Abstract

PrintTalk is an open XML standard used to communicate business information. It provides JDF with capabilities for Pricing, Web-to-Print, RFQ/Quote, Invoicing, Order Status, Sub-contracting and more. The CIP4 consortium has maintained PrintTalk as integral to JDF development since 2005.

(The prior version was 1.3; there is no 1.4.)
Copyright Notice


Permission is hereby granted, free of charge, to any person obtaining a copy of the Specification and associated documentation files (the “Specification”) to deal in the Specification, including without limitation the rights to use, copy, publish, distribute, and/or sublicense copies of the Specification, and to permit persons to whom the Specification is furnished to do so, subject to the following conditions. The above copyright notice and this permission notice must be included in all copies or substantial portions of the Specification.

THE SPECIFICATION IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED, OR OTHERWISE, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT WILL CIP4 BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF, OR IN CONNECTION WITH THE SPECIFICATION OR THE USE OR OTHER DEALINGS IN THE SPECIFICATION.

Except as contained in this notice or as allowed by membership in CIP4, the name of CIP4 must not be used in advertising or otherwise to promote the use or other dealings in this Specification without prior written authorization from CIP4.

Licenses and Trademarks

International Cooperation for Integration of Processes in Prepress, Press and Postpress, CIP4, PrintTalk, Job Description Format, JDF and the logos for both CIP4 and PrintTalk are trademarks of CIP4.

Rather than put a trademark symbol in every occurrence of other trademarked names, we state that we are using the names only in an editorial fashion, and to the benefit of the trademark owner, with no intention of infringement of the trademark.
Table of Contents

1 Introduction ................................................................................................................................. 6
  1.1 Intended Audience ............................................................................................................... 6
2 Glossary .................................................................................................................................... 7
3 PrintTalk Structure ..................................................................................................................... 9
  3.1 MIME and HTTP Content-Type .......................................................................................... 10
  3.2 XML Declaration ............................................................................................................... 10
  3.3 PrintTalk Node ................................................................................................................... 10
  3.4 Header ............................................................................................................................... 10
      3.4.1 Example of a Header ................................................................................................. 12
      3.4.2 From ........................................................................................................................ 13
      3.4.3 To ............................................................................................................................. 13
      3.4.4 Sender ....................................................................................................................... 13
      3.4.5 Credential ................................................................................................................ 14
  3.5 Request ............................................................................................................................... 14
  3.6 Response ............................................................................................................................. 15
  3.7 Abstract Elements ............................................................................................................. 15
      3.7.1 Abstract pt ................................................................................................................ 15
      3.7.1.1 jdf:GeneralID – pt .......................................................................................... 16
      3.7.2 Abstract Business Object ....................................................................................... 16
  3.8 Business Objects ................................................................................................................. 18
      3.8.1 RFQ ......................................................................................................................... 20
      3.8.2 Quotation ............................................................................................................... 22
      3.8.2.1 Quote .................................................................................................................. 23
      3.8.2.2 Pricing ............................................................................................................... 25
      3.8.2.3 Payment ............................................................................................................. 25
      3.8.2.4 jdf:GeneralID – Payment ............................................................................. 26
      3.8.2.5 CreditCard ......................................................................................................... 26
      3.8.2.6 Price ................................................................................................................... 27
      3.8.2.7 Additional ........................................................................................................... 29
      3.8.3 PurchaseOrder ......................................................................................................... 29
      3.8.4 Confirmation ............................................................................................................ 30
      3.8.5 Cancellation ............................................................................................................. 30
      3.8.6 Refusal ..................................................................................................................... 31
      3.8.7 OrderStatusRequest ............................................................................................... 31
      3.8.7.1 StatusRequest ................................................................................................. 31
      3.8.8 OrderStatusResponse ............................................................................................ 33
      3.8.8.1 Status ................................................................................................................ 34
      3.8.9 StockLevelRequest .................................................................................................. 34
      3.8.10 StockLevelResponse .............................................................................................. 35
      3.8.10.1 StockLevel ....................................................................................................... 36
      3.8.11 ProofApprovalRequest ......................................................................................... 36
      3.8.11.1 ProofRequest .................................................................................................. 37
      3.8.12 ProofApprovalResponse ....................................................................................... 38
      3.8.12.1 ProofResponse ............................................................................................... 38
      3.8.13 Invoice .................................................................................................................... 39
      3.8.14 ReturnJob ............................................................................................................... 40
4 PrintTalk Workflow Diagram .................................................................................................... 41
5 Usage of the PrintTalk IDs ....................................................................................................... 45
  5.1 BusinessID and BusinessRefID: ..................................................................................... 45
      5.1.1 Simple Negotiation ................................................................................................. 45
      5.1.2 Change Order Initiated by Print Buyer and Starting with RFQ ....... 45
      5.1.3 Change Order Initiated by Print Buyer and Starting with PurchaseOrder ... 45
      5.1.4 Change Order Initiated by Print Provider and Starting with Quotation ........ 46
      5.1.5 Complex Negotiation. ............................................................................................ 46

Page 3 of 81
5.2 ReplaceID
5.2.1 Print Buyer Supersedes RFQ
5.2.2 Print Buyer Supersedes PurchaseOrder
5.2.3 Print Provider Supersedes Quotation
5.3 ReorderID
5.3.1 Print Buyer Reorders via an RFQ
5.3.2 Print Buyer Reorders via an PurchaseOrder
5.3.3 Print Provider Quotes using ReorderID
5.4 JDF/@JobID
5.5 JDF/@JobPartID
5.6 jdf:CustomerInfo/@CustomerOrderID?

