

Customer to MIS ICS

Version 1.3

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Product Description WG

Abstract

This ICS is targeted at conventional and digital commercial printing. This CIP4 ICS details the use of *PrintTalk* and JDF to allow a Customer to convey his/her requirements to a print provider, to allow the print provider to respond and to allow the Customer to place an order. The Customer specifies his requirements in a JDF Product Intent which he sends to the MIS using a *PrintTalk* Business Object – a Request-For-Quote. The MIS responds with one or more JDF Product Intent Nodes that it creates from the RFO. The MIS returns these Nodes in another *PrintTalk* Business Object – Quotation which has a set of Quote Elements. The Customer can select one of the Quote Elements and use it to place the order using a *PrintTalk* Business Object – PurchaseOrder. This ICS details how *PrintTalk* is used with JDF Version 1.3, and the requirements for the JDF at each of the stages in business exchange.



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1 Introduction

The JDF Specification describes two classes of Jobs represented by either JDF Intent Nodes or JDF Process Nodes. This ICS describes the use of Intent Nodes to:

1. describe the result desired by a Customer,
2. form a JDF Job ticket, and
3. create Quotations from a Supplier. Such Quotations must be unambiguous because the Customer uses the contained JDF when placing an Order.

This ICS requires the use of certain PrintTalk Business Objects for exchanging the aforementioned JDF Nodes and this ICS specifies the Conformance Requirements for such Business Objects.

This ICS details the Conformance Requirements for both JDF and PrintTalk Business Objects that are necessary for systems that intend to use JDF to request a quotation, provide a quotation and submit an order.

2 Glossary

This section defines terminology used throughout this document. References to other documents are indicated with square brackets, e.g. [JDF1.3]. For most terms, see the Terminology section in [JDF1.3] and [Base-ICS].

Table 1: Glossary

Term	Definition
<i>Customer</i>	In this ICS, the <i>Customer</i> is the system specifying the requirements for a Job.
<i>MIS</i>	In this ICS, the <i>MIS</i> is the system responsible for receiving RFQ Elements, replying with Quotation Elements and accepting PurchaseOrder Elements.
<i>PO</i>	Abbreviation for PurchaseOrder.
PurchaseOrder	A PurchaseOrder Element is the <i>PrintTalk</i> Business Object that a <i>Customer</i> sends to an <i>MIS</i> , and that represents a binding business contract
<i>PrintTalk</i>	[PrintTalk1.3] defines a set of Business Objects that allow JDF to be conveyed between a <i>Customer</i> and an <i>MIS</i> . Business Objects include RFQ, Quotation and PurchaseOrder Elements.
Quotation	A Quotation Element is the <i>PrintTalk</i> Business Object that an <i>MIS</i> returns to a <i>Customer</i> in response to an RFQ Element.
<i>Request for Quote</i>	The full name of RFQ.
RFQ	An RFQ Element is the <i>PrintTalk</i> Business Object that a <i>Customer</i> sends to an <i>MIS</i> in order to elicit a Quotation Element.

3 Conformance Levels

This ICS specifies one *Conformance Level* of *Conformance Requirements*, which is a subset of [JDF1.3] and [PrintTalk1.3]. Table 2 below specifies the Conformance Requirements for the Manager (*Customer*) and Worker (*MIS*).

See Appendix A “*How to Read ICS Documents*” in [Base-ICS] for an explanation of Conformance Tables.

To be conformant to the single level of this ICS specified in the first column of Table 2, a Manager (*Customer*) MUST conform to the Manager part and a Worker (*MIS*) MUST conform to the Worker part of the ICSs and levels specified in all but the first and last columns of Table 2 below.

Table 2: Conformance Levels

Level of this ICS	[Base-ICS]	[JMF-ICS]	[MIS-ICS]	Description
1	1 or higher	-	-	

3.1 Format of Conformance Tables

In this ICS, many of the tables have a heading of “State → R Q P R Q P” rather than “Level → 1 2 3 1 2 3”. This heading change is because the *Customer /MIS* interaction differs based on the state of the transaction. The headings may be read “State → RFQ, Quotation, PurchaseOrder, RFQ, Quotation, PurchaseOrder”. That is, each column will contain the ICS expectations for the *Customer* and the *MIS* at each stage of the transaction, RFQ, Quotation and PurchaseOrder.

3.2 R-Test

The “**r-Test**” term is used in a Description to specify a test that determines whether an Element or Attribute has been parsed and appropriately processed. If not further specified, the default “**r-Test**” requires that if an Element or Attribute appears in the RFQ, it MUST also appear in the Quotation as specified below.

- If an Attribute is specified in the RFQ, the corresponding Attribute in the Quote MUST have a value.
- If a Span Element is specified in the RFQ with a *Preferred* or *Range*, that Span Element in the Quote MUST contain an *Actual* or *OfferRange* Attribute. If an *Actual* or *OfferRange* Attribute in the Quote is outside of the range given in a *Preferred* or *Range* in the RFQ, the modification MUST be indicated as being out of range in the user interface of the Customer application. The *MIS* user interface MUST display the value of the *Actual* or *OfferRange* Attribute.

In addition, the terms “**r-Test R**”, “**r-Test Q**” and “**r-Test P**” further specify that the “**r-Test**” applies to an RFQ, Quotation, PurchaseOrder, respectively.

