

ICS & Product Certification

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PIA/GATF as a “production” facility

We produce all our own magazines, books, etc.. CIM Environment



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JDF systems

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It is evolving

Reasons

- Large and complex industry
 - *Expanding range*
- Increased complexity from devices and users
- Many more real world solutions
- Errors
 - *Interpretation*



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JDF technology

On one slide in geek speak

- JDF is a Graphic Arts Job Ticket
 - **Data Interchange Format Specification**
 - JDF is not an Application or System
- JDF is encoded in XML
- Content is referenced, not embedded
- JDF is extensible
- **JDF** Job Definition + **JMF** Messaging + **JDF Capabilities** + **ICS Documents** define the **JDF Framework**



JMF

Messaging

- Real-time data interchange format
- Small XML structures
 - JDF is referenced via URL, not bound into message
 - Minimize network traffic & delay transmission of data until it needed
 - Send potentially interesting information as soon as it is available
- Used for:
 - Snapshots of Job / Device status
 - Dynamic job update
 - Job submission and Queue/QueueEntry handling
 - Capabilities discovery
 - Plug + Play bootstrapping (Future)
- Generally used within an Intranet



ICS documents

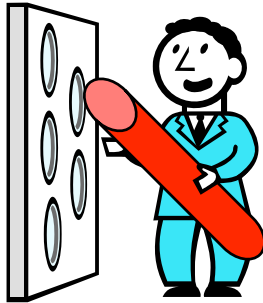


It's all about **Interoperability** !!!

If you don't know about capabilities, you won't be able to "interoperate"...



It's all about **Interoperability!!**

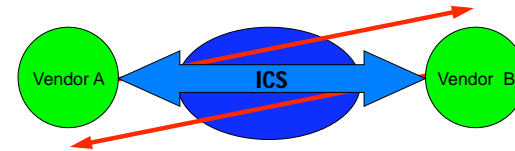


But if you do, you *can* use the right tools...



Implementation issues

Improving the communication



How to address this within JDF

ICS: What they do

- Provide basis for conformance
- Number released
 - *Being expanded*
- They can include several levels
 - *Base conformance*
 - *Built upon*
 - MIS base conformance
 - Level 1
 - Level 2
 - Level 3

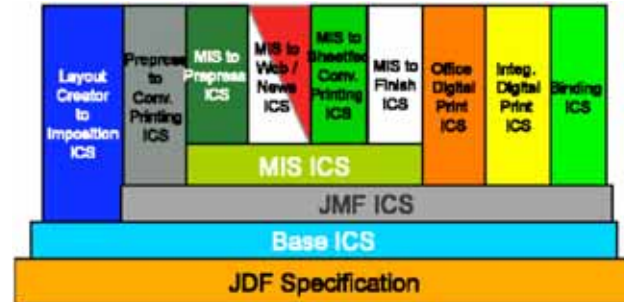
Table 11: Colortool Control
Report #: Communication/Printing_02 Document/Printing

Name	Manager	Worker	Level			Description
			1	2	3	
ProcessOrderMaker	WT	WT				See Section 9 "Customization Rules - Business-to-Business Integration"
PrintJobMaker	WT	WT				
ColorTool	WT	WT				ICST is required if color data between Client/Server path or the Pathwork to Job is defined.
ColorTool	WT	WT				ICST is required if the color data between Client and Server Machine.
ColorToolParameters	WT	WT				ICST is required if color values are present. See [D5098.10]
ColorToolOrder	WT	WT				ColorTool order is a direct extension for color. See ColorToolParameters and ProcessOrderMaker Order. If the Manager does not have the name of job order, then a "JOB" or "JOBID" is also often present. The Manager MUST send the appropriate needed items when the Color Tool Order. See [D5098.10]
ColorTool	WT	WT				See Table 11: ColorTool
DeviceColorToolOrder	WT	WT				ColorTool order is required. If required, it is strongly recommended to be for color when the printing. See [D5098.10]



ICS

Are an increasing number of documents



ICS

Registry on CIP4 Website

Interoperability Conformance Specifications (ICS)