6 Examples
6.1 Example A – “Learn to Fly” Mailer
6.1.1 Outline of JDF Structure
6.1.2 Text Version of RFQ
6.1.3 PrintTalk Version of RFQ
6.2 Example B – Bible
6.2.1 Outline of JDF Structure
6.2.2 PrintTalk Version of RFQ
6.2.3 PrintTalk Version of Quotation
6.3 Example C – Sunrise PurchaseOrder
6.3.1 Text Version of RFQ
6.3.2 PrintTalk Version of RFQ
6.4 Example D – Collaboration Scenario
6.4.1 PrintTalk Version of PurchaseOrder for Print Buyer PB1
6.4.2 PrintTalk Version of PurchaseOrder for Print Buyer PB2
6.4.3 PrintTalk Version of PurchaseOrder for Dealer
6.4.4 PrintTalk Version of OrderStatusResponse (1) for Dealer
6.4.5 PrintTalk Version of OrderStatusResponse (2) for Print Buyer PB1
6.4.6 PrintTalk Version of OrderStatusResponse (3) for Print Buyer PB2

7 References
7.1 Normative References
PrintTalk Version 1.5

Figures

Figure 1: Structure of PrintTalk Node ................................................................. 9
Figure 2: Simplified Workflow Diagram .............................................................. 10
Figure 3: Proof Cycle ......................................................................................... 11
Figure 4: Status Request Cycle ......................................................................... 13
Figure 5: Change Order Management ................................................................. 15
Figure 6: Workflow Diagram .............................................................................. 17
Figure 7: Outline of JDF Structure for the “Bible” Example ................................. 19
Figure 8: Diagram of Business Transactions among Four Collaborating Parties ......................................................... 21

Tables

Table 1: Glossary ............................................................................................... 22
Table 2: PrintTalk .............................................................................................. 23
Table 3: Header ................................................................................................. 25
Table 4: From .................................................................................................... 26
Table 5: To ......................................................................................................... 26
Table 6: Sender ................................................................................................. 27
Table 7: Credential ............................................................................................ 29
Table 8: Request ............................................................................................... 30
Table 9: Abstract pt ........................................................................................... 30
Table 10: jdf:GeneralID – pt ............................................................................. 31
Table 11: Abstract BusinessObject .................................................................. 31
Table 12: List of BusinessObject Elements ...................................................... 32
Table 13: RFQ .................................................................................................... 33
Table 14: Quotation .......................................................................................... 34
Table 15: Quote ................................................................................................ 34
Table 16: Pricing ............................................................................................... 35
Table 17: Payment ............................................................................................. 35
Table 18: jdf:GeneralID – Payment ................................................................. 36
Table 19: CreditCard ........................................................................................ 36
Table 20: Price ................................................................................................. 37
Table 21: Additional ........................................................................................ 37
Table 22: PurchaseOrder ................................................................................... 38
Table 23: Confirmation ..................................................................................... 38
Table 24: Cancellation ...................................................................................... 39
Table 25: Refusal .............................................................................................. 39
Table 26: OrderStatusRequest ....................................................................... 40
Table 27: StatusRequest .................................................................................. 40
Table 28: OrderStatusResponse ..................................................................... 41
Table 29: Status ............................................................................................... 41
Table 30: StockLevelRequest ........................................................................... 42
Table 31: StockLevelResponse ........................................................................ 42
Table 32: StockLevel ........................................................................................ 43
Table 33: ProofApprovalRequest .................................................................... 43
Table 34: ProofRequest .................................................................................... 44
Table 35: ProofApprovalResponse .................................................................. 44
Table 36: ProofResponse .................................................................................. 45
Table 37: Invoice .............................................................................................. 45
Table 38: ReturnJob ......................................................................................... 45

Page 5 of 81
1 Introduction

PrintTalk is an XML standard that provides a single format for Print Providers to collaboratively communicate Business Transactions and specifications of Print Product both with their Print Buyers and among themselves. Print industry professionals from a wide range of organizations contributed to the design of PrintTalk. Such organizations include eCommerce companies, print Business Management Systems, print providers, and print equipment manufactures.

The PrintTalk standard embraces [JDF1.5] and [cXML 1.2]. These bracketed references are defined in Section 7 “References”. By incorporating PrintTalk, JDF has been enhanced to provide a richer descriptive capability. While JDF describes the piece to be produced, PrintTalk specifies the external communication of business processes between Print Provider and Print Buyer.

With the extensions made for PrintTalk 1.3, it may also be used for subcontracting. For details about JDF, see [JDF1.5]

The PrintTalk interface specification is distributed free of any license fees or royalties in order to address the need for end-to-end connectivity in the printing industry.

The following pages describe the Business Objects that make up PrintTalk. See section 3.8 “Business Objects” for a complete list of Business Objects and a description of each.

1.1 Intended Audience

While print industry professionals may find parts of this specification to be useful; our primary goal is to describe the PrintTalk protocol to programmers who wish to implement the PrintTalk interface specification within their software products. A working knowledge of XML and familiarity with JDF is required to fully understand this document.
# 2 Glossary

This section defines terminology used throughout this document. References to other documents are indicated with square brackets, e.g. [JDF1.5]. For most terms, see the Terminology section in [JDF1.5].