4 Conformance Tables – Business Objects

4.1 Abstract BusinessObject

Table 3: Abstract BusinessObject
Superclass of: RFQ, Quotation, PurchaseOrder

Name	Customer			MIS			Description	
	State →	R	Q	P	R	Q		P
<i>AgentID</i>		w	r	w	r	w	r	r-Test R: MIS MUST record the value in database. r-Test P: If this value is not known to the MIS, the MIS MUST indicate an error in some fashion. r-Test Q: Customer MUST record the value in database.
<i>AuxID</i>		w?	r?	w?	r	w←	r?	MUST be preserved if present.
<i>AgentDisplayName</i>		w	r	w	r	w	r	r-Test: See <i>AgentID</i> .
<i>BusinessID</i>		w	r	w	r	w	r	
<i>BusinessRefID</i>		w?	r	w	r?	w	r	
<i>RequestDate</i>		w	r	w	r	w	r	

4.2 List of BusinessObject Elements

This ICS requires Support for the three *PrintTalk* Business Object specified in Table 4: List of BusinessObject Elements.

A Business Cycle consists of the following.

- A *Customer* MAY initiate a business cycle by producing an RFQ.
- A *MIS* SHOULD respond with a Quotation.
- A *Customer* MAY accept a single Quote from the set in the Quotation for use in a PurchaseOrder.

All other *PrintTalk* Business Objects are beyond the scope of this ICS. Such Business Objects include:

- Cancellation
- Change Order (to be covered in a future version of this ICS)
- Confirmation
- Invoice
- OrderStatusRequest
- OrderStatusResponse
- ProofApprovalResponse
- Refusal

Table 4: List of BusinessObject Elements

Name	Customer			MIS			Description
	Level →	1	2	3	1	2	
RFQ	w			r			See Table 5: RFQ.
Quotation	r			w			See Table 6: Quotation.
PurchaseOrder	w			r			See Table 14: PurchaseOrder.

4.3 RFQ

Table 5: RFQ

Referenced by: List of BusinessObject Elements

Subclass of: Abstract BusinessObject

Name	Customer			MIS			Description
	Level →	1	2	3	1	2	
<i>Currency</i>	w			r			
<i>Estimate</i>	w?			r			
<i>Expires</i>	w			r			
jdf:JDF	w			r			See Table 15: JDF Node.

4.4 Quotation

Table 6: Quotation

Referenced by: List of BusinessObject Elements

Subclass of: Abstract BusinessObject

Name	Customer			MIS			Description
	Level →	1	2	3	1	2	
<i>Currency</i>	r			w			
<i>Estimate</i>	r			w?			
<i>Expires</i>	r			w			
Quote	r			w			See Table 7: Quote.

4.4.1 Quote

Table 7: Quote
Referenced by: Quotation

Name	Customer			MIS			Description
	Level →	1	2	3	1	2	
Currency	r			w			
Estimate	r			w			
QuoteID	r			w			
jdf: JDF	r			w			See Table 15: JDF Node.
Pricing	r			w			See Table 8: Pricing.

4.4.2 Pricing

Table 8: Pricing
Referenced by: Quote, PurchaseOrder

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
Payment	w?	r	w	r	w	r	See Table 11: Payment.
Price	r			w			See Table 9: Price.

4.4.3 Price

Table 9: Price
Referenced by: Pricing

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
Amount	w?	r	w	r	w	r	
DescriptiveName	w?	r	w?	r	w?	r	MUST be displayed (in some fashion) if present.
LineID	w?	r	w	r	w?	r	
Price	w?	r	w←	r	w←	r	Exactly one of <i>Price</i> or the combination of <i>Unit</i> and <i>UnitPrice</i> MUST be specified.
Unit	w?	r	w←	r	w←	r	Exactly one of <i>Price</i> or the combination of <i>Unit</i> and <i>UnitPrice</i> MUST be specified.

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>UnitPrice</i>	w?	r	w←	r	w←	r	Exactly one of Price or the combination of <i>Unit</i> and <i>UnitPrice</i> MUST be specified.
Additional	w?	r	w?	r	w?	r	See Table 10: Additional.
CreditCard	!w	r?	w?	r?	!w	r	See Table 12: CreditCard.

4.4.4 Additional

Table 10: Additional
Referenced by: Price

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>Amount</i>	w?	r?	w	r?	w	r	
<i>Price</i>	w?	r?	w	r?	w	r	

4.4.5 Payment

Table 11: Payment
Referenced by: Pricing

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
PayTerm	w	r	w	r	w	r	Text Element.
CreditCard	w?	r?	w?	r?	!w	r	See Table 12: CreditCard.
<i>jdf:GeneralID</i>	w?	r	w←	r	w←	r	SHOULD be preserved if present. See Table 13: <i>jdf:GeneralID</i> .

4.4.6 CreditCard

Table 12: CreditCard
Referenced by: Payment, Price

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>Expires</i>	w	r	w	r	w	r	

Name	Customer			MIS			Description	
	State →	R	Q	P	R	Q		P
<i>Number</i>		w	r	w	r	w	r	
<i>Type</i>		w	r	w	r	w	r	Exactly one type MUST be supplied.
<i>all values</i>		w←					r	

4.4.7 jdf:GeneralID

Table 13: jdf:GeneralID
Referenced by: Payment

Name	Customer			MIS			Description	
	State →	R	Q	P	R	Q		P
<i>IDUsage</i>		w?	r	w←	r	w←	r	SHOULD be preserved if present.
<i>all values</i>		w?	r	w←	r	w←	r	SHOULD be preserved if present.
<i>IDValue</i>		w?	r	w←	r	w←	r	SHOULD be preserved if present.

