significant differences. One of the most important differences is the fact that a JDF file is *extensible*, whereas PostScript and PDF files are not. PostScript and PDF files are either complete and correct, in which case they can be processed, or they are incomplete and incorrect, in which case they are unusable. Conversely, because JDF is based on the Extensible Markup Language (XML), JDF files can be added to as job information is gathered throughout the premedia and printing processes by people with different job functions. A JDF file can start its life as a high-level job definition describing only a rough outline and evolve into a detailed product description complete with all the necessary manufacturing particulars.

### Where is the JDF File Initiated?

Before Adobe Creative Suite 2, JDF job tickets were predominantly initiated at the print production site, usually by a Customer Service Representative, who had to manually transcribe the information gleaned from discussions with the graphic designer. As most of us know from practical experience, this process lends itself to misunderstanding and error. Often three parties are involved: the customer, the graphic designer, and the CSR at the printing plant; the children's game of "Telephone" all too often describes the unfortunate results. Furthermore, even when communication is perfect, inadvertent typos can cause disaster.

### Adobe Creative Suite 2: The Missing Link in the JDF Workflow

Communication problems and unnecessary rework and delay can be ameliorated by digitally capturing job information upstream, in a standard job description file. With this goal in mind, Adobe has provided content originators with the ability to create JDF files on the desktop, directly within Adobe Creative Suite 2 Professional.

A basic job description might include:

- number of pages;
- trim page size;
- print quantity;
- type of binding;
- inks (colors);
- desired stock;
- cover type (separate cover or self-cover); and
- contact information.

## JDF Job Tickets, Verified Content, and Print-Ready PDF

Content originators can generate JDF job tickets from Adobe Creative Suite 2 in a number of different ways, depending on the current status of the job, the PDF conversion and preflight requirements designated by the print provider, and personal preference.

### Initiating JDF Job Tickets from Acrobat® 7

JDF job tickets can be generated directly from within Acrobat 7 software, based on a JDF “template” that has been supplied by the print provider. These templates typically include PDF conversion settings, preflight profiles, and may also include other commonly-used job specifications.

### Initiating JDF Job Tickets from InDesign® CS2

Using the PDF Export function from within InDesign CS2, graphic designers can choose to create a JDF job ticket by simply clicking on a checkbox on the Advanced dialog. In this scenario, standard PDF conversion settings (formerly called Acrobat® Distiller® Job Settings) are utilized during the PDF Export task. Job ticket information is then completed within Acrobat 7 Professional.

### Preflight and Verification

The ability to embed PDF conversion and preflight settings in a JDF ensures the integrity of the files before the job enters print production.

Most importantly, however, Adobe Creative Suite 2 performs a *comparison* between the job definition in the job ticket and the properties of the assigned files. Any inconsistencies or discrepancies in page sizes, inks, and/or the number of pages available in the associated documents result in an error. In other words, files are not only preflighted, they are *verified*.

Verification is a qualitative leap above preflight, and is of course impossible without a job description. Standalone preflighting cannot detect extra pages or missing pages, for example, nor can it detect page size discrepancies or too many spot colors. This important feature will surely prevent many of the errors that cause frustration, delay production, and hurt the bottom line.

### Submission Options

Once the JDF and associated content files have been converted to PDF, preflighted, and verified, they can be packaged into a single MIME (Multipurpose Internet Mail Extensions) file. MIME is a specification for formatting non-ASCII messages so they can be sent over the Internet, ensuring they do not get separated from each other.

The JDF package is then submitted to the print production site, either manually (attached to email) or automatically (for example, sent to the URL of a JDF-enabled MIS system).

## WHITE PAPER

### GLOSSARY

#### JDF (Job Definition Format)

The Job Definition Format is a comprehensive XML-based file format/proposed industry standard for end-to-end job ticket specifications combined with a message description standard and message interchange protocol.

#### JMF (Job Messaging Format)

A communication format with multi-level capabilities – the command and control language that is an integral part of JDF. JMF is specified within the JDF Specification – it is not a separate CIP4 standard.

#### Production Automation

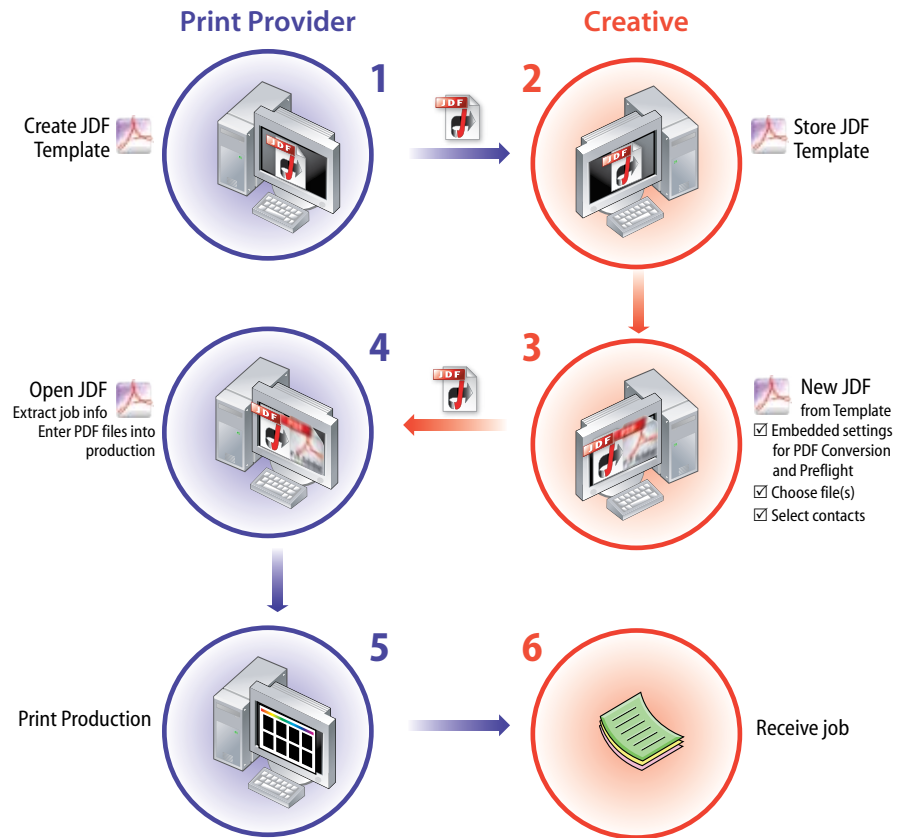
Use of a centralized computer to monitor costing, workflow, job status, pressroom efficiency, billing and other administrative and production processes critical to the concept to fulfillment process of print production.