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business Object</strong></td>
<td>The portion of a <em>PrintTalk Document</em> that describes a <em>Business Transaction</em>. For example an RFQ <em>Business Object</em> describes a request-for-quote <em>Business Transaction</em> and a PurchaseOrder <em>Business Object</em> describes a purchase order <em>Business Transaction</em>.</td>
</tr>
</tbody>
</table>
| **Business Transaction** | When a *Print Buyer* sends a *PrintTalk Document* to a *Print Provider*, or a *Print Provider* sends a *PrintTalk Document* to a *Print Buyer*, the *Business Object* within the *PrintTalk Document* describes a *Business Transaction* between the *Print Buyer* and *Print Provider*.
| **Change Order**         | A *Business Transaction* that requests changes to *Confirmed Job*.                                                                                                                                         |
| **Confirmed Job**        | A Job (producing *Print Product*) that a *Print Buyer* and *Print Provider* have agreed to after negotiating a contract for it. The *Print Provider* consummates the agreement by confirming the *Print Buyer*’s purchase order.           |
| **Invalid**              | When used in the context of a *Business Object*, it refers to a *Business Object* that is no longer *Pending* and is thus no longer accessible.                                                               |
| **Item**                 | Something that is priced separately in a *Quote*, *PurchaseOrder* or *Invoice*.                                                                                                                             |
| **Negotiation Phase**    | The phase during which a *Print Buyer* and *Print Provider* negotiate a contract for *Print Product* by exchanging *Business Objects*. The *Production Phase* follows the *Negotiation Phase*.                                        |
| **Pending**              | When used in the context of a *Business Object*, it refers to a *Pending Business Object*.                                                                                                                  |
| **Pending Business Object** | A *Business Object* that other *Business Objects* can reference via @BusinessRefID and @ReplaceID. A *Business Object* X is pending from the time a *Print Buyer* or *Print Provider* creates it until
|                          |   • it expires,
|                          |   • its creator sends a *Cancellation* whose @BusinessRefID references X, or
<p>|                          |   • its creator sends a <em>Business Object</em> whose @ReplaceID references X.                                                                                                                                   |
| <strong>Print Buyer</strong>          | The customer that is buying <em>Print Product</em>.                                                                                                                                                                  |
| <strong>Print Product</strong>        | The printed matter produced according to a contract negotiated between the <em>Print Buyer</em> and <em>Print Provider</em> using the <em>PrintTalk negotiation process</em>.                                                        |
| <strong>Print Provider</strong>       | The producer of the <em>Print Product</em>.                                                                                                                                                                         |
| <strong>PrintTalk Document</strong>   | An XML document whose Root element has a Type of “PrintTalk” and which follows the rules of this document, the <em>PrintTalk 1.5 specification</em>.                                                                   |
| <strong>Production Phase</strong>     | The phase during which a <em>Print Provider</em> produces and ships <em>Print Product</em>.                                                                                                                              |
| <strong>Re-Quote</strong>             | An additional <em>Quotation</em> for a variation in a Job, for which the <em>Print Provider</em> has already issued a <em>Quotation</em>.                                                                                           |
| <strong>Supersedes</strong>           | If <em>Business Object X Supersedes Business Object Y</em>, <em>Business Object X</em> becomes a <em>Pending Business Object</em> and <em>Business Object Y</em> becomes a <em>Superseded Business Object</em>.                                  |</p>
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superseded Business Object</td>
<td>When a Print Buyer or Print Provider sends a Business Object X with a @ReplaceID that references some other Business Object Y of the same type, Business Object Y becomes a Superseded Business Object and Business Object X become a Pending Business Object, A Superseded Business Object is Invalid and not Pending.</td>
</tr>
<tr>
<td>Superseding Business Object</td>
<td>A Business Object that Supersedes some other Business Object.</td>
</tr>
</tbody>
</table>
3 PrintTalk Structure

A PrintTalk Document is JDF wrapped in PrintTalk, which is similar to cXML. Like cXML, the top two elements of a PrintTalk Document SHALL be a Header element and a Request element. The Header concept comes directly from cXML, and identifies the parties involved in this correspondence. The Request element SHALL contain exactly one PrintTalk Business Object.

Whenever elements or attributes are specified with a “jdf” namespace prefix, this prefix specifies the presence of that element from the JDF namespace xmlns:jdf="http://www.CIP4.org/JDFSchema_1_1". A PrintTalk implementation SHALL support standard namespace handling as defined in [XMLNS]. Thus the prefix “jdf:“ is used as an example only. Any element from the JDF namespace MAY be specified with any prefix conforming to [XMLNS], including the default (empty) namespace prefix.

This document does not specify the transport for a PrintTalk Object. The selection of transport is left to the implementer. For example, a PrintTalk Object MAY be sent via email as an attachment, or it MAY be sent via HTTP using the POST or GET Method. Note that future ICS documents MAY restrict the transport protocol for PrintTalk in the context of specific interfaces.

The following pages provide a detailed explanation of each PrintTalk element. Figure 1 shows a high level view of the PrintTalk structure, where each box represents either an XML declaration (the first one) or a PrintTalk element.

**Figure 1: Structure of PrintTalk Node**

| XML |
| PrintTalk |
| Header |
| From |
| Credential... |
| To |
| Credential... |
| Sender |
| Credential... |
| Request |
| **BusinessObject**: (RFQ, Quotation, PurchaseOrder, Confirmation, Cancellation, Refusal, OrderStatusRequest, OrderStatusResponse, StockLevelRequest, StockLevelResponse, ProofApprovalRequest, ProofApprovalResponse, Invoice, ReturnJob) |
| jdf:JDF |
3.1 MIME and HTTP Content-Type

If PrintTalk is packaged in a MIME wrapper or posted over HTTP, the respective Content-Type header value SHOULD be set to: application/vnd-cip4-ptk+xml.