4.5 PurchaseOrder

Table 14: PurchaseOrder
Referenced by: List of BusinessObject Elements
Subclass of: Abstract BusinessObject

Name	Customer			MIS			Description	
	Level →	1	2	3	1	2		3
<i>Currency</i>		w			r			
<i>Expires</i>		w?			r			
<i>QuoteID</i>		w←			r			At most one of <i>QuoteID</i> , <i>ReorderID</i> and <i>ReplaceID</i> MUST be specified.
<i>ReorderID</i>		w←			r			At most one of <i>QuoteID</i> , <i>ReorderID</i> and <i>ReplaceID</i> MUST be specified.
<i>ReplaceID</i>		w←			r			At most one of <i>QuoteID</i> , <i>ReorderID</i> and <i>ReplaceID</i> MUST be specified.
jdf:JDF		w?			r			MAY be supplied. For example, to narrow a range of quantity pricing from the <i>Quote</i> . See Table 15: JDF Node.
<i>Pricing</i>		w			r			See Table 8: Pricing.

5 Conformance Tables – JDF Instances

5.1 JDF Node

Table 15: JDF Node

Root Node of: JDF Instance

Referenced by: JDF Node, RFQ, Quote, PurchaseOrder

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>ICSVersions</i>	w	r?	w	r?	w	r?	Specifies conformance for Root Node only.
<i>CusMIS_L1-1.3</i>	w	r?	w	r?	w	r?	Specifies conformance for Level 1 of this ICS..
<i>Type</i>	w	r?	w	r?	w	r?	
<i>Product</i>	w	r?	w	r?	w	r?	
<i>all remaining values</i>	!w	r?	!w	r?	!w	r?	Specifies conformance for Root Node only.
JDF	w?	r	w←	r	w←	r	Specifies conformance for Root Node only. JDF Nodes deeper than the 2 nd level NEED NOT be Supported. r-Test: MUST be preserved if present. r-Test P: The Job created in the MIS MUST reflect or contain the Product parts as indicated by the child JDF Product Nodes. See Table 15: JDF Node.
ResourcePool	w	r	w	r	w	r	See Intent Resources for r-Tests . See Table 16: ResourcePool.

5.2 ResourcePool

Table 16: ResourcePool

Referenced by: JDF Node

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
ArtDeliveryIntent	w	r	w	r	w	r	Specifies conformance for Root Node only. See Table 18: ArtDeliveryIntent.
ArtDeliveryIntent	w?	r	w←	r	w←	r	Specifies conformance for Child Node only. See Table 18: ArtDeliveryIntent.
BindingIntent	w←	r	w←	r	w←	r	Specifies conformance for Root Node only. NEED NOT be present for unbound Products.

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
							See Table 20: BindingIntent.
ColorIntent	w←	r	w←	r	w←	r	MUST be specified in Leaf Product Nodes only. See Table 34: ColorIntent.
Component – Input	w?	r	w←	r	w←	r	Specifies conformance for Root Node only. See Table 61: Component – Input.
Component – Output	w	r	w	r	w	r	Specifies conformance for Root Node only. See Table 62: Component – Output.
CustomerInfo	w?	r	w←	r	w←	r	See Table 67: CustomerInfo.
DeliveryIntent	w	r	w	r	w	r	Specifies conformance for Root Node only. See Table 36: DeliveryIntent.
EmbossingIntent	w?	r	w←	r	w←	r	See Table 40: EmbossingIntent.
FoldingIntent	w?	r	w←	r	w←	r	See Table 42: FoldingIntent.
HoleMakingIntent	w?	r	w←	r	w←	r	See Table 43: HoleMakingIntent.
InsertingIntent	w?	r	w←	r	w←	r	See Table 44: InsertingIntent.
LaminatingIntent	w?	r	w←	r	w←	r	See Table 47: LaminatingIntent.
LayoutIntent	w←	r	w←	r	w←	r	MUST be specified in Leaf Product Nodes only. See Table 48: LayoutIntent.
MediaIntent	w←	r	w←	r	w←	r	MUST be specified in Leaf Product Nodes only. See Table 49: MediaIntent.
PackingIntent	w?	r	w←	r	w←	r	Specifies conformance for Root Node only. See Table 50: PackingIntent.
ProductionIntent	w?	r	w←	r	w←	r	See Table 51: ProductionIntent.
ProofingIntent	w?	r	w←	r	w←	r	See Table 52: ProofingIntent.
ShapeCuttingIntent	w?	r	w←	r	w←	r	See Table 54: ShapeCuttingIntent.

6 Conformance Tables – ResourceLinks

6.1 ComponentLink

Table 17: ComponentLink

Name	Customer			MIS			Description	
	State →	R	Q	P	R	Q		P
<i>Amount</i>		w	r	w	r	w	r	Note: Unless it's an exception where the number of sub-components does not match the number of final components, <i>Amount</i> SHOULD only be specified on a ComponentLink for a Final Product and the <i>MIS</i> SHOULD infer the quantities from the desired result ComponentLink (the output Component).