Spec ID	Title	Version	Level	Supplement Name
10-001-000	ISO 15926-1:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-1:2013
10-001-001	ISO 15926-2:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-2:2013
10-001-002	ISO 15926-3:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-3:2013
10-001-003	ISO 15926-4:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-4:2013
10-001-004	ISO 15926-5:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-5:2013
10-001-005	ISO 15926-6:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-6:2013
10-001-006	ISO 15926-7:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-7:2013
10-001-007	ISO 15926-8:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-8:2013
10-001-008	ISO 15926-9:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-9:2013
10-001-009	ISO 15926-10:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-10:2013
10-001-010	ISO 15926-11:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-11:2013
10-001-011	ISO 15926-12:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-12:2013
10-001-012	ISO 15926-13:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-13:2013
10-001-013	ISO 15926-14:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-14:2013
10-001-014	ISO 15926-15:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-15:2013
10-001-015	ISO 15926-16:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-16:2013
10-001-016	ISO 15926-17:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-17:2013
10-001-017	ISO 15926-18:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-18:2013
10-001-018	ISO 15926-19:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-19:2013
10-001-019	ISO 15926-20:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-20:2013
10-001-020	ISO 15926-21:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-21:2013
10-001-021	ISO 15926-22:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-22:2013
10-001-022	ISO 15926-23:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-23:2013
10-001-023	ISO 15926-24:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-24:2013
10-001-024	ISO 15926-25:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-25:2013
10-001-025	ISO 15926-26:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-26:2013
10-001-026	ISO 15926-27:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-27:2013
10-001-027	ISO 15926-28:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-28:2013
10-001-028	ISO 15926-29:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-29:2013
10-001-029	ISO 15926-30:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-30:2013
10-001-030	ISO 15926-31:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-31:2013
10-001-031	ISO 15926-32:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-32:2013
10-001-032	ISO 15926-33:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-33:2013
10-001-033	ISO 15926-34:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-34:2013
10-001-034	ISO 15926-35:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-35:2013
10-001-035	ISO 15926-36:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-36:2013
10-001-036	ISO 15926-37:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-37:2013
10-001-037	ISO 15926-38:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-38:2013
10-001-038	ISO 15926-39:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-39:2013
10-001-039	ISO 15926-40:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-40:2013
10-001-040	ISO 15926-41:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-41:2013
10-001-041	ISO 15926-42:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-42:2013
10-001-042	ISO 15926-43:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-43:2013
10-001-043	ISO 15926-44:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-44:2013
10-001-044	ISO 15926-45:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-45:2013
10-001-045	ISO 15926-46:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-46:2013
10-001-046	ISO 15926-47:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-47:2013
10-001-047	ISO 15926-48:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-48:2013
10-001-048	ISO 15926-49:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-49:2013
10-001-049	ISO 15926-50:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-50:2013
10-001-050	ISO 15926-51:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-51:2013
10-001-051	ISO 15926-52:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-52:2013
10-001-052	ISO 15926-53:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-53:2013
10-001-053	ISO 15926-54:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-54:2013
10-001-054	ISO 15926-55:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-55:2013
10-001-055	ISO 15926-56:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-56:2013
10-001-056	ISO 15926-57:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-57:2013
10-001-057	ISO 15926-58:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-58:2013
10-001-058	ISO 15926-59:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-59:2013
10-001-059	ISO 15926-60:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-60:2013
10-001-060	ISO 15926-61:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-61:2013
10-001-061	ISO 15926-62:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-62:2013
10-001-062	ISO 15926-63:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-63:2013
10-001-063	ISO 15926-64:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-64:2013
10-001-064	ISO 15926-65:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-65:2013
10-001-065	ISO 15926-66:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-66:2013
10-001-066	ISO 15926-67:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-67:2013
10-001-067	ISO 15926-68:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-68:2013
10-001-068	ISO 15926-69:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-69:2013
10-001-069	ISO 15926-70:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-70:2013
10-001-070	ISO 15926-71:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-71:2013
10-001-071	ISO 15926-72:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-72:2013
10-001-072	ISO 15926-73:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-73:2013
10-001-073	ISO 15926-74:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-74:2013
10-001-074	ISO 15926-75:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-75:2013
10-001-075	ISO 15926-76:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-76:2013
10-001-076	ISO 15926-77:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-77:2013
10-001-077	ISO 15926-78:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-78:2013
10-001-078	ISO 15926-79:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-79:2013
10-001-079	ISO 15926-80:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-80:2013
10-001-080	ISO 15926-81:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-81:2013
10-001-081	ISO 15926-82:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-82:2013
10-001-082	ISO 15926-83:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-83:2013
10-001-083	ISO 15926-84:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-84:2013
10-001-084	ISO 15926-85:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-85:2013
10-001-085	ISO 15926-86:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-86:2013
10-001-086	ISO 15926-87:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-87:2013
10-001-087	ISO 15926-88:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-88:2013
10-001-088	ISO 15926-89:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-89:2013
10-001-089	ISO 15926-90:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-90:2013
10-001-090	ISO 15926-91:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-91:2013
10-001-091	ISO 15926-92:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-92:2013
10-001-092	ISO 15926-93:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-93:2013
10-001-093	ISO 15926-94:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-94:2013
10-001-094	ISO 15926-95:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-95:2013
10-001-095	ISO 15926-96:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-96:2013
10-001-096	ISO 15926-97:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-97:2013
10-001-097	ISO 15926-98:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-98:2013
10-001-098	ISO 15926-99:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-99:2013
10-001-099	ISO 15926-100:2013 (Energy - Interoperability)	1.0	ISO 1.0	ISO 15926-100:2013

ICS

Specifics of what do they do?

