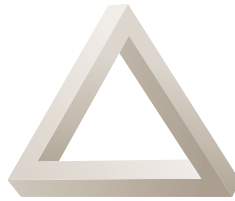
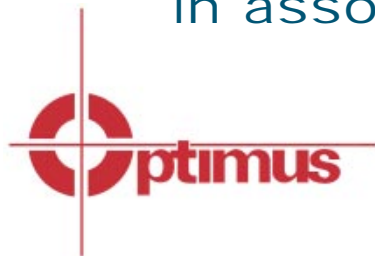

A Guide to JDF

Produced by



TripleArc

in association with



What is JDF?

JDF stands for **Job Definition Format**.

It is a new open standard
that acts as a universal
electronic job ticket for print.

So it's different to PDF?

Yes. PDF (**Portable Document Format**)
is a document format that
contains job content.

JDF contains print-production data.

Why does this matter to me?

JDF will automate the whole print procurement and production process.

It is the missing link in the industry.



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Who is behind JDF?

Adobe, Agfa, Heidelberg
and MAN Roland created
the original specification in early 2000.

It was handed to the
CIP4 Committee in June 2000
for implementation.

Who are the CIP4 Committee?

CIP4 consists of over 100 leading pre-press, printing, finishing, MIS and e-commerce companies.



What is CIP4's link with PrintTalk?

PrintTalk is a consortium of e-commerce and MIS developers who also support JDF.

TripleArc are members of PrintTalk.



What are the aims of JDF?

JDF aims to create a digital Job-Bag that can describe a print job at all stages of its existence.

JDF will be the “glue” that integrates all the processes.



So how does it work?

A JDF file describes the item that is to be printed (intent) and the steps required to produce it (process).

It will include information about estimating, file delivery, trapping and imposition, right through to ink key set up, folding and cutting data and delivery.

In short, the whole process.

What is JMF?

It stands for Job Messaging Format.

This is a complementary format that allows bi-directional communication between devices.

This provides real time feedback on job status from production machines such as a press.



What format is JDF written in?

JDF is XML-based which means that it is a totally open multi vendor solution.

So how does XML fit in?

XML has been widely adopted by the whole technology industry.

Because of this fact, and the availability of tools already supporting XML, JDF will gain mass usage and acceptance quicker.



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For Example

An e-commerce solution, such as The TripleArc CWS could link with an Optimus MIS system, which could instruct an Agfa Apogee Workflow, which in turn, could communicate with a Heidelberg Press.

Secure, managed file transfer could be facilitated, with fully JDF compliant job tickets, using the Vio Service.



What about e-commerce?

JDF is particularly suited to online print ordering and estimating solutions that create the initial job specification.

The TripleArc Collaborative Workflow System is such a solution.



The JDF workflow



The Benefits

- △ JDF links disparate processes (estimating, production, pre-press etc)
- △ JDF eliminates mistakes caused by misinterpretation – the whole print process is described and defined. Job data is entered only once, reducing manual processes – eg. re-keying, faxing etc.
- △ JDF increases workflow automation
- △ JDF improves customer service – quicker responses coupled with real time job tracking
- △ JDF empowers print buyers
- △ JDF is a vendor-independent format
- △ JDF is adaptable, flexible and extendable
- △ Estimating becomes more accurate
- △ JDF allows the interrogation and instruction of production machinery
- △ JDF provides feedback from production machinery (e.g. a press) using Job Messaging Format to allow schedules to be adjusted

A Summary

JDF is the e-Lubricant
of the print industry.

Customers can become involved
in the workflow, communication
becomes easier, automation
is increased and production
is controlled.



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**.....JDF may not be as
headline-grabbing as a new press
but it's potentially the most
important development in the printing
industry since Postscript.**

- Simon Eccles, Electronic Imaging Magazine



The chief executive of TripleArc explains why JDF is set to be one of the great landmarks in the evolution of printing **By Conor O'Brien**

Landmark for Ipex

In today's printing industry, many processes are isolated, undertaken by systems which are technological islands within the printing stream. This is a rather confused picture and lacks the coherence of an integrated and standardised total workflow solution which can be adopted easily by printers and is simple to manage.

Having previously worked in other industries, I have been able to approach the print and publishing industry with a somewhat fresh perspective.

While I do not pretend to know all the problems, it has become apparent to me that there are a number of key issues that need to be addressed in the short term, which will benefit both the printer and the print buyer.

End-to-end solution

For some time now printers have focused on making their production processes more efficient. While this has increased efficiencies in a number of disparate processes, there still lacks a total end-to-end solution which can integrate all aspects of the workflow.

It will be the implementation of such a complete and automated workflow that will finally allow all involved in the supply chain to benefit from all those years of investment.

Improved customer service and interaction with suppliers is an increasingly common request for print buyers. In an industry where customer communication and information provision is dominated by phone, fax and e-mail, the ability to make this data available in real time is vital, its importance cannot be overstressed.