7 Conformance Tables – Intent Resources

7.1 ArtDeliveryIntent

Table 18: ArtDeliveryIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description	
	State →	R	Q	P	R	Q		P
<i>ArtDeliveryDate</i>		w←	r?	w	r	w←	r	In an RFQ, at most one of <i>ArtDeliveryDate</i> or <i>ArtDeliveryDuration</i> MAY be supplied. In each ArtDeliveryIntent Resource of a Quotation, one of <i>ArtDeliveryDate</i> or <i>ArtDeliveryDuration</i> MUST be supplied. This is the date the art is released by the <i>Customer</i> . The one supplied MAY differ in each ArtDeliveryIntent Resource.
<i>ArtDeliveryDuration</i>		w←	r?	!w	r	w←	r?	In an RFQ, at most one of <i>ArtDeliveryDate</i> or <i>ArtDeliveryDuration</i> MAY be supplied. In each ArtDeliveryIntent Resource of a Quotation, one of <i>ArtDeliveryDate</i> or <i>ArtDeliveryDuration</i> MUST be supplied. The one supplied MAY differ in each ArtDeliveryIntent Resource.
<i>ArtDelivery</i>		w	r	w	r	w	r	Art MAY not be available at the time of the PurchaseOrder. See Table 19: ArtDelivery.

7.1.1 ArtDelivery

Table 19: ArtDelivery
Referenced by: ArtDeliveryIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>ArtDeliveryDate</i>	w←	r?	w	r	w←	r	In an RFQ, at most one of <i>ArtDeliveryDate</i> or <i>ArtDeliveryDuration</i> MAY be supplied. In each ArtDelivery Element of a Quotation, one of <i>ArtDeliveryDate</i> or <i>ArtDeliveryDuration</i> MUST be supplied. The one supplied MAY differ in each ArtDelivery Element. This is the date the art is released by the <i>Customer</i> .
<i>ArtDeliveryDuration</i>	w←	r?	!w	r	w←	r?	In an RFQ, at most one of <i>ArtDeliveryDate</i> or <i>ArtDeliveryDuration</i> MAY be supplied. In each ArtDelivery Element of a Quotation, one of <i>ArtDeliveryDate</i> or <i>ArtDeliveryDuration</i> MUST be supplied. The one supplied MAY differ in each ArtDelivery Element.
<i>DeliveryCharge</i>	w?	r	w	r	w	r	
<i>HasBleeds</i>	w?	r	w	r	w	r	Interpreted as a requirement that the finished Pages have bleeds; does not imply that the content data has bleeds.
<i>Transfer</i>	w?	r	w	r	w	r	
DigitalMedia	w?	r	w←	r	w←	r	MUST be supplied in a Quotation if the quote is based on the number and/or type of DigitalMedia . MUST be supplied in a PurchaseOrder if there is to be DigitalMedia involved in production. Note: the JDF in a PurchaseOrder MAY be implied by referencing a previous Quote. See Table 68: DigitalMedia.

7.2 BindingIntent

Table 20: BindingIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
BackCoverColor	w←	r	w←	r	w←	r	MUST be supplied if different from the front cover color.
BindingColor	w?	r	w	r	w	r	
BindingLength	w?	r	w	r	w	r	
<i>BindingOrder</i>	w?	r	w	r	w	r	
BindingSide	w	r	w	r	w	r	
BindingType	w	r	w	r	w	r	
<i>LooseBinding</i>	w←	r	w←	r	w←	r	
<i>SaddleStitch</i>	w←	r	w←	r	w←	r	
<i>SoftCover</i>	w←	r	w←	r	w←	r	
CoverColor	w←	r	w←	r	w←	r	MUST be supplied if a cover is desired. MUST NOT be specified for SaddleStitching or HardcoverBinding.
ChannelBinding	w?	r?	w?	r?	w?	r?	See Table 21: ChannelBinding.
CoilBinding	w?	r?	w?	r?	w?	r?	See Table 22: CoilBinding.
EdgeGluing	w?	r?	w?	r?	w?	r?	See Table 23: EdgeGluing.
HardcoverBinding	w?	r?	w?	r?	w?	r?	See Table 24: HardcoverBinding.
PlasticCombBinding	w?	r?	w?	r?	w?	r?	See Table 25: PlasticCombBinding.
RingBinding	w?	r?	w?	r?	w?	r?	See Table 26: RingBinding.
SaddleStitching	w←	r	w←	r	w←	r	See Table 27: SaddleStitching.
SideStitching	w?	r?	w?	r?	w?	r?	See Table 28: SideStitching.
SoftCoverBinding	w←	r	w←	r	w	r	See Table 29: SoftCoverBinding.
StripBinding	w?	r?	w?	r?	w?	r?	See Table 30: StripBinding.
Tabs	w?	r?	w?	r?	w?	r?	See Table 31: Tabs.
Tape	w?	r?	w?	r?	w?	r?	See Table 32: Tape.
WireCombBinding	w?	r?	w?	r?	w?	r?	See Table 33: WireCombBinding.

7.2.1 ChannelBinding

Table 21: ChannelBinding
 Referenced by: **BindingIntent**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
ChannelBrand	w?	r	w←	r	w←	r	MUST be preserved if present.
Cover	w	r	w	r	w	r	
Thickness	w?	r	w←	r	w←	r	MUST be preserved if present.