*"JDF is to printing as ASTM standards are to the building industry. As long as all my studs are built to the same standard, I know they will fit together well in the homes I build. What that standard is and how it works are not important to me. This is where we would like JDF to take our industry."*

Tim Daisy,  
chairman, networked graphic  
production, Creo Americas

*"JDF in the Graphic Arts,"  
Digital Output, June 2005*

## Creative Suite 2 JDF Workflow, with Template

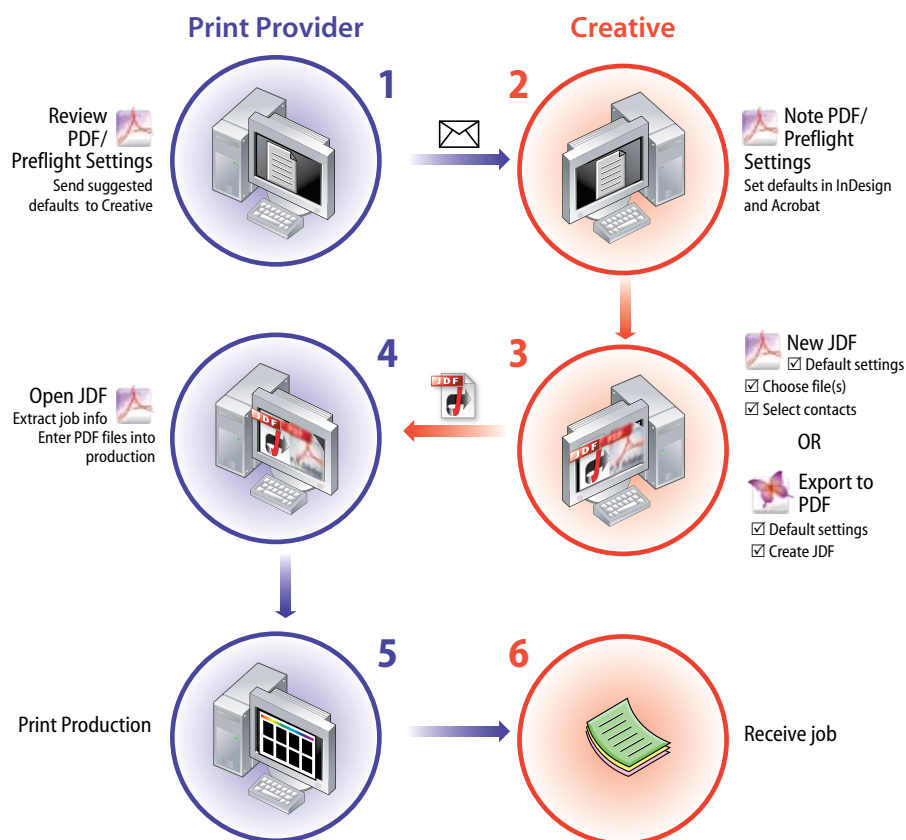


### Creative Suite 2 JDF Workflow, with Template

Using a JDF Template supplied by their print providers, creative professionals can quickly and easily create print-ready and preflighted PDFs and package them with a JDF job ticket.

- 1 Print Provider:** Create a JDF Template with embedded settings for PDF Conversion and Preflight. Send the Template to the creative professional.
- 2 Creative Professional:** Store the Template anywhere on the network.
- 3 Creative Professional:** Use the Template to create a new JDF. Fill out the job ticket and add the content file(s). Submit the JDF: a package is created containing the job ticket and the PDF content, converted and preflighted according to print provider specifications.
- 4 Print Provider:** Open the JDF package in Acrobat 7 Professional, which unpacks the job ticket and the PDF file(s). Enter the job into production.
- 5 Print Provider:** Process the job according to the specifications in the JDF job ticket. Add information to the JDF as necessary.
- 6 Creative Professional:** Receive the printed job.

## Creative Suite 2 JDF Workflow, without Template



### Creative Suite 2 JDF Workflow, without Template

Even without a JDF Template, creative professionals can create print-ready and preflighted PDFs and package them with a JDF job ticket.

- 1** Print Provider: Communicate suggested PDF Conversion and Preflight settings to the Creative Professional.
- 2** Creative Professional: Set default PDF Conversion and Preflight settings. Acrobat 7 and InDesign CS2 utilize the same settings for PDF Conversion.
- 3** Creative Professional: Create a new JDF using the suggested settings. Fill out the job ticket and add content file(s). Submit the JDF: a package is created containing the job ticket and the PDF content, converted and preflighted according to print provider specifications.
- 4** Print Provider: Open the JDF package in Acrobat 7 Professional, which unpacks the job ticket and the PDF file(s). Enter the job into production.
- 5** Print Provider: Process the job according to the specifications in the JDF job ticket. Add information to the JDF as necessary.
- 6** Creative Professional: Receive the printed job.

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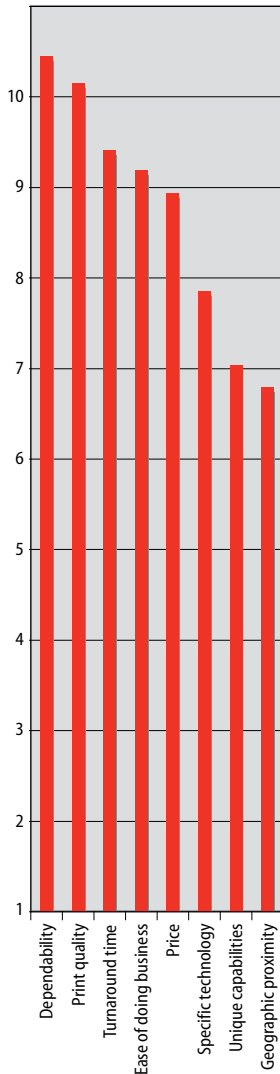
*"Saying it is just about the job ticket makes it sound small. JDF enables automation across the print shop, which is no small task."*

Margaret Motamed,  
chief marketing officer, CIP4

*"JDF in the Graphic Arts,"  
Digital Output, June 2005*

## WHITE PAPER

### TOP EIGHT CRITERIA USED TO SELECT A PRINT SERVICES PROVIDER





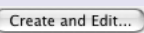
Scale: 1–10; 10=very important

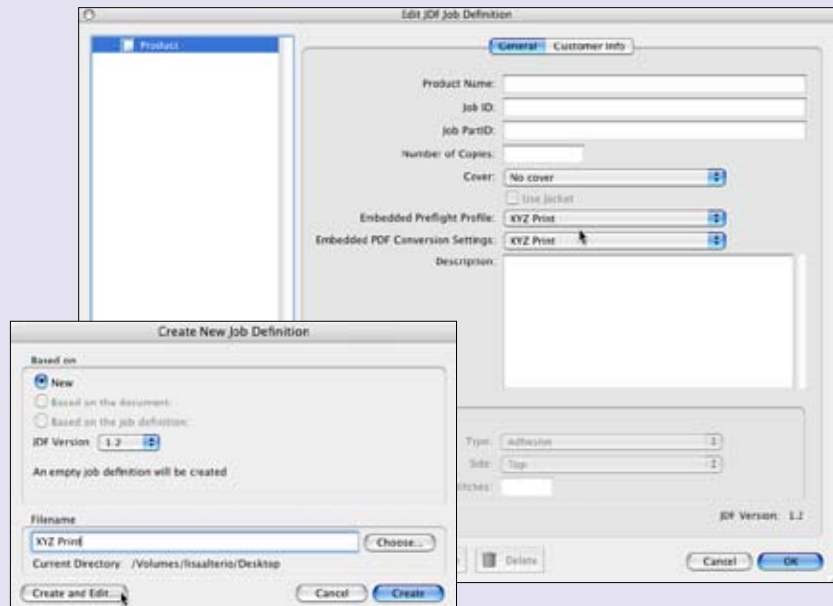
Source: "The Advertising Agency's Role in Marketing Communications Demand Creation," Barbara A. Pellow, Patricia Sorce, Franziska Frey, et. al., R.I.T. Printing Industry Center, October 2003.