3.2 XML Declaration

A PrintTalk Document SHOULD start with the standard XML Declaration. An example is:

```xml
<?xml version="1.0" encoding="utf-8"?>
```

3.3 PrintTalk Node

The Root element in a PrintTalk Document SHALL be an element whose type is "PrintTalk". An example is:

```xml
<PrintTalk version="1.5" payloadID="107778" Timestamp="2013-02-01T22:39:00Z" xmlns="http://www.printtalk.org/schema_15">
...
</PrintTalk>
```

Table 2: PrintTalk

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>payloadID</td>
<td>string</td>
<td>From cXML: A unique number with respect to space and time, used for logging purposes to identify documents that might have been lost or had problems. This value SHOULD not change for retry attempts.</td>
</tr>
<tr>
<td>Timestamp</td>
<td>dateTime</td>
<td>From cXML: The date and time the message was sent, in [ISO8601] format. Timestamp SHALL NOT change for retry attempts.</td>
</tr>
<tr>
<td>version</td>
<td>string</td>
<td>The version of PrintTalk. The current release is &quot;1.5&quot;.</td>
</tr>
<tr>
<td>xmlns</td>
<td>URI</td>
<td>PrintTalk supports use of XML namespaces. The namespace SHALL be declared in the PrintTalk element. For details on using namespaces in XML, see [XMLNS]. For version 1.5 of PrintTalk, xmlns = &quot;<a href="http://www.printtalk.org/schema_15">http://www.printtalk.org/schema_15</a>&quot;.</td>
</tr>
<tr>
<td>Header</td>
<td>element</td>
<td>The Header defined in [cXML 1.2]. See Table 3: Header.</td>
</tr>
<tr>
<td>Request</td>
<td>element</td>
<td>The Request defined in [cXML 1.2] and as further specified in this document. See Table 8: Request.</td>
</tr>
</tbody>
</table>

3.4 Header

The Header element comes directly from cXML. Refer to the cXML Users Guide [cXML 1.2].

**From cXML:** The From, To and Sender elements allow receiving systems to identify and authorize parties. The From and To elements in a document do not change. However, as the document travels to its destination, intermediate nodes (such as Ariba Network) MAY change the Sender element.

For example, in an RFQ, the “From” party is the Print Buyer. The “To” party is the Print Provider. In the subsequent Quotation, those roles are reversed. The Sender is always the party sending the message.
Table 3: Header
Referenced by: PrintTalk

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>element</td>
<td><strong>From cXML:</strong> identifies the originator of the cXML request. See Table 4: From.</td>
</tr>
<tr>
<td>Sender</td>
<td>element</td>
<td><strong>From cXML:</strong> allows the receiving party to identify and authenticate the party that opened the HTTP connection. It contains a stronger authentication Credential than the ones in the From or To elements, because the receiving party SHALL authenticate who is asking it to perform work. See Table 6: Sender.</td>
</tr>
<tr>
<td>To</td>
<td>element</td>
<td><strong>From cXML:</strong> identifies the destination of the cXML request. See Table 5: To.</td>
</tr>
</tbody>
</table>
3.4.1 Example of a Header

The following is an example of a Header taken from a Quotation. In this example, the “To” party is a Print Buyer company called “PeterPan”. The DUNS number uniquely identifies them. The “From” party is a Print Provider. It too, is uniquely identified by a DUNS number. The “Sender” is the party sending this PrintTalk Document. In this case, it’s an eCommerce company. The SharedSecret element is a password known to (at least) the eCommerce company and the “To” party.

The content and exact format of this section depends on the specific implementation. All parties SHOULD agree to the format prior to sending messages.

```xml
<Header>
  <From>
    <Credential domain="DNS">
      <Identity>AnExcellentPrinter.com</Identity>
    </Credential>
    <Credential domain="ECompany.com">
      <Identity>Polkadot</Identity>
    </Credential>
    <Credential domain="DUNS">
      <Identity>3040392</Identity>
    </Credential>
    <Credential domain="jdf:CustomerID">
      <Identity>C1234</Identity>
    </Credential>
  </From>
  <To>
    <Credential domain="DNS">
      <Identity>pan-o-ramic.com</Identity>
    </Credential>
    <Credential domain="ECompany.com">
      <Identity>PetePan</Identity>
    </Credential>
    <Credential domain="DUNS">
      <Identity>93009388</Identity>
    </Credential>
  </To>
  <Sender>
    <Credential domain="DNS">
      <Identity>ECompany.com</Identity>
      <UserAgent>Print Buyer v.54.9</UserAgent>
    </Credential>
  </Sender>
</Header>
```
### 3.4.2 From

Table 4: From

Referenced by: Header

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credential</td>
<td>element</td>
<td>A customer identifier that is known by the receiver (see jdf:CustomerInfo/@CustomerID) SHALL be specified as Credential[@domain=&quot;jdf:CustomerID&quot;]/Identity. See Table 7: Credential.</td>
</tr>
</tbody>
</table>

### 3.4.3 To

Table 5: To

Referenced by: Header

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credential</td>
<td>element</td>
<td>See Table 7: Credential.</td>
</tr>
</tbody>
</table>

### 3.4.4 Sender

Table 6: Sender

Referenced by: Header

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credential</td>
<td>element</td>
<td>See Table 7: Credential.</td>
</tr>
<tr>
<td>UserAgent</td>
<td>element</td>
<td>See [cXML 1.2].</td>
</tr>
</tbody>
</table>
3.4.5 Credential
A Credential identifies and authenticates the various parties involved in a transaction.