I am an advocate of new technology, but more importantly I am an advocate of customer service. On that basis, I do not see

technology replacing the need for face-to-face (or voice) communication. More importantly, I see the print buyer as a "virtual employee" of the printing company.

In today's increasingly competitive environment, printers should be considering how best to increase the automation of their processes and improve communication with their customers while reducing the need for staff intervention.

Obviously, there is a need to achieve all these goals without printers having to invest heavily in replacing their existing technologies and equipment. It was with these considerations in mind that the CIP4 development committee was set up in June, 2000.

This committee now has more than 100 members, drawn from some of the leading players in prepress, printing and finishing, not to mention publishing, MIS and e-commerce.

The objective of the CIP4 committee was to implement a solution that would streamline print workflows from design through to production. And so the Job Definition Format (JDF) was born.

Standardised format

JDF is a job ticket specification containing every piece of information in a sole standardised format, needed to produce a piece of print from the design stage right through to the finishing. It is in an XML-based format, allowing it to be a truly open multi-vendor solution.

This means that it has the ability to bridge any gaps that exist between separate links of the workflow chain, regardless of the number of manufacturing platforms involved or the complexity of the task.

So, from the moment a cus-

tomers places an order, to the moment the finished product is placed in the customer's hands, JDF is working to standardise the entire process. It can even link the two separate strata essential to the completion of each print job, MIS and production.

Because JDF has been developed by an industry body as opposed to being developed by one particular player, it really can be called a new industry standard.

It also negates any potential problems associated with a proprietary technology, developed by a single company such as interchangeability: many proprietary technologies are device specific and mono-directional (they cannot send messages to devices and report back from devices). JDF has none of these limitations.

Key benefits

JDF provides key benefits to each member of the supply chain. For printers, it provides that crucial efficient integration of the complete production chain as efficiently as possible. Practically speaking, this means integrating both business and technical processes.

It improves transparency of the workflow, streamlines production, increases process control and allows the printer to efficiently interface with his customer in a real time environment.

When inputting job data with JDF, information need only be entered once and the same information can be used throughout the whole process.

Ask yourself how often various pieces of customer information, whether it relates to the customer or the job, has to be rekeyed or reprocessed, so that it is in a format compatible to your own system.

JDF eliminates this problem, making all information available in a single standard format.



**Conor O'Brien is
ceo of
TripleArc**



The significance of JDF is huge and should not be underestimated. It is going to transform the way in which we conduct business and produce print.

The industry is constantly evolving, but JDF is something that I believe will be looked upon in years to come as one of the great landmarks in the industry's history. Ipex 2002 will be remembered as the event where the true potential of JDF was first demonstrated.

The strapline for Ipex 2002 is "Let me show you the future" and I really believe that JDF is the immediate future of the industry. It is not going to change overnight, but industry standards are here to stay.

The sooner that they are embraced by all parties, the sooner we can all start seeing the benefits.

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In brief!

- JDF will transform the industry
- It has no limitations
- A workflow wonder

Glossary of Terms

CIP4 – Co-operation for the Integration of Processes in Pre-press, Press and Post-press. CIP4 is the committee responsible for turning JDF into a workable specification. It has 117 members including Adobe, Heidelberg, Agfa and MAN Roland.

CWS – TripleArc's Collaborative Workflow System, provides powerful, flexible tools for the procurement and production of printed materials with JDF at its core.

JDF – Job Definition Format. JDF is a data exchange standard that will act as a universal electronic job ticket that contains control data from print buying through estimating, customer service, pre-press, press, finishing and despatch. JDF contains production information rather than content data. CIP4 is the committee responsible for developing the format. (See CIP4).

MIS – Management Information Systems. Companies such as Optichrome and Tharsten who make software that automate such print related tasks as estimating, job tracking and job ticketing. More recently MIS vendors have started integrating e-commerce solutions to allow online quotations, ordering and job status reports.

Glossary of Terms

PDF – Portable Document Format. Adobe's file format that is platform independent, and allows any user to view a file, irrespective of whether the original software package it was created on is present. This format is widely used in the print industry as well as in general business.

PrintTalk - PrintTalk is a community formed by print management systems and e-commerce companies to define a "best practice" common and open communications interface between their products. The PrintTalk implementation will support use of the broadly published, proposed Job Definition Format (JDF) standard and Commercial eXtensible Markup Language (cXML).

XML – Extensible Mark-Up Language. A more powerful mark-up language than the previous popular HTML. XML allows designers and programmers to create tags that can do almost anything they want them to, hence the term "extensible". XML was created so that richly structured documents could be used over the web. The only viable alternatives, HTML and SGML, are not practical for this purpose.

For more information:

www.triplearc.com

www.cip4.org

www.printtalk.org

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