## PRINT PROVIDER SETUP

### JDF Workflow, with Template

Supplying your customers with a JDF Template is a quick and easy way to ensure that the JDF packages you receive contain verified, print-ready PDF files. Follow these steps to create and save a JDF Template.

- 1 From Acrobat 7 Professional, display the JDF dialog by selecting JDF  from the Print Production Toolbar.
- 2 Click  to create a new JDF file:
- 3 Enter a filename, for example, your company name, select a location, then click .



- 4 Select Preflight Profile and PDF Conversion settings. These selections are embedded when the template is used to create a JDF.
- 5 The JDF Template can be attached to an email or posted on your website for download.

### JDF Workflow, without Template

Creative Suite 2 ships with a selection of standard PDF Conversion settings and Preflight Profiles. The PDF/X standard was developed specifically for print, and you may wish to recommend that your clients use one of the PDF/X variations available. **NOTE:** PDF Conversion settings are identical for Acrobat 7 and InDesign CS2.

### Instructions to Your Clients

Your client will need to know how to configure the JDF **Submission Manager**, **Contacts Manager**, and **Media Manager** within Acrobat 7 Professional. These procedures are fully explained in the next section, "Creative Professional Setup."



## CREATIVE PROFESSIONAL SETUP

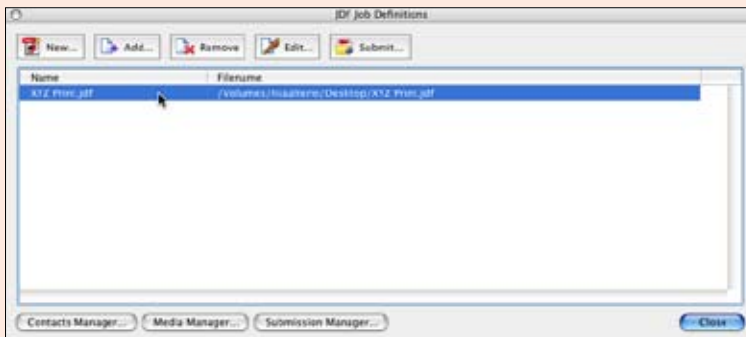
### JDF Workflow, with Template

Follow these procedures to configure Acrobat 7 Professional for a JDF workflow with Template.

#### Adding the JDF Template



The JDF Template can be stored in any location on your network. To make the Template accessible, it must be added using the JDF dialog of Acrobat 7. Follow these steps to add the Template.

- 1 Display the JDF dialog by selecting JDF  from the Print Production Toolbar.
- 2 Click  to load the JDF Template.
- 3 Navigate to the location of the stored Template and click **Open**. The Template appears on the list of JDF files:



#### Setting Up the Submission Manager

You can create a Submission setup for each print provider using the **Submission Manager**. Follow these steps to create a Submission setup.

- 1 To display the existing Submission setups, click .
- 2 To create a new Submission setup, click .
- 3 Name the setup and select your **Pre-Submission** and **Submission** options.



“Unspecified” – this setting is Embedded.

Enable this option to validate your PDF files against the JDF job definition.

Not recommended for PDF/X workflows, but may be appropriate for other workflows.

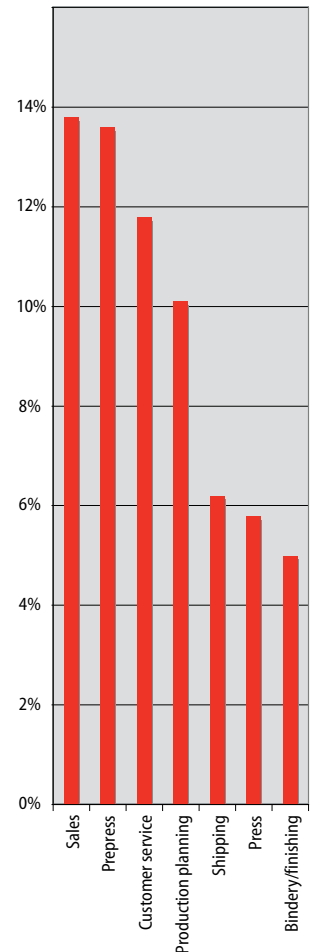
“Unspecified” – this setting is Embedded.

Use this option when submitting directly to a JDF-enabled MIS system. JMF stands for Job Messaging Format, part of the Job Definition Format specification.

Use this option when submitting via FTP or email.

## WHITE PAPER

### PERCENTAGE OF JOBS DELAYED IN THE FOLLOWING DEPARTMENTS DUE TO MISSING OR WRONG INFORMATION



Source: “Digital Integration and the Lean Manufacturing Practices of U.S. Printing Firms,” Frank J. Cost and Brett J. Daly, R.I.T. Printing Industry Center, October 2003.



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*"JDF isn't a system or a process, and it is not an application. It is simply an information standard for passing information between different processes in a workflow or different constituents."*

Jess Walker,  
senior product manager,  
Adobe

*"JDF in the Graphic Arts,"  
Digital Output, June 2005*

### Setting Up the Contacts Manager

Use the **Contacts Manager** to set up a database of personnel involved in the process of ordering, creating, and receiving printed materials. Contacts from this database are selected when the JDF is created, enabling the printer to get in touch with the right person for approvals, delivery, billing, etc. Follow these steps to create a database of personnel using the **Contacts Manager**.

- 1 To display the existing database of personnel, click **Contacts Manager...**.
- 2 To create a new contact, click **Add...**:
- 3 Enter all the information that is known, preferably including one or more "Communication Channels" (how to reach that person).

The screenshot shows the 'Contact Information' dialog box. It contains fields for Title (Mr), First Name (Jay), Last Name (Deff), Job Title (Print Buyer), Company (Four Seas), Address (Number & Street: 2055 Standards Street, City: Progress, State: AA, Postal or Zip, Code: 12345, Country), and Communication Channels. The Communication Channels section has a table with columns Type, Usage, and Locator. One entry is shown: Phone Mobile, Business, 555-234-5678. There are buttons for Add..., Remove, Edit..., Cancel, and OK.

### Setting Up the Media Manager [Optional]

Paper stock can be specified using the **Media Manager**, if desired. Follow these steps to create a paper stock using the **Media Manager**.

- 1 To display the existing database of paper stocks, click **Media Manager...**.
- 2 To create a new paper stock, click **Add...**.
- 3 Enter only the information that is known. For example, your paper stock description might only include a stock name and/or type, and weight.