7.2.2 CoilBinding

Table 22: CoilBinding
 Referenced by: **BindingIntent**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
CoilMaterial	w?	r	w	r	w	r	

7.2.3 EdgeGluing

Table 23: EdgeGluing
 Referenced by: **BindingIntent**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
EdgeGlue	w?	r	w	r	w	r	

7.2.4 HardCoverBinding

Table 24: HardCoverBinding
 Referenced by: **BindingIntent**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
BlockThreadSewing	w	r	w	r	w	r	

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
EndSheets	w?	r	w	r	w	r	MUST be preserved if present. Note: details may be specified in a JDF Child Node that defines the end Sheets.
HeadBands	w?	r	w	r	w	r	MUST be preserved if present.
Jacket	w?	r	w	r	w	r	MUST be preserved if present.
Thickness	w←	r	w	r	w	r	MUST be able to specify this Attribute value if known.
TightBacking	w←	r	w	r	w	r	MUST be able to specify this Attribute value if known.

7.2.5 PlasticCombBinding

Table 25: PlasticCombBinding
Referenced by: **BindingIntent**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
							All Attributes are optional and MAY be omitted.

7.2.6 RingBinding

Table 26: RingBinding
Referenced by: **BindingIntent**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
BinderMaterial	w?	r	w	r	w	r	
HoleType	w?	r	w←	r	w←	r	MUST be preserved if present.
RingDiameter	w?	r	w←	r	w←	r	MUST be preserved if present.
RingShape	w?	r	w←	r	w←	r	MUST be preserved if present.
RivetsExposed	w?	r	w←	r	w←	r	MUST be preserved if present.
ViewBinder	w?	r	w←	r	w←	r	MUST be preserved if present.

7.2.7 SaddleStitching

Table 27: SaddleStitching
 Referenced by: **BindingIntent**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
StitchNumber	w?	r	w	r	w	r	

7.2.8 SideStitching

Table 28: SideStitching
 Referenced by: **BindingIntent**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
StitchNumber	w?	r	w	r	w	r	

7.2.9 SoftCoverBinding

Table 29: SoftCoverBinding
 Referenced by: **BindingIntent**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
EndSheets	w←	r	w	r	w	r	
GlueProcedure	w←	r	w	r	w	r	
SpineGlue	w?	r	w←	r	w←	r	MUST be preserved if present.

7.2.10 StripBinding

Table 30: StripBinding
 Referenced by: **BindingIntent**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
							All Attributes are optional and MAY be omitted.

7.2.11 Tabs

Table 31: Tabs
Referenced by: BindingIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
TabBanks	w←	r	w	r	w	r	
TabBrand	w?	r	w	r	w	r	
TabsPerBank	w←	r	w	r	w	r	
TabExtensionDistance	w?	r	w	r	w	r	
TabExtensionMylar	w←	r	w	r	w	r	
TabBindMylar	w←	r	w	r	w	r	
TabBodyCopy	w←	r	w	r	w	r	
TabMylarColor	w?	r	w←	r	w←	r	MUST NOT be supplied in a Quotation or PurchaseOrder if <i>TabExtensionMylar</i> is "false".

7.2.12 Tape

Table 32: Tape
Referenced by: BindingIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
TapeColor	w?	r	w←	r	w←	r	MUST be preserved if present.

7.2.13 WireCombBinding

Table 33: WireCombBinding
Referenced by: BindingIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
WireCombShape	w?	r	w	r	w	r	

7.3 ColorIntent

Table 34: ColorIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
ColorStandard	w?	r	w←	r	w←	r	MUST be preserved if present.
ColorICCStandard	w?	r	w←	r	w←	r	MUST be preserved if present.
Coverage	w?	r	w←	r	w←	r	MUST be preserved if present.
ColorsUsed	w	r	w	r	w	r	<p>Note: Partition ColorIntent by <i>Side</i> if the front is a different color from the back.</p> <p>Note: the front is the outside of the Product, e.g. cover where the first reader Page is located.</p> <p>See Table 35: ColorsUsed.</p>

7.3.1 ColorsUsed

Table 35: ColorsUsed
Referenced by: ColorIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
SeparationSpec	w	r	w	r	w	r	See Table 71: SeparationSpec.

7.4 DeliveryIntent

Table 36: DeliveryIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
BuyerAccount	w?	r	w←	r	w←	r	MUST be preserved if present.
DeliveryCharge	w←	r	w	r	w	r	Must be specified if the RFQ is dependent upon this Attribute.
Earliest	w?	r	w?	r	w?	r	
EarliestDuration	w?	r	!w	r	w?	r?	
Method	w←	r	w	r	w	r	Must be specified if the RFQ is dependent upon

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
							this Attribute.
<i>Ownership</i>	w?	r	w	r	w	r	
<i>Overage</i>	w?	r	w	r	w?	r	
<i>Required</i>	w←	r	w?	r	w←	r	
<i>RequiredDuration</i>	w?	r	!w	r	w?	r?	
<i>ServiceLevel</i>	w?	r	w?	r	w←	r	Must be supplied in a Quotation if specified in the RFQ.
<i>Transfer</i>	w←	r	w	r	w	r	
<i>Underage</i>	w?	r	w	r	w?	r	
Contact	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 65: Contact – DeliveryIntent.
<i>DropIntent</i>	w	r	w	r	w	r	See Table 37: DropIntent.