Table 7: Credential
Referenced by: From, To, Sender

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>domain</td>
<td>string</td>
<td>From cXML: Specifies the type of credential. This attribute allows documents to contain multiple types of credentials for multiple authentication domains. From cXML: For messages sent on Ariba Supplier Network, for instance, the domain MAY be AribaNetworkUserId to indicate an email address, DUNS for a D-U-N-S number, or NetworkId for a preassigned UserID. In addition to the domains defined by [cXML 1.2]. Values include:</td>
</tr>
<tr>
<td>jdf:AgentID</td>
<td></td>
<td>Identifier of the individual user in the print buyer system.</td>
</tr>
<tr>
<td>jdf:CustomerID</td>
<td></td>
<td>Customer Identifier in the print provider system.</td>
</tr>
<tr>
<td>jdf:ShopID</td>
<td></td>
<td>Identifier of the web shop if the BusinessObject has been submitted in a web-to-print environment.</td>
</tr>
<tr>
<td>type ?</td>
<td>string</td>
<td>See [cXML 1.2].</td>
</tr>
<tr>
<td>CredentialMac ?</td>
<td>element</td>
<td>See [cXML 1.2].</td>
</tr>
<tr>
<td>Identity</td>
<td>element</td>
<td>From cXML: The text in the element states who the Credential represents. For example, the text MAY be an email address or some other unique string of characters. See [cXML 1.2].</td>
</tr>
<tr>
<td>SharedSecret ?</td>
<td>element</td>
<td>See [cXML 1.2].</td>
</tr>
</tbody>
</table>

3.5 Request
The Request element comes from [cXML 1.2]. However, its child BusinessObject is defined in PrintTalk but not in [cXML 1.2].

Table 8: Request
Referenced by: PrintTalk

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BusinessObject</td>
<td>element</td>
<td>A PrintTalk Request SHALL contain exactly one BusinessObject. See Table 11: Abstract BusinessObject.</td>
</tr>
</tbody>
</table>
3.6 Response

If the PrintTalk document is sent over a synchronous protocol, e.g. HTTP, then a valid cXML response SHOULD be generated if an error occurred. If no error occurred, a valid cXML response SHOULD be sent, but a response MAY be returned as an empty HTTP response with an HTTP response code of 200. See [cXML 1.2] for details, including a discussion of error handling and error codes in the Response. See pages 49-51 in [cXML 1.2] for a list of status codes.

Example PrintTalk success Response:

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<PrintTalk version="1.5" payloadID="107778" Timestamp="2013-02-01T22:39:00Z" xmlns="http://www.printtalk.org/schema_15">
  <Response>
    <Status code="200"/>
  </Response>
</PrintTalk>
```

Example PrintTalk error Response:

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<PrintTalk version="1.5" payloadID="107778" Timestamp="2013-02-01T22:39:00Z" xmlns="http://www.printtalk.org/schema_15">
  <Response>
    <Status code="400">Stuff happens</Status>
  </Response>
</PrintTalk>
```

3.7 Abstract Elements

PrintTalk has two abstract element types that other elements inherit from.

3.7.1 Abstract pt

All elements in the PrintTalk namespace inherit from the Abstract pt element. That is, every descendant of the Request element inherits from the Abstract pt element, either directly or indirectly through the Abstract BusinessObject (see Table 11: Abstract BusinessObject).

Table 9: Abstract pt

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DescriptiveName ?</td>
<td>string</td>
<td>Display text for this element.</td>
</tr>
<tr>
<td>jdf:Comment *</td>
<td>element</td>
<td>Comment text that contains free form information about the element. See JDF “Generic Element” for the definition of the Comment element.</td>
</tr>
</tbody>
</table>
### Name | Data Type | Description
--- | --- | ---
**jdf:GeneralID** * New in PrintTalk 1.3 | element | Optional parameters for a *Business Transaction*. *GeneralID* elements MAY be used e.g. to carry a system's internal IDs. Generally both parties SHALL agree on the semantics of these IDs in an out-of-band communication. **Note:** a *GeneralID* references a *Business Object* that is a secondary parameter in a *Business Transaction*, whereas *@BusinessRefID* references a *Business Object* that is the primary parameter in a *Business Transaction*. See Table 10: *jdf:GeneralID – pt.*

#### 3.7.1.1 *jdf:GeneralID – pt*

This section specifies particular PrintTalk values in Abstract *pt* for *jdf:GeneralID*.

**Table 10: *jdf:GeneralID – pt***

Referenced by: Abstract *pt*

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDUsage</td>
<td>NMTOKEN</td>
<td>Values include:</td>
</tr>
<tr>
<td><em>PurchaseOrderID</em>*</td>
<td></td>
<td><em>@BusinessID</em> of the initial <em>PurchaseOrder</em>.</td>
</tr>
<tr>
<td><em>QuoteID</em>*</td>
<td></td>
<td><em>@BusinessID</em> of the initial <em>Quotation</em>.</td>
</tr>
<tr>
<td><em>RFQID</em>*</td>
<td></td>
<td><em>@BusinessID</em> of the initial <em>RFQ</em>.</td>
</tr>
<tr>
<td><strong>all remaining values</strong></td>
<td></td>
<td>Application specific identifier.</td>
</tr>
<tr>
<td>IDValue</td>
<td>string</td>
<td>The value of the identifier that <em>IDUsage</em> specifies.</td>
</tr>
</tbody>
</table>

#### 3.7.2 Abstract *BusinessObject*

All *Business Objects* in PrintTalk (e.g. RFQ) extend the Abstract *BusinessObject* element. The Abstract *BusinessObject* element itself extends the Abstract *pt* element.

Table 11 below describes the contents of the Abstract *BusinessObject* element. For a detailed description of each Data Type see [JDF1.5].

Each individual *BusinessObject* within PrintTalk inherits all of the attributes and elements of the Abstract *BusinessObject* element, which in turn inherits all attributes and elements of the Abstract *pt* element.