The screenshot shows the 'Media' dialog box. It contains fields for Description (No. 2 gloss house sheet 100# text), Media type (Unspecified), User Media Type (Unspecified), Color (Unspecified), Shade (None), Thickness (microns), Weight (g/m2), Grain Direction (Unspecified), Opacity (Unspecified), Opacity Level (%), Texture (Unspecified), Front Coating (Unspecified), Back Coating (Same as Front Coating), Stock Brand, Stock Type (Unspecified), Brightness (%), and Recycled Amount (%). There are buttons for Cancel and OK.



## CREATIVE PROFESSIONAL SETUP

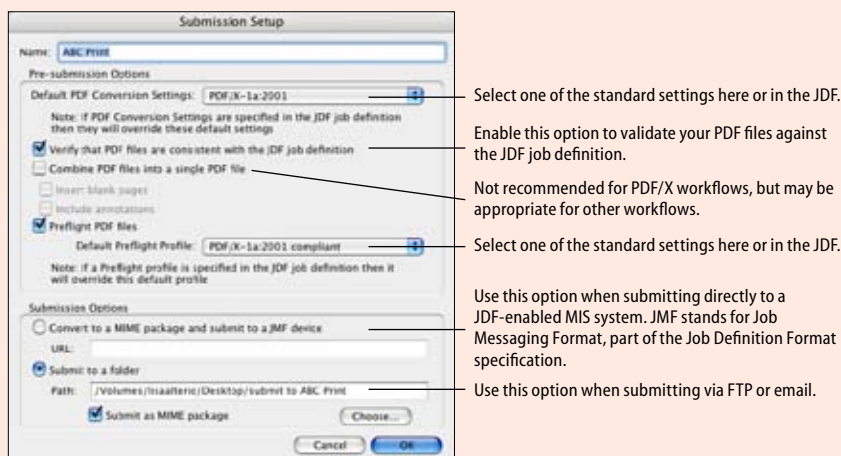
### JDF Workflow, without Template

If you will not be using a JDF Template, use one of the standard settings provided with Creative Suite 2 for PDF Conversion and Preflight.

#### Setting Up the Submission Manager

You can create a Submission setup for each print provider using the **Submission Manager**. Follow these steps to create a Submission setup.

- 1 To display the existing Submission setups, click **Submission Manager...**.
- 2 To create a new Submission setup, click **Add...**.
- 3 Name the setup and select your **Pre-Submission** and **Submission** options.



#### Contacts Manager / Media Manager

Follow the instructions on page 8 for setting up the **Contacts Manager** and the **Media Manager** [optional].

## CREATIVE PROFESSIONAL – JOB SUBMISSION

### Creating JDF Files

There are three ways to create a JDF using Creative Suite 2.

1. **From Acrobat 7, with Template.** Settings for Preflight and PDF Conversion are embedded. A new JDF is created from an existing one; all Product, Section, and File data is entered manually.
2. **From Acrobat 7, without Template.** Settings for Preflight and PDF Conversion, if left “Unspecified” in the JDF, are dictated by the defaults specified in the **Submission Manager**. A new, empty JDF is created, and all Product, Section, and File data is entered manually.
3. **From InDesign CS2 based on Document (no template).** A new JDF is created based on the PDF file exported from InDesign. PDF Conversion setting is selected in InDesign. Preflight setting, if left “Unspecified” in the JDF, is dictated by the default specified in the **Submission Manager**. Product data is entered manually, but Section and File data is automatically filled in by Acrobat, based on the PDF file.

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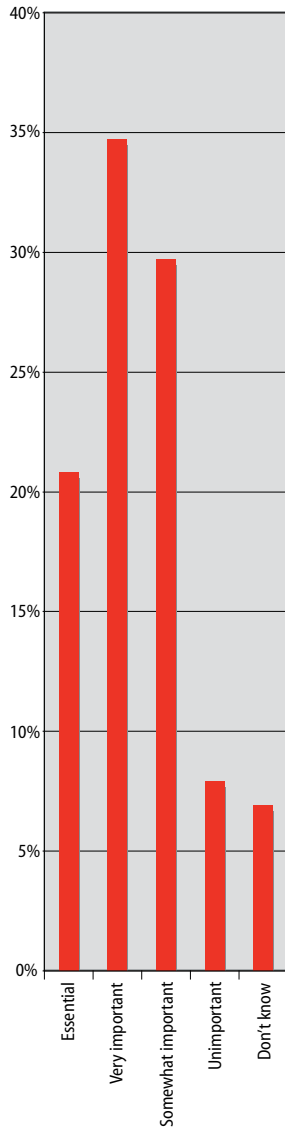
*“JDF is setting a standard within the graphics industry to provide more interoperability among different products and vendors, and is a great resolution for the industry to improve their overall production return on investment (ROI). JDF is still in its infancy.”*

**Michele Zajac,**  
workflow product manager,  
Screen USA

*“JDF in the Graphic Arts,”*  
*Digital Output, June 2005*


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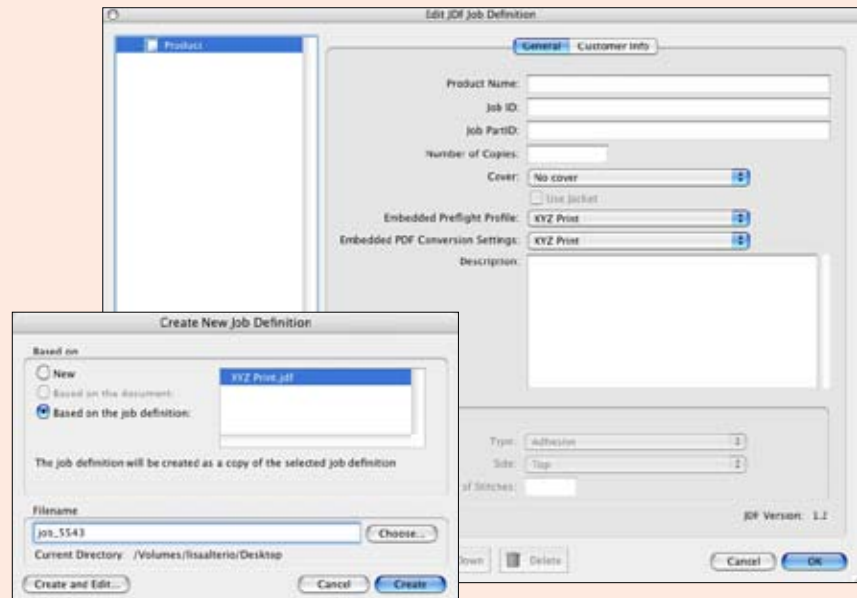
HOW IMPORTANT DO YOU BELIEVE CIM WILL BE TO THE FUTURE PROFITABILITY OF YOUR BUSINESS?



Source: "Digital Integration and the Lean Manufacturing Practices of U.S. Printing Firms," Frank J. Cost and Brett J. Daly, R.I.T. Printing Industry Center, October 2003.