7.4.1 Droplntent

Table 37: DropIntent
Referenced by: **DeliveryIntent**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>BuyerAccount</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>Earliest</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>EarliestDuration</i>	w?	r	!w	r	w←	r	
<i>Method</i>	w?	r	w←	r	w←	r	MUST be preserved if present. Value may change in the Quotation.
<i>Required</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>RequiredDuration</i>	w?	r	!w	r	w←	r	
<i>ServiceLevel</i>	w?	r	w←	r	w←	r	MUST be preserved if present. Value may change in the Quotation.
<i>Transfer</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
Contact	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 66: Contact – DropIntent.
<i>DropltemIntent</i>	w	r	w	r	w	r	See Table 38: DropItemIntent.

7.4.2 DropItemIntent

Table 38: DropItemIntent
Referenced by: DropIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>Amount</i>	w	r	w	r	w	r	
<i>OrderedAmount</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>Proof</i>	w←	r	w←	r	w←	r	Exactly one of <i>Proof</i> or PhysicalResource MUST be present. MUST be preserved if present.
<i>Unit</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
PhysicalResource	w←	r	w←	r	w←	r	Exactly one of <i>Proof</i> or PhysicalResource MUST be supplied. MUST be a refelement reference only. MUST be preserved if present. See Table 39: List of PhysicalResource Elements.

7.4.3 List of PhysicalResource Elements

This section specifies the **PhysicalResource** Elements to Support.

Table 39: List of PhysicalResource Elements
Referenced by: DropItemIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
Component – Output	w	r	w	r	w	r	See Table 62: Component – Output.

7.5 EmbossingIntent

Table 40: EmbossingIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
EmbossingItem	w	r	w	r	w	r	See Table 41: EmbossingItem.

7.5.1 EmbossingItem

Table 41: EmbossingItem
Referenced by: EmbossingIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
Direction	w	r	w	r	w	r	
EdgeAngle	w?	r	w←	r	w←	r	MUST be preserved if present.
EdgeShape	w?	r	w←	r	w←	r	MUST be preserved if present.
EmbossingType	w	r	w	r	w	r	
FoilColor	w?	r	w←	r	w←	r	MUST be preserved if present.
Height	w?	r	w←	r	w←	r	MUST be preserved if present.
ImageSize	w	r	w	r	w	r	
Level	w?	r	w←	r	w←	r	MUST be preserved if present.
Position	w?	r	w←	r	w←	r	MUST be preserved if present.

7.6 FoldingIntent

Table 42: FoldingIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
FoldingCatalog	w	r	w	r	w	r	
Fold	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 69: Fold.

7.7 HoleMakingIntent

Table 43: HoleMakingIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>Extent</i>	w?	r	w←	r	w←	r	MUST be preserved if present.

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
HoleType	w	r	w	r	w	r	

7.8 InsertingIntent

Table 44: InsertingIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
InsertList	w	r	w	r	w	r	See Table 45: InsertList.

7.8.1 InsertList

Table 45: InsertList
Referenced by: InsertingIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
Insert	w	r	w	r	w	r	See Table 46: Insert.

7.8.2 Insert

Table 46: Insert
Referenced by: InsertList

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>Folio</i>	w	r	w	r	w	r	
GlueType	w?	r	w←	r	w←	r	MUST be preserved if present.
Method	w	r	w	r	w	r	
<i>Transformation</i>	w?	r	w←	r	w←	r	MUST be preserved if present.

7.9 LaminatingIntent

Table 47: LaminatingIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description	
	State →	R	Q	P	R	Q		P
Surface		w	r	w	r	w	r	
Texture		w	r	w	r	w	r	
Thickness		w?	r	w←	r	w←	r	MUST be preserved if present.

7.10 LayoutIntent

Table 48: LayoutIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description	
	State →	R	Q	P	R	Q		P
Dimensions		w?	r	w←	r	w←	r	MUST be preserved if present.
FinishedDimensions		w	r	w	r	w	r	
FinishedGrainDirection		w?	r	w←	r	w←	r	MUST be preserved if present.
<i>FolioCount</i>		w?	r	w←	r	w←	r	MUST be preserved if present.
Pages		w	r	w	r	w	r	
PageVariance		w?	r	w←	r	w←	r	MUST be preserved if present.
<i>Sides</i>		w	r	w	r	w	r	
SizePolicy		w?	r	w←	r	w←	r	MUST be preserved if present.

7.11 MediaIntent

Table 49: MediaIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description	
	State →	R	Q	P	R	Q		P
BackCoatings		w?	r	w←	r	w←	r	MUST be preserved if present.
Brightness		w?	r	w←	r	w←	r	MUST be preserved if present.