- ICS documents do not add to JDF Specification, they restrict JDF Specification usage
 - *Define interfaces*
 - *Define read and write responsibilities*
 - *Set Data Type values, size limits*
 - *Communications (hot folder, MIME, pull/push)*
 - *JDF Extensions*
 - *JDF Node, AuditPool usage*
 - *Messaging via JMF*
 - *And more*

Testing procedure

Product certification

- Dependent on product that is tested
 - *ICS*
 - *Functionality*
- Is the product manager / worker or both
- Read and write
 - *Interesting issues!*
- Additional functionality testing
 - *Syntax, attributes, etc ...*
- Levels

Product certification

What it will offer

- Conformance against set specification
- Details of how products perform
- Lead to easier implementation
- Carried out by PIA/GATF on behalf of CIP4



Certification

Status

- LayCrlmp
 - *Eleven certifications*
 - Two more in the process
Multiple in the pipeline
- Successful program
 - *1.3 underway*
 - Upgrades and new products



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Certification

Status

List of JDF Certified Products

The following products have successfully passed JDF Certification testing.
The list is sorted by JDF version and the IC5's the products have been tested against.

Certified on	Company	Product	Product Version	Certification #	Manager/Worker
JDF 1.3 LayCrlmp, Base IC5 (L8) Certified Products:					
09-Nov-2007	Agfa	ApogeeX	4.0	0710000601	Worker
22-Oct-2007	Kodak	Preps	5.3.1	0710000203	Manager
JDF 1.2 LayCrlmp, Base IC5 (L8) Certified Products:					
12-Nov-2007	Agfa	ApogeeX	4.0	0710000601	Worker
05-Sep-2007	Kodak	Pandora	2.9.6	0710000202	Manager
11-May-2007	Heidelberger Druckmaschinen AG	Prinect MetaDimension	6.5	0710000502	Worker
03-May-2007	Heidelberger Druckmaschinen AG	Prinect Signa Station	3.0	0710000501	Manager
11-Oct-2006	Dynagram	DynaStrip	4.5.0	0610000301	Manager
25-Sep-2006	Kodak	Preps	5.2 (Build 193)	0610000201	Manager
04-Aug-2006	Global Graphics	Harlequin Rip	Genesis Release (7.1d)	0610000101	Worker

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Certification

Status

- New certifications on the way
 - *MIS to Conventional Sheetfed*
 - *MIS to Pre-Press*
 - *Pre-Press to Conventional Sheetfed*
- Announced prior to drupa
 - *Number in progress*



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JDF User Group

www.jdfusergroup.org

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Overview

www.jdfusergroup.org

- New group run in collaboration with CIP4
- Addresses printer needs
 - *Identify printer issues*
 - *Practical demonstrations*
 - Challenges and opportunities
 - *Case studies*
 - *Peer networking*
 - *Technical and management*



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Questions addressed

www.jdfusergroup.org

- How do you effect cross-vendor implementations?
- How does my MIS integrate into my facility?
- What happens with postpress?
- Where do I start?
- What do I need to avoid?
- How do I optimize the integration of new installations into my existing workflows?

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Schedule 24th and 25th March

www.jdfusergroup.org

- Welcome and introductions
- Overview of PIA/GATF
- Demonstration and discussion of connectivity:
 - *MIS to sheetfed press*
 - *MIS to digital press*
 - *Layout to post press – Stitcher and cutter*
 - *Layout to pre press*
 - *MIS to pre press*
- Wrap up
- Bus to hotel
- JDF specification development
 - *ICS and specification forward*
- Top 15 issues to address
 - *From conception to production*
- Five questions you **have** to ask your suppliers
- Printer panels
 - *Pre-press environment*
 - *Integration into the pressroom*
 - *Automation in the post press*
 - *Integration into digital*
- Wrap up/focus of next meeting

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Closing thoughts

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MIS resource

Different types

- Wide gamut of ranges
 - Applications
 - Connectivity
 - Functionality
 - Cost
- Being updated for 2008



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Moving forward

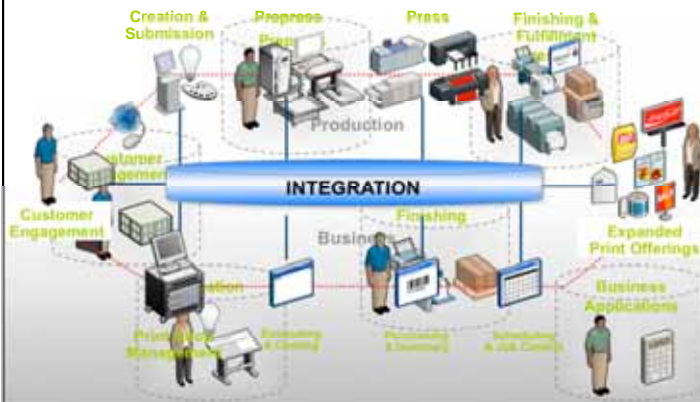
Where are the advantages? Where are the disadvantages?



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From Autonomy... to Integration



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Thank you for your attention

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