### Creating a JDF with a Template

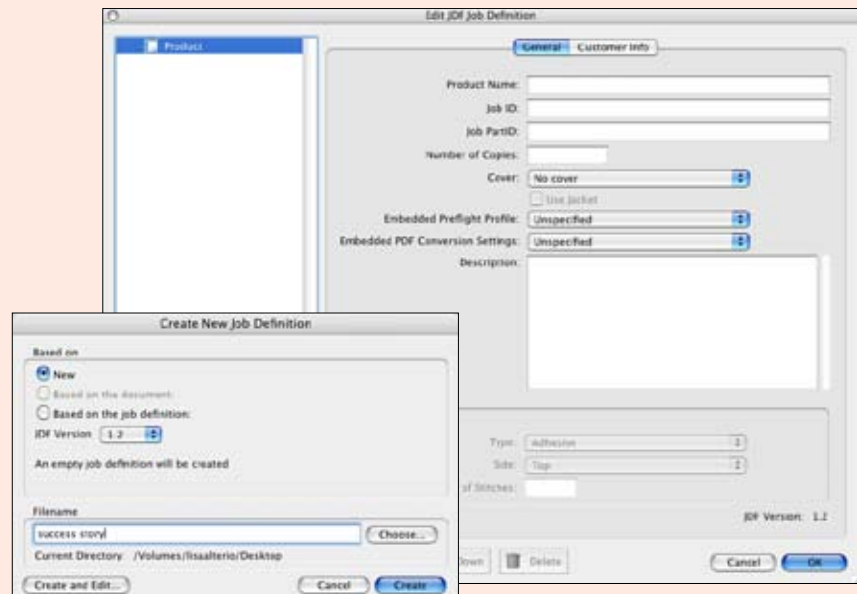
- From the JDF dialog in Acrobat 7, click  **New...** to create a new JDF. Choose **Based on the job definition** then select the Template.



- Enter a filename, choose a location, then click **Create** or **Create and Edit...**. Note that the selections for Preflight and PDF Conversion are **Embedded**.

### Creating a JDF without a Template

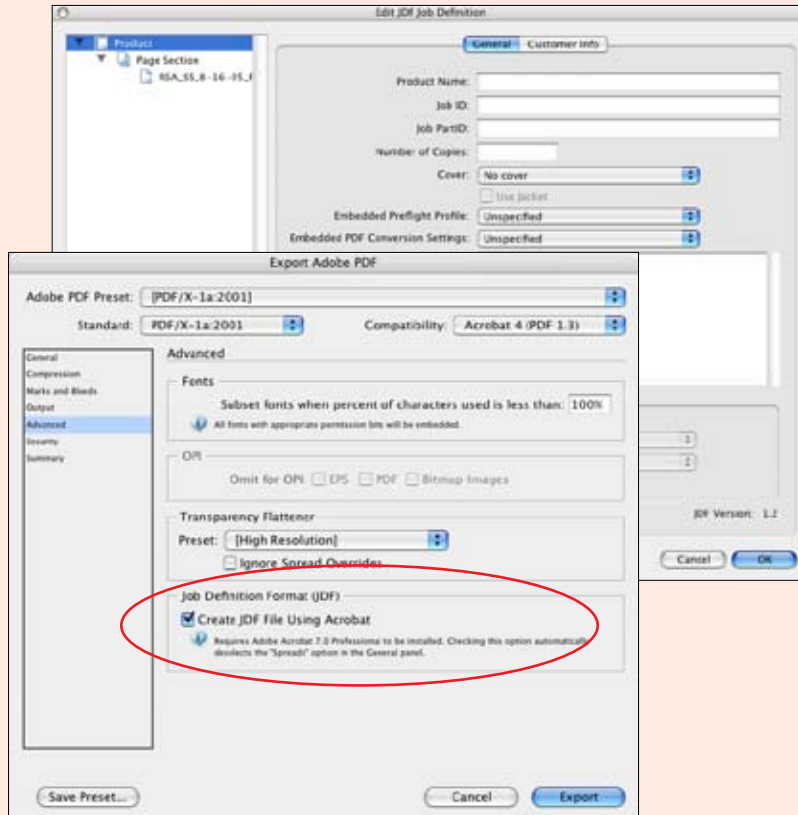
- From the JDF dialog in Acrobat 7, click  **New...** to create a new JDF.



- Enter a filename, choose a location, then click **Create** or **Create and Edit...**. Note that the Preflight and PDF Conversion settings are **Unspecified**. Any settings you select in the JDF job ticket will override defaults selected in the Submission Manager.

## Creating a JDF from InDesign CS2

You can create a JDF from InDesign CS2 using the File > Export function. Simply select **Create JDF File Using Acrobat** on the Advanced dialog. InDesign exports the PDF, creates a JDF with the same root name as the PDF, and adds the JDF to the list of job tickets on the JDF dialog in Acrobat.

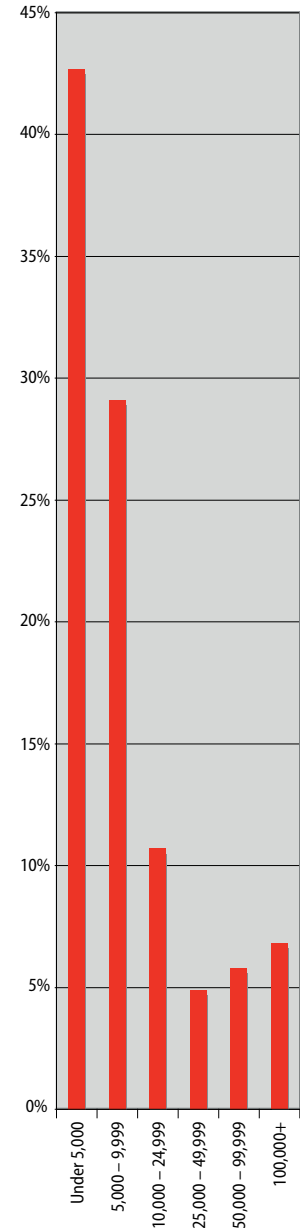


JDF files created this way require you to enter Product information and select the Preflight Profile manually, but Section and File information are automatically added to the JDF, based on the exported PDF.

**NOTE:** Because all Section and File information are added to a JDF created this way, you can skip steps 3, 4, and 5 in the next section, “Filling Out the Job Ticket.”

## WHITE PAPER

### AVERAGE RUN LENGTH



Source: “Digital Integration and the Lean Manufacturing Practices of U.S. Printing Firms,” Frank J. Cost and Brett J. Daly, R.I.T. Printing Industry Center, October 2003.