Each *Business Object* has additional attributes and elements that are defined in a subsection of section 3.8 “Business Objects”. Three of these *Business Objects* (RFQ, Quotation and *PurchaseOrder*) have a *jdf:JDF Node*. Credentials related to the context of the *Business Object* SHALL be extracted from the PrintTalk/Header.
Table 11: Abstract BusinessObject

Referenced by: Request  
Subclass of: Abstract pt

Superclass of: RFQ, Quotation, PurchaseOrder, Confirmation, Cancellation, Refusal, OrderStatusRequest, OrderStatusResponse, StockLevelRequest, StockLevelResponse, ProofApprovalRequest, ProofApprovalResponse, Invoice, ReturnJob

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AgentDisplayName ?</td>
<td>string</td>
<td>The display name of the user that is identified by @AgentID.</td>
</tr>
<tr>
<td>AgentID ?</td>
<td>NMTOKEN</td>
<td>The unique identity of the user that “pushed the button” to send this PrintTalk Document, for example, a Print Buyer in an RFQ or a Print Provider’s estimator in a Quotation. Description note: the value &quot;AgentID&quot; was added to Credential/@domain.</td>
</tr>
<tr>
<td>AuxID ?</td>
<td>string</td>
<td>@AuxID is used as a reference to the Print Buyer's internal system ID by the sender. An @AuxID SHALL be used to carry a systems internal ID. Modification note: starting with PrintTalk 1.3, SHALL use pt/jdf:GeneralID for any IDs other than the Print Buyer's internal system ID.</td>
</tr>
<tr>
<td>BusinessID</td>
<td>NMTOKEN</td>
<td>The unique identifier for this Business Object.</td>
</tr>
<tr>
<td>BusinessRefID ?</td>
<td>NMTOKEN</td>
<td>The value of this @BusinessRefID SHALL be the same as the @BusinessID of some other Pending Business Object which acts as the primary parameter to the Business Transaction that this PrintTalk Document represents. See pt/GeneralID for secondary parameters. Prior to a PurchaseOrder, a @BusinessRefID SHALL refer to a Business Object that was received from the other party. Once a PurchaseOrder has been placed, PurchaseOrder /@BusinessID SHALL be used as the @BusinessRefID of all following Business Objects. For example, a Quotation/@BusinessRefID references an RFQ if it provides a quote for the RFQ, or it references a PurchaseOrder if it specifies a Change Order.</td>
</tr>
<tr>
<td>RequestDate ?</td>
<td>dateTime</td>
<td>Date/Time when this Business Object was sent.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deprecation note: starting with PrintTalk 1.5, use PrintTalk/@Timestamp.</td>
</tr>
</tbody>
</table>
3.8 Business Objects

For a Print Buyer and a Print Provider to negotiate a contract for Print Product, they SHALL exchange one or more of the following Business Objects: RFQ, Quotation, PurchaseOrder, Confirmation, Cancellation and Refusal.

After a contract has been consummated, either a Print Buyer or a Print Provider MAY initiate a Change Order. The negotiation of the Change Order is performed with the same Business Objects as the initial negotiation – RFQ, Quotation, PurchaseOrder, Confirmation, Cancellation and Refusal. The contract, which both parties have agreed on during previous negotiations, is valid during the whole Change Order process. However the Print Provider may halt production of the Print Product. The old contract is replaced only if there is a new agreement on a Change Order (expressed by the new Confirmation sent by the Print Provider). If the Change Order process terminates with a Refusal of a Business Object, an expired Business Object, or Cancellation of a Business Object, the Change Order process fails and production continues as originally planned before the Change Order was proposed.

During the Production Phase, interactions other than Change Orders can take place between the Print Buyer and Print Provider. The Print Buyer MAY send one or more OrderStatusRequest elements and receive an OrderStatusResponse from each request. The Print Provider MAY send unsolicited OrderStatusResponse elements. The Print Provider MAY send one or more ProofApprovalRequest elements and receive a ProofApprovalResponse from each request.

Either the Print Buyer or the Print Provider MAY send a Cancellation for the Job during the Production Phase, which generally leads to a final Invoice that conforms to the Print Provider’s terms and conditions.

The Print Provider MAY send Invoice elements to the Print Buyer after delivery of the Print Product as well as at various milestones.

After the Production Phase is finished, the Print Provider MAY send back information about the produced Job using a ReturnJob element.

The following table lists the Business Objects that a PrintTalk implementation SHALL support. Each Business Object corresponds to a Business Transaction used in the commercial print industry. The list may expand in the future as the PrintTalk specification grows to support other Business Transactions and new areas of the industry.

The table columns are:

- Column 1: specifies the name of a Business Object and is a hotlink to a subsection on it.
- Column 2: describes the Business Object.
- Column 3: specifies the Business Objects which the named Business Object can reference via @BusinessRefID. The value "None" means that the @BusinessRefID MAY be absent from the Business Object.
- Column 4: specifies the direction of the Business Transaction, between the Print Buyer (shown as “B”) and Print Provider (shown as “P”). In the cases with the two-headed arrow, the Business Transaction can be in either direction.
### Table 12: List of BusinessObject Elements