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
FrontCoatings	w?	r	w←	r	w←	r	MUST be preserved if present.
Grade	w?	r	w←	r	w←	r	MUST be preserved if present.
MediaColor	w?	r	w←	r	w←	r	MUST be preserved if present.
MediaColorDetails	w?	r	w←	r	w←	r	MUST be preserved if present.
MediaType	w?	r	w←	r	w←	r	MUST be preserved if present.
MediaTypeDetails	w?	r	w←	r	w←	r	MUST be preserved if present.
Opacity	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>PrePrinted</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
StockBrand	w?	r	w←	r	w←	r	MUST be preserved if present.
StockType	w	r	w	r	w	r	
Texture	w?	r	w←	r	w←	r	MUST be preserved if present.
Thickness	w?	r	w←	r	w←	r	MUST be preserved if present.
Weight	w	r	w	r	w	r	

7.12 PackingIntent

Table 50: PackingIntent
 Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
BoxedQuantity	w?	r	w←	r	w←	r	MUST be preserved if present.
CartonMaxWeight	w?	r	w←	r	w←	r	MUST be preserved if present.
FoldingCatalog	w?	r	w←	r	w←	r	MUST be preserved if present.
PalletQuantity	w?	r	w←	r	w←	r	MUST be preserved if present.
PalletSize	w?	r	w←	r	w←	r	MUST be preserved if present.
PalletMaxHeight	w?	r	w←	r	w←	r	MUST be preserved if present.
PalletMaxWeight	w?	r	w←	r	w←	r	MUST be preserved if present.
PalletType	w?	r	w←	r	w←	r	MUST be preserved if present.
WrappedQuantity	w?	r	w←	r	w←	r	MUST be preserved if present.
WrappingMaterial	w?	r	w←	r	w←	r	MUST be preserved if present.

7.13 ProductionIntent

Table 51: ProductionIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
PrintPreference	w	r	w	r	w	r	
PrintProcess	w?	r	w←	r	w←	r	MUST be preserved if present.

7.14 ProofingIntent

Table 52: ProofingIntent
Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
ProofItem	w	r	w	r	w	r	See Table 53: ProofItem.

7.14.1 ProofItem

Table 53: ProofItem
Referenced by: ProofingIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
Amount	w?	r	w←	r	w←	r	MUST be preserved if present.
BrandName	w?	r	w←	r	w←	r	MUST be preserved if present.
ColorType	w?	r	w←	r	w←	r	MUST be preserved if present.
Contract	w?	r	w←	r	w←	r	MUST be preserved if present.
HalfTone	w?	r	w←	r	w←	r	MUST be preserved if present.
ImageStrategy	w?	r	w←	r	w←	r	MUST be preserved if present.
PageIndex	w?	r	w←	r	w←	r	MUST be preserved if present.
ProofName	w?	r	w←	r	w←	r	MUST be preserved if present.
ProofTarget	w?	r	w←	r	w←	r	MUST be preserved if present.
Technology	w?	r	w←	r	w←	r	MUST be preserved if present.

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
ProofType	w?	r	w←	r	w←	r	MUST be preserved if present.
ApprovalParams	w	r	w←	r	w←	r	See Table 57: ApprovalParams.

7.15 ShapeCuttingIntent

Table 54: ShapeCuttingIntent

Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
ShapeCut	w	r	w	r	w	r	See Table 55: ShapeCut.

7.15.1 ShapeCut

Table 55: ShapeCut

Referenced by: ShapeCuttingIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
ShapeType	w	r	w	r	w	r	

8 Conformance Tables – Process Resources

8.1 Address

Table 56: Address

Referenced by: **Contact** – DeliveryIntent, **Contact** – DropIntent, **Contact** – ApprovalPerson, **Contact** – CustomerInfo, **Person**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
City		w	r	w	r	w	r
Country	w?	r	w←	r	w←	r	MUST be preserved if present.
CountryCode	w?	r	w←	r	w←	r	MUST be preserved if present.
PostBox	w?	r	w←	r	w←	r	MUST be preserved if present.

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
PostalCode	w?	r	w←	r	w←	r	MUST be preserved if present.
Region	w?	r	w←	r	w←	r	MUST be preserved if present.
Street	w	r	w	r	w	r	
ExtendedAddress	w?	r	w←	r	w←	r	MUST be preserved if present. Note: specific information may be moved into the ExtendedAddress field if the information is not Supported in the underlying database. Text Element.

8.2 ApprovalParams

Table 57: ApprovalParams

Referenced by: ProofItem

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
ApprovalPerson	w	r	w←	r	w←	r	See Table 58: ApprovalPerson.

8.2.1 ApprovalPerson

Table 58: ApprovalPerson

Referenced by: ApprovalParams

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
Contact	w	r	w←	r	w←	r	See Table 63: Contact – ApprovalPerson.

8.3 ComChannel

Table 59: ComChannel

Referenced by: **Contact** – DeliveryIntent, **Contact** – DropIntent, **Contact** – ApprovalPerson, **Contact** – CustomerInfo, **Person**

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
ChannelType	w	r	w	r	w	r	

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>ChannelTypeDetails</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>Locator</i>	w	r	w	r	w	r	

8.4 Company

Table 60: Company

Referenced by: **Contact** – DeliveryIntent, **Contact** – DropIntent, **Contact** – ApprovalPerson

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>OrganizationName</i>	w	r	w	r	w	w	

8.5 Component

8.5.1 Component – Input

Table 61: Component – Input

Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>ComponentType</i>	w	r	w	r	w	r	
<i>FinalProduct</i>	!w	r?	!w	r?	!w	r?	
<i>PartialProduct</i>	w←	r	w←	r	w←	r	
<i>all remaining values</i>	!w	r?	!w	r?	!w	r?	
<i>Dimensions</i>	w?	r	w	r?	w	r	

8.5.2 Component – Output

Each Product Node’s ResourceLinkPool MUST contain at least one output ComponentLink (which, of course, links to a **Component**). That is, each Product Node MUST link to at least one output **Component**. If a Product Root Node links to an output **Component**, the **Component** is the Final Product. If any other Product Node links to an Output **Component**, the **Component** is a Partial Product. The Final Product is the single Product before any packaging or stacking.