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*"The digital age, Internet, and e-mail have all made it possible to get a job from completion of the creative process to 'ready to run' in less than an hour. But many print providers do not have the infrastructure to handle that kind of workflow on the front end. This is part of the reason you will hear a lot about JDF (Job Definition Format) over the next few years, and there will be a compelling need to implement it in digital workflows."*

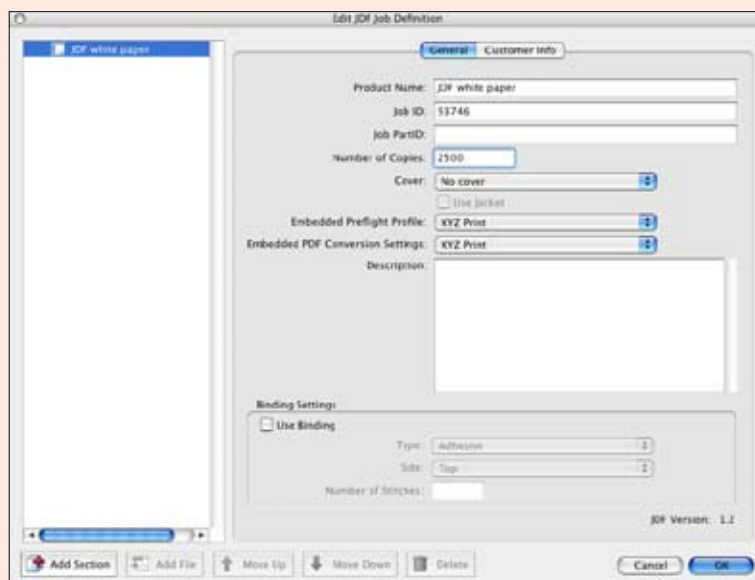
Stephen Beals,  
digital prepress manager,  
Finger Lakes Press

"JDF: Helping Turnaround,"  
a column by Stephen Beals  
[www.bigpicture.net](http://www.bigpicture.net),  
posted 02-07-2005

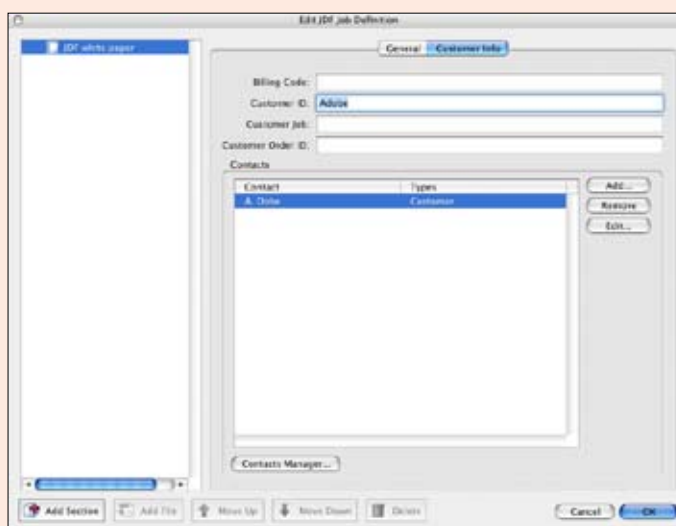
## Filling Out the Job Ticket: With and Without a JDF Template

After the JDF has been created, fill out as much information as you know about the job. Follow these steps to complete your JDF job ticket.


- 1 Enter general job specifications on the **General** tab. Enter only the information you are sure of. Binding specifics, for example, can be added later in the production cycle.

The screenshot shows the 'Edit JDF Job Definition' dialog box with the 'General' tab selected. The 'Product Name' is 'JDF white paper', 'Job ID' is '53746', and 'Job Part ID' is empty. 'Number of Copies' is set to '2500'. The 'Cover' dropdown is set to 'No cover'. 'Embedded Preflight Profile' and 'Embedded PDF Conversion Settings' are both set to 'XYZ Print'. The 'Description' field is empty. Under 'Binding Settings', 'Use Binding' is unchecked. 'Type' is 'Adhesion', 'Size' is 'Top', and 'Number of Stitches' is empty. The 'JDF Version' is '1.2'. At the bottom are buttons for 'Add Section', 'Add File', 'Move Up', 'Move Down', 'Delete', 'Cancel', and 'OK'.

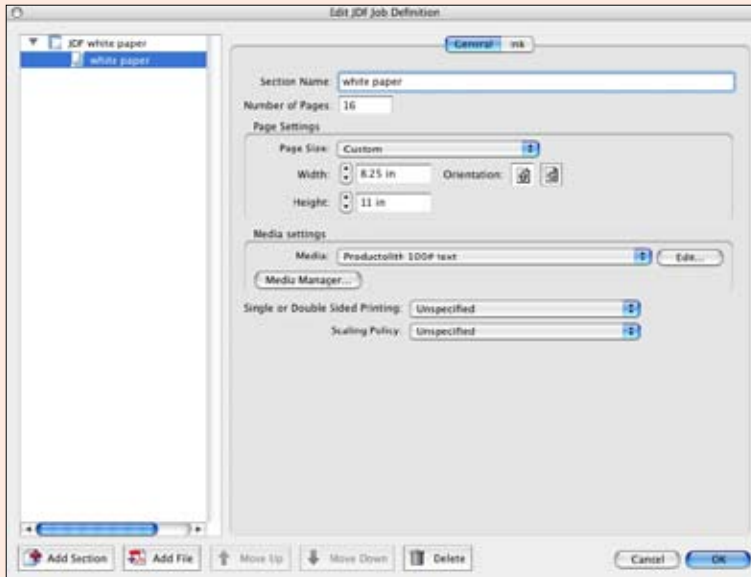
- 2 Click the **Customer Info** tab to select the contacts for this job.

The screenshot shows the 'Edit JDF Job Definition' dialog box with the 'Customer Info' tab selected. 'Billing Code' is empty. 'Customer ID' is 'Adobe'. 'Customer Job' and 'Customer Order ID' are empty. The 'Contacts' section has a table with columns 'Contact' and 'Types'. The 'Contact' column contains 'A. Choe' and the 'Types' column contains 'Customer'. To the right of the table are buttons for 'Add...', 'Remove', and 'Edit...'. Below the table is a 'Contacts Manager...' button. At the bottom are buttons for 'Add Section', 'Add File', 'Move Up', 'Move Down', 'Delete', 'Cancel', and 'OK'.

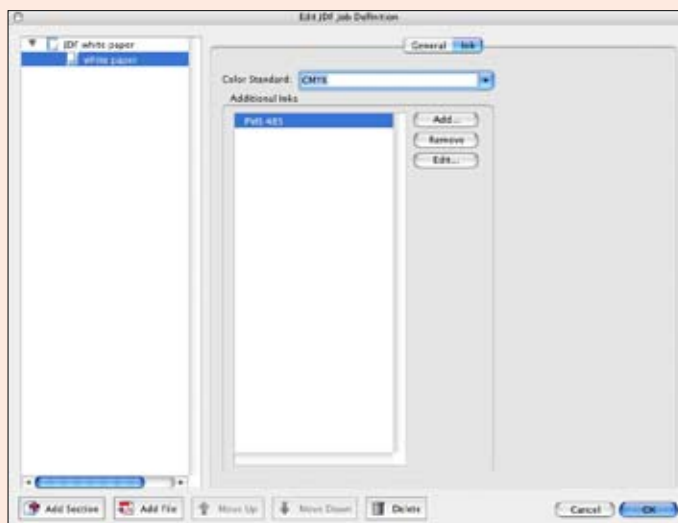
When necessary, you can add contact information by using the **Contacts Manager**, accessible from this dialog.

**3** Add a Section by clicking  Add Section . A Section must be created for each file or set of files that has unique:

- Page size and orientation, or
- Media (paper stock), or
- Simplex/duplex policy, or
- Scaling percentage, or
- Inks.



