CIP4 and JDF: 15 years dedicated to graphic industries workflow automation

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What you do not need to know about JDF

1 - unless you are a JDF developer
JDF is a Graphic Arts Job Ticket Data Interchange Format Specification
- JDF is *not* an Application or System
- JDF allows systems to Communicate
- JDF is encoded in XML
- Content is referenced, not embedded
- JDF is extensible
JDF on Another 2 Slides
- Goals and Requirements -

• Why JDF?
  – Automation increases Efficiency
  – Digital information reduces errors compared to paper job jackets
  – Information allows for informed decisions
What does JDF enable?

- Setup a Job in the graphic arts from the view point of:
  - Technical Applications
  - Management Information Systems
  - Customers
- Collect data that is relevant to a Job from origination to delivery
  - Business Data
  - Technical Data
- Realtime Job Tracking
- Comprehensively describe many areas of the graphic arts
JDF in the workflow
MIS Communication with JDF

- MIS passes data it knows to JDF-enabled production systems
- JDF-enabled production systems can add more data to the JDF ticket
  - Production parameters
  - Costing data
    - General notes
- JDF ticket passed back to MIS
- Bridges the islands of information
• **Semi Real-time data interchange format**
  
  – Small XML structures
  – Network Data (HTTP)
  – Used for:
    
    • Snapshots of Job / Device status
    • Dynamic job update (Change Orders)
    • Job submission and queue scheduling
Customer requirements for JDF

Customers can be either End Customer or business partner!

- Describe the final product or the requested service
- Details may vary in detail from very rough to very detailed
- Allow price and contract negotiations
- Job Tracking
- Manage the approval cycle
- Change order Management
• Format to specify the context of a JDF in a business transaction
  – JDF describes the product to be produced
  – PrintTalk describes the business context of the JDF product
    • Request For Quote
    • Quotation
    • Purchase Order
    • Invoice
    • Change Order
  – PrintTalk also contains Pricing Information
JDF Complete Job Ticket

JDF describes the entire Production in one File
- JDF Describes Process interdependencies

All processes are described in one single Job Ticket
XJDF – New Developments

- XJDF is a simplified version of JFD
  - Point to Point interactions only
  - Easier to understand and implement
  - Closely aligned with new developments in XML Technologies
JDF/XJDF in PDF metadata

• JDF/XJDF is being used as the semantic basis for an Interoperability Conformance Specification (ICS) to define transport of product intent with PDF:

  Metadata may vary depending on page and/or document
  Media selection
  Finishing options
  Recipient data
  ...
  • Collaborative effort with ISO TC130 TF2/WG3
What does PDF represent today?

• Digital Film
• Description of printed Pages
  • Colors
  • Fonts
  • Trim Boxes
  • …
• Global metadata in a document context (Author, Customer)

**Page description language**
What does PDF NOT represent today?

- Description of Media properties
- Binding
- Page layout (simplex, duplex...)
- ...

No Product description language

- Products may be described with JDF
Why Metadata in PDF?

- Applying Metadata to page ranges
- Variable data / PDF/VT
  - Variable Metadata
    - Paper for the Cover
    - Different paper for the body
    - Localized page binding
- Product and page description in one single file

Product description language
Which Metadata in PDF?

- Only product details that are known to the customer/producer of the pdf.
- Independent of production process.
- Based on: JDF Product Intent
- Encoding: PDF (NOT XML)

No Process description language

Preview version:
https://confluence.cip4.org/display/PUB/ICS-CommonMetadata.PDF.1.5
Applications of PDF Metadata

- Loose coupling of variable data generation and print.
- Complete description of simple products for online print procurement (excluding amounts)
- Extended „Preflight“ including finishing requirements
- …