Table 62: Component – Output
Referenced by: ResourcePool, List of PhysicalResource Elements

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>ComponentType</i>	w	r	w	r	w	r	MAY be combined with other values for Component/@ComponentType defined in [JDF1.3] .
<i>FinalProduct</i>	w	r	w	r	w	r	MUST be set if this Component is the final result of the Product Root Node. r-Test P: The amount produced MUST be taken from the ComponentLink/@Amount.
<i>PartialProduct</i>	w←	r	w←	r	w←	r	MUST be set if this Component is an intermediate result of a Product Leaf Node.
<i>Dimensions</i>	w?	r	w	r	w	r	

8.6 Contact

8.6.1 Contact – ApprovalPerson

Table 63: Contact – ApprovalPerson
Referenced by: ApprovalPerson

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>ContactTypes</i>	w	r	w	r	w	r	
<i>Approver</i>	w	r	w	r	w	r	
<i>all remaining values</i>	w?	r?	w?	r?	w?	r?	Additional values MAY be included.
<i>ContactTypeDetails</i>	w?	r	w←	r	w←	r	
Address	w?	r	w←	r	w←	r	See Table 56: Address.
ComChannel	w?	r	w←	r	w←	r	See Table 59: ComChannel.
Company	w?	r	w←	r	w←	r	See Table 60: Company.
Person	w?	r	w←	r	w←	r	See Table 70: Person.

8.6.2 Contact – CustomerInfo

Table 64: Contact – CustomerInfo
Referenced by: CustomerInfo

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>ContactTypes</i>	w	r	w	r	w	r	
<i>Customer</i>	w	r	w	r	w	r	
<i>ContactTypeDetails</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
Address	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 56: Address.
ComChannel	w	r	w	r	w	r	See Table 59: ComChannel.
Person	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 70: Person.

8.6.3 Contact – DeliveryIntent

Table 65: Contact – DeliveryIntent
Referenced by: DeliveryIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>Name</i>	w	r	w	r	w	r	
<i>ContactTypes</i>	w	r	w	r	w	r	
<i>Delivery</i>	w	r	w	r	w	r	
<i>ContactTypeDetails</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
Address	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 56: Address.
ComChannel	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 59: ComChannel.
Company	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 60: Company.
Person	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 70: Person.

8.6.4 Contact – DropIntent

Table 66: Contact – DropIntent
Referenced by: DropIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>ContactTypes</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>ContactTypeDetails</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
Address	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 56: Address.
ComChannel	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 59: ComChannel.
Company	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 60: Company.
Person	w?	r	w←	r	w←	r	MUST be preserved if present. See Table 70: Person.

8.7 CustomerInfo

Table 67: CustomerInfo
Referenced by: ResourcePool

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>BillingCode</i>	w?	r	w←	r	w←	r	MUST be preserved if present..
<i>CustomerID</i>	w?	r	w←	r	w←	r	In the PurchaseOrder, MUST be preserved if present in the Quote .
<i>CustomerJobName</i>	w	r	w	r	w	r	
<i>CustomerOrderID</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>CustomerProjectID</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
Contact	w	r	w	r	w	r	See Table 64: Contact – CustomerInfo.

8.8 DigitalMedia

Table 68: DigitalMedia
Referenced by: ArtDelivery

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>MediaType</i>	w	r	w	r	w	r	See [JDF1.3].

8.9 Fold

Table 69: Fold
Referenced by: FoldingIntent

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>From</i>	w	r	w	r	w	r	
<i>To</i>	w	r	w	r	w	r	
<i>Travel</i>	w←	r	w←	r	w←	r	At least one of <i>Travel</i> or <i>RelativeTravel</i> MUST be supplied.
<i>RelativeTravel</i>	w←	r	w←	r	w←	r	At least one of <i>Travel</i> or <i>RelativeTravel</i> MUST be supplied.

8.10 Person

Table 70: Person
Referenced by: Contact – DeliveryIntent, **Contact** – DropIntent, **Contact** – ApprovalPerson,
Contact – CustomerInfo

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
<i>AdditionalNames</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>FamilyName</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>FirstName</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>JobTitle</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>NamePrefix</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
<i>NameSuffix</i>	w?	r	w←	r	w←	r	MUST be preserved if present.
Address	w?	r	w←	r	w←	r	See Table 56: Address.

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
ComChannel	w?	r	w←	r	w←	r	See Table 59: ComChannel.

8.11 SeparationSpec

Table 71: SeparationSpec
Referenced by: ColorsUsed

Name	Customer			MIS			Description
	State →	R	Q	P	R	Q	
Name	w	r	w	r	w	r	

9 References

9.1 Normative References

- [Base-ICS] Base ICS, Version 1.3, published July 2007. Available at: <http://www.cip4.org>.
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- [RFC2396] Berners-Lee, T., Fielding, R. and L. Masinter, "Uniform Resource Identifiers (URI): Generic Syntax", RFC 2396, August 1998