**4** Click the Ink tab to select the color standard and the inks required for the job.



## WHITE PAPER


*“As a founder of CIP4 and one of the creators of the JDF specification, Adobe plans to integrate the CIP4 standard across its publishing and design platform to drive JDF adoption throughout the creative industries.”*

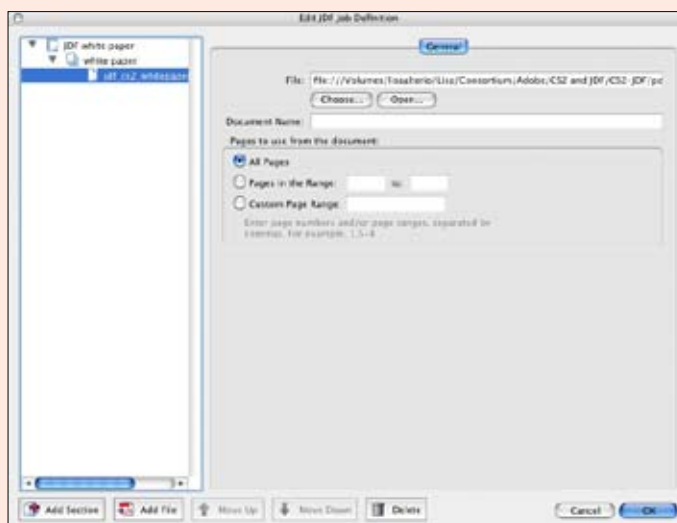
**Don Walker,**  
General Manager,  
Publishing Technologies and  
Services Group,  
Adobe

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*"In theory, publishers will never actually see the machinations of JDF but instead benefit from it by using electronic job tickets. Instead of e-mailing or writing down print job specifications in pen on an envelope or stapling a form to a folder, software that supports JDF allows publishers to enter (or receive) instructions about a print job such as page size and paper stock."*

**"With JDF, Print Jobs Come with Instructions,"**  
by Charles Pickett  
Publish, Aug. 9, 2005

- 5 To add PDF files and/or compatible native files, click  **Add File**. Add the files in reader order. Use the dialog to select each file and page range in the Section.




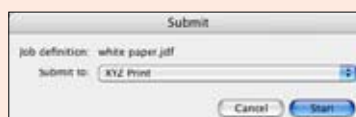
After all the files have been specified in reader order within one or more Sections, the JDF is complete.

### Submitting the JDF

After the job ticket has been filled out you are ready to submit the job. Acrobat performs the following tasks upon submission:

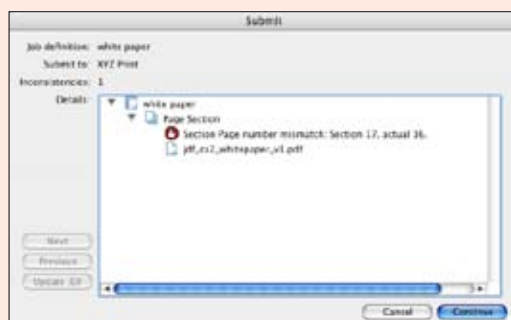
- **Conversion to PDF** (when necessary)  
Native files in the file list are converted to PDF using the PDF Conversion settings specified in the JDF or as defaults by the **Submission Manager**.
- **Verification**  
The JDF is compared to the content of the files to check for any inconsistencies or discrepancies. Verification errors are displayed in the preflight report. You can either change the JDF to correspond to the assigned files, correct the files as necessary, or ignore the errors and allow your print provider to resolve the problems.
- **Preflight**  
The files are preflighted using the Preflight Profile specified in the JDF or as the default by the **Submission Manager**. The preflight report contains a detailed listing of any problems found.
- **Packaging the JDF and PDF files**  
When PDF conversion, preflighting, and verification are complete, the JDF/PDF package is submitted for production.

To submit the job, click  **Submit...**. Select the desired Submission Site, then click **Start**.



## Verification Report

If Acrobat discovers any discrepancies between the JDF definition and the assigned files, a report is produced which describes the problem(s) found:

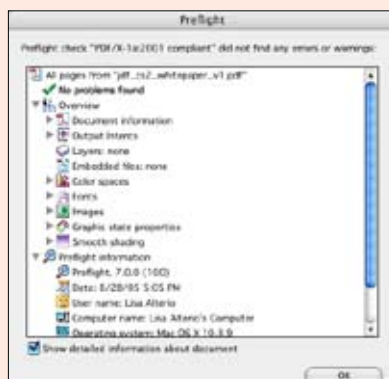


You can either update the JDF (if it is incorrect), or correct the file(s).

The Acrobat verification report also contains important information about the file(s), even if no errors were discovered.

## Preflight Report

Acrobat delivers a complete preflight report, even if no errors were discovered.



After preflight, the JDF and PDF are processed according to the **Submission** options selected in the **Submission Manager**.

- **Submit to a folder (no MIME encoding)**

The JDF is placed in the target folder, with the PDFs in a subfolder.

- **Submit to a folder (MIME encoding)**

The JDF is combined with the PDF file(s) into a MIME package and placed into the target folder.

- **Convert to a MIME package and submit to a JMF device**

The JDF is combined with the PDF file(s) into a MIME package and sent directly to a JMF device. No files are created on your system.

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*"JDF provides two significant advantages. First, it allows the description of more job definition elements than any other format. Second, it's been adopted by a large, ever-growing number of vendors. Consequently, JDF will deliver automation within reach of small to midsized companies – while larger companies will be able to rely on standard solutions rather than building their own."*

**Freddy Pieters,**  
product manager,  
Commercial Printing,  
Esko-Graphics





## PRINT PROVIDER – JOB PROCESSING

### Receiving and Processing JDF

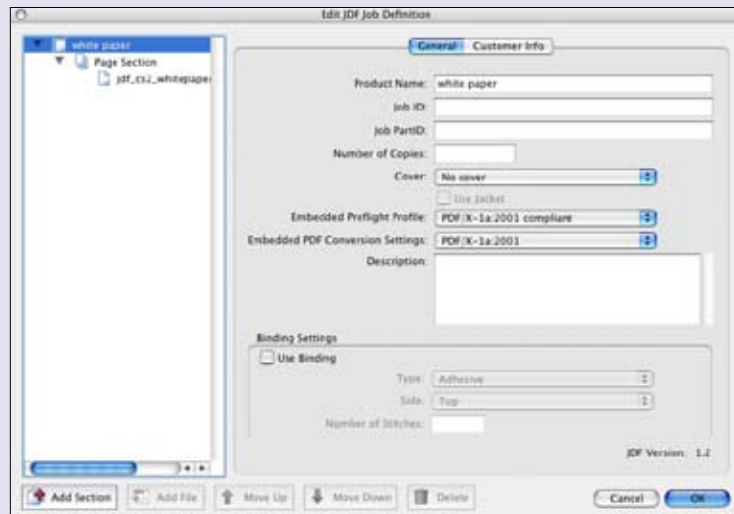
Unless you are equipped with a JMF device, you will be receiving JDF from your clients either as MIME-encoded email attachments or as uploads to your FTP site.