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>References</th>
<th>Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFQ</td>
<td>A Request for Quote that a <em>Print Buyer</em> sends to a <em>Print Provider</em>.</td>
<td><em>None</em>, Quotation, Confirmation</td>
<td>B→P</td>
</tr>
<tr>
<td>Quote</td>
<td>A <em>Quote</em> MAY be sent in response to a RFQ. The <em>Quote</em> may contain very detailed information about the printing processes intended to create the product defined by the <em>RFQ</em> or it may contain only basic price and billing information. As with traditional quotes, providing the <em>Print Buyer</em> with detailed information lessens the chance of a misunderstanding. The <em>Re-Quote</em> and <em>Change Order Quote</em> variations are included within <em>Quote</em>. A <em>Quote</em> may <em>Supersede</em> an existing <em>Quote</em> before the <em>Print Buyer</em> has answered with a RFQ or an Order. <strong>Deprecation note:</strong> starting with PrintTalk 1.3, <em>Quote</em> elements SHALL be nested in <em>Quotation</em> Business Objects.</td>
<td>RFQ, PurchaseOrder, Confirmation</td>
<td>B←P</td>
</tr>
<tr>
<td>Quotation</td>
<td>A <em>Print Provider</em> sends a <em>Quotation</em> to a <em>Print Buyer</em> to provide one or more quotes for a Job. <strong>Note:</strong> starting with PrintTalk 1.3, <em>Quotation</em> replaces the <em>Quote</em> Business Object.</td>
<td>RFQ, PurchaseOrder, Confirmation</td>
<td>B←P</td>
</tr>
<tr>
<td>PurchaseOrder</td>
<td>A <em>Print Buyer</em> sends a <em>PurchaseOrder</em> to a <em>Print Provider</em> to purchase <em>Print Product</em> that is specified in a <em>Quotation</em>.</td>
<td><em>None</em>, Quotation, Confirmation</td>
<td>B→P</td>
</tr>
<tr>
<td>Confirmation</td>
<td>A <em>Print Provider</em> sends a <em>Confirmation</em> if it accepts a <em>PurchaseOrder</em> or Cancellation.</td>
<td>PurchaseOrder</td>
<td>B←P</td>
</tr>
<tr>
<td>Cancellation</td>
<td>A Cancellation cancels a <em>Business Object</em>.</td>
<td>RFQ, Quotation, PurchaseOrder, Confirmation</td>
<td>B←P</td>
</tr>
<tr>
<td>Refusal</td>
<td>A <em>Refusal</em> declines a received <em>Business Object</em>.</td>
<td>RFQ, Quotation, PurchaseOrder</td>
<td>B←P</td>
</tr>
<tr>
<td>OrderStatusRequest</td>
<td>A <em>Print Buyer</em> sends an <em>OrderStatusRequest</em> to the <em>Print Provider</em> for details of the order status.</td>
<td>PurchaseOrder</td>
<td>B→P</td>
</tr>
<tr>
<td>OrderStatusResponse</td>
<td>A <em>Print Provider</em> sends to a <em>Print Buyer</em> an <em>OrderStatusResponse</em> either automatically or as the response to an <em>OrderStatusRequest</em>. See pages 49-51 in [cXML 1.2] for a list of status codes.</td>
<td>PurchaseOrder, OrderStatusRequest</td>
<td>B←P</td>
</tr>
</tbody>
</table>
### Name Description References Flow

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>References</th>
<th>Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProofApprovalRequest</td>
<td><strong>A Print Provider</strong> sends a ProofApprovalRequest to the <strong>Print Buyer</strong> to request an approval of a Proof.</td>
<td>PurchaseOrder</td>
<td>B→P</td>
</tr>
<tr>
<td>ProofApprovalResponse</td>
<td><strong>A Print Buyer</strong> sends a to a <strong>Print Provider</strong> ProofApprovalResponse as the response to a ProofApprovalRequest. See pages 49-51 in [cXML 1.2] for a list of status codes.</td>
<td>ProofApprovalRequest</td>
<td>B→P</td>
</tr>
<tr>
<td>StockLevelRequest</td>
<td><strong>A Print Buyer</strong> sends a StockLevelRequest to the <strong>Print Provider</strong> for a list of items that are available on stock.</td>
<td>-</td>
<td>B→P</td>
</tr>
<tr>
<td>StockLevelResponse</td>
<td><strong>A Print Provider</strong> sends a StockLevelResponse to a <strong>Print Buyer</strong> as the response to a StockLevelRequest.</td>
<td>StockLevelRequest</td>
<td>B→P</td>
</tr>
<tr>
<td>Invoice</td>
<td><strong>A Print Provider</strong> sends an Invoice to a <strong>Print Buyer</strong> to request payment</td>
<td>PurchaseOrder, Cancellation</td>
<td>B→P</td>
</tr>
<tr>
<td>ReturnJob</td>
<td><strong>A Print Provider</strong> sends a ReturnJob to a <strong>Print Buyer</strong> to provide production information for the Job.</td>
<td>PurchaseOrder</td>
<td>B→P</td>
</tr>
</tbody>
</table>

#### 3.8.1 RFQ

A **Print Buyer** sends an RFQ to a **Print Provider** to request a quote. Usually the **Negotiation Phase** starts with an RFQ. Sometimes, the **Negotiation Phase** starts with a **Quotation** or **PurchaseOrder** (see sections 3.8.2 “Quotation” and 3.8.3 “PurchaseOrder”).

An RFQ SHALL convey the unambiguous intentions of the **Print Buyer** to the **Print Provider**. A complex RFQ MAY contain options that specify several types of acceptable materials or methods required by the **Print Buyer**. An RFQ MAY contain other options that require the **Print Provider’s** estimator to generate more than one quoted price in the response.

A **Print Buyer** sends an RFQ whose semantics vary depending on @BusinessRefID.

**Not specified:** If a **Print Buyer** chooses to initiate a new product process by making a request-for-quote to a **Print Provider**, it SHALL send an RFQ with no @BusinessRefID.

**Quotation:** If a **Print Buyer** receives a Quotation for a Job and wants a Re-Quote for a variation of the Job, it SHALL send an RFQ whose @BusinessRefID references the received Quotation.

**Confirmation:** If a **Print Buyer** wants to initiate a Change Order for a Confirmed Job and the PurchaseOrder form of a Change Order cannot be used because there are changes that don’t have quotes, the **Print Buyer** SHALL send an RFQ whose @BusinessRefID references the Confirmation for the Confirmed Job. A Change Order (CO) RFQ asks what the consequences would be for a certain change of the Print Product. See 3.8.3 “PurchaseOrder” for an alternate Change Order that a **Print Buyer** can send.