MIME-encoded JDF files from Creative Suite 2 have an “mjd” extension.



JDFProdDef.mjd

To unpack the file from your Acrobat 7 Professional workstation, double-click on the file. Acrobat will prompt you for a location in which to unpack the file. The JDF is separated from the content PDF file(s) and placed into the specified folder. Acrobat 7 adds the JDF to the list, and from here you can review all the job specifications and contact information, and add information when necessary.



When the PDF Conversion and Preflight settings were specified in the JDF using either a Template or non-Template workflow, they are displayed on the **General** tab.

The PDF content file(s) can be processed with your prepress workflow according to the instructions in the JDF.

## JDF Makes the Workflow Flow

With Adobe Creative Suite 2, JDF can be introduced into the production workflow at the onset of the creation process – literally on the desktop. Users can capture job-specific information early in the workflow and then manually append additional details later in the production process. Eventually, JDF will supplant the myriad of manual and error-prone processes now required to get a job from the desktop to the shipping dock. Backed by the commitment, experience, and standards-based development of companies like Adobe, JDF is poised to become as important to the industry as PostScript and Adobe PDF.

## Resources

For more information on JDF, visit the following websites:

[www.adobe.com/products/jdf](http://www.adobe.com/products/jdf)

[www.adobe.com/products/pdfjobready](http://www.adobe.com/products/pdfjobready)

[www.cip4.org](http://www.cip4.org)

For more information on Acrobat, visit [www.adobe.com/products/acrobat](http://www.adobe.com/products/acrobat)

WHITE PAPER





# Appendix A

## CIP4 & JDF: Frequently Asked Questions

*Excerpted from [www.cip4.org](http://www.cip4.org): "CIP4 and JDF FAQ"*

**WHAT IS CIP4?** CIP4 brings together vendors, consultants and end-users in the print communications, Graphic Arts industry and associated sectors, covering a variety of equipment, software, peripherals, and processes. Members participate in focused working groups to define future versions of JDF, to study user requirements, and to design a JDF SDK.

**WHAT IS JDF?** JDF is an upcoming industry standard designed to simplify information exchange between different applications and systems in and around the Graphic Arts industry. To that end JDF builds on and extends beyond pre-existing partial solutions, such as CIP3's Print Production Format (PPF) and Adobe Systems' Portable Job Ticket Format (PJTF). It also enables the integration of commercial and planning applications into the technical workflow. JDF joins the growing number of standards based on XML, ensuring maximum possible portability between different platforms and ready interaction with Internet-based systems. More information is available at [www.cip4.org](http://www.cip4.org).

JDF is a comprehensive XML-based file format/proposed industry standard for end-to-end job ticket specifications combined with a message description standard and message interchange protocol.

- JDF is designed to streamline information exchange between different applications and systems.
- JDF is intended to enable the entire industry, including media, design, graphic arts, on demand and e-commerce companies to implement and work with individual workflow solutions.
- JDF will allow integration of heterogeneous products from diverse vendors to seamless workflow solutions.

The most prominent features of JDF are:

1. Ability to carry a print job from genesis through completion. This includes a detailed description of the creative, prepress, press, postpress and delivery processes.
2. Ability to bridge the communication gap between production and Management Information Services. This ability enables instantaneous job and device tracking as well as detailed pre- and post-calculation of jobs in the graphic arts.
3. Ability to bridge the gap between the customer's view of product and the manufacturing process by defining a process independent product view as well as a process dependent production view of a print job.
4. Ability to define and track any user defined workflow without constraints on the supported workflow models. This includes serial, parallel, overlapping and iterative processing in arbitrary combinations and over distributed locations.
5. Ability to do so (1, 2, 3&4) under nearly any precondition.

**WHAT AREAS OF WORKFLOW DOES JDF COVER?** The long-term aim of CIP4 is to cover the whole life cycle of a print and cross-media job, from concept to delivery. Each individual segment might be covered by JDF, or by ensuring that it can be linked efficiently into pre-existing specifications. The current version of the specification – JDF 1.1 – has a primary focus on the areas ranging from prepress over press to postpress and delivery. The JDF specification includes three major application areas:

1. *Job Ticket* – Information about a printed product that may start with customer intent information and eventually include all process instructions and parameters.
2. *Workflow organization* – A building block model used by management, production, and workflow systems to organize jobs and automate job, including an extensive library of processes, parameters, and job metadata
3. *Device control & automation* – A open, XML-based command and control language for all shop floor and studio floor software and systems.



**IS THERE A FORMAL JDF COMPLIANCE PROCESS?** In JDF 1.2 the concept of Interoperability Conformance Specification of “ICS” documents is introduced. To specify exactly what individual classes of devices need to do with JDF, CIP4 members are developing ICS documents that will provide the minimum expectations for individual classes of devices. ICS documents will later be used as the basis for certification testing. CIP4 has signed an agreement with GATF to serve as the first certification testing facility, and others will later be added in Europe and Asia. Once the certification program begins, you will start seeing products that are marked as “JDF Certified” and this will be to a specific ICS document. The ICS documents are all currently in draft form and only in circulation among members of CIP4, but once published, like the standard, they will be freely available to the public and we expect that they will become part of your buying practices.

**WHEN WILL ALL PRODUCTS BE JDF COMPATIBLE?** With JDF 1.2 we’re starting the push further upstream with two new processes addressing digital file transfer and preflight. Our goal is to have JDF support for all products involved in the print and cross media publishing workflow. Many JDF-enabled products came to market in 2003 and 2004 will be the biggest year ever for JDF-enabled product introductions. In four or five years you may stop asking “is it JDF-Enabled” – it will become as expected as is CTP and digital file exchange.

**WILL PPF (CIP3) CONTINUE ON AS A SEPARATE SPECIFICATION?** PPF functionality is a subset of the JDF standard. But currently, PPF also exists as a separate standard to support legacy implementations. JDF builds on and extends beyond CIP3’s Print Production Format (PPF). In JDF 1.3 we will be integrating PPF support directly into JDF.

**HOW DOES JDF RELATE TO OTHER STANDARDS?** We have formal and informal cooperation with many other groups! Together, we are building bridges between islands of automation. Our formal alliances, with whom our standards can work together with, include:

- CGATS SC6 (process control of content files)
- ICC
- Idealliance
- IFRA
- PODi
- PrintTalk
- UP3i.

CIP4’s advertising workgroup is working with AdsML, for JDF 1.3. CIP4’s digital printing group is working with PODi and CGATS SC6. CIP4’s ecommerce group is working with PrintTalk.

With Commerce XML, there are a dozen specifications and no clear winner. They aren’t all aimed at the same area, but there are some overlaps. There is the PrintTalk specification, now it is basically JDF inside a cXML wrapper designed for ecommerce transactions with respect to print. So in a sense we have connections to business XML.

Where we know of a specific standard, we sit down with the other group and talk about what information needs to cross the boundary (i.e., with papinet about the color of the paper). We are trying to avoid barriers, rather than building bridges in all areas.



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