After the **Print Buyer** has sent an RFQ and while it is Pending, the **Print Buyer** MAY send either

- a **Superseding** RFQ that replaces the Pending one or.
- an unrelated RFQ or
• a Cancellation for the Pending RFQ after which the Print Buyer MAY choose to continue the negotiation process by sending either a new RFQ or a new PurchaseOrder for a Pending Quotation. A Pending Quotation exists only if the cancelled RFQ was in fact a Request for Re-Quote.

When a Print Provider receives an RFQ, the Print Provider SHALL either
• accept the RFQ by sending a Quotation to the Print Buyer or
• decline the RFQ by either sending a Refusal to the Print Buyer or letting the RFQ expire.

### Table 13: RFQ

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency</td>
<td>NMTOKEN</td>
<td>Three-digit currency definition according to [ISO4217], e.g., USD, EUR, GBP. The value of @Currency identifies the currency that the Print Provider SHOULD use in the responding Quotation.</td>
</tr>
<tr>
<td>Estimate ?</td>
<td>boolean</td>
<td>If &quot;false&quot;, the prices in the responding Quotation SHALL be binding amounts. If &quot;true&quot;, the Print Buyer SHALL treat the prices in the responding Quotation as an estimate. If not specified, the Print Provider SHALL choose whether the responding Quotation is a binding amount or an estimate.</td>
</tr>
<tr>
<td>Expires</td>
<td>dateTime</td>
<td>Date/time when this RFQ becomes Invalid.</td>
</tr>
<tr>
<td>ReorderID ?</td>
<td>NMTOKENS</td>
<td>Whitespace-separated @BusinessID values that refer to PurchaseOrder PrintTalk Documents that are the basis for this (collected) RFQ. The RFQ is intended to lead to a re-order.</td>
</tr>
<tr>
<td>ReplaceID ?</td>
<td>NMTOKEN</td>
<td>RFQ/@BusinessID of the RFQ that this PrintTalk Document Supersedes. Superseding is only allowed as long as the RFQ to be Superseded is Pending.</td>
</tr>
<tr>
<td>jdf:JDF *</td>
<td>element</td>
<td>Description of the products or services that are to be produced or delivered. Multiple jdf:JDF elements specify multiple ordered Items. Note that a Product description is typically used in a Print Buyer to Print Provider environment, whereas a Gray Box or individual Process is typically used in a subcontracting environment. See [JDF1.5].</td>
</tr>
<tr>
<td>Pricing ?</td>
<td>element</td>
<td>Pricing is a prototype element that defines the amounts that a quote is requested for. Multiple Price elements in this Pricing element specify an RFQ for amounts greater than or equal to Price/@Amount. Price/@DescriptiveName SHALL be identical for all Pricing/Price elements in the scope of one RFQ. RFQ/Pricing/Price/@UnitPrice SHALL be specified. RFQ/Pricing/Price/@Price SHALL NOT be specified.</td>
</tr>
</tbody>
</table>

New in PrintTalk 1.5
3.8.2 Quotation

New in PrintTalk 1.3

Usually a Print Provider creates a Quotation after receiving an RFQ. Sometimes, a Print Provider creates a Quotation as the first Business Object in the Negotiation Phase.

If the Print Provider chooses to accept an RFQ, the Print Provider creates one or more Quote elements and sends them back to the Print Buyer in a Quotation element. Each Quote element represents one quote for the Job.

A Print Provider sends a Quotation whose semantics vary depending on @BusinessRefID.

RFQ: If a Print Provider receives an RFQ and chooses to provide a quote, it SHALL send a Quotation whose @BusinessRefID references the received RFQ.

PurchaseOrder: If a Print Provider chooses to initiate a Change Order for a Confirmed Job, it SHALL send a Quotation whose @BusinessRefID references the PurchaseOrder for the Confirmed Job. The Print Buyer selects a possible or necessary change for the Print Product.

A Quotation SHALL contain at least one Quote element. If the Print Provider offers multiple options, it SHALL specify a separate Quote element for each such option.

After the Print Provider has sent a Quotation and while it is pending, the Print Provider MAY send either

- a Superseding Quotation that replaces the Pending one
- a Cancellation for the Pending Quotation after which the Print Provider MAY choose to send either a new Quotation or a Confirmation for some pending PurchaseOrder A Pending PurchaseOrder exists only if the cancelled Quotation was in fact a Re-Quote.

When a Print Buyer receives a Quotation, the Print Buyer MAY

- accept the Quotation by sending a PurchaseOrder that references the Quote that the Print Buyer wishes to accept from the list of Quote elements in the Quotation or
- decline the Quotation by either sending a Refusal or letting it expire. The Print Buyer MAY choose to create a new RFQ that requests a Re-Quote (see section 3.8.3 “ RFQ”), or
- defer a decision on the Quotation and send a new RFQ that requests a Re-Quote (see section 3.8.1 “ RFQ”).

Table 14: Quotation

Subclass of: Abstract BusinessObject

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency</td>
<td>NMTOKEN</td>
<td>Three-digit currency definition according to [ISO4217] Identifies the currency that each Quote[not(exists(@Currency))] element inside this Quotation uses.</td>
</tr>
<tr>
<td>Estimate</td>
<td>boolean</td>
<td>For each Quote[not(exists(@Estimate))] element inside this Quotation, the price SHALL be a binding amount if @Estimate = &quot;false&quot;, otherwise, the Print Buyer SHALL treat the price as an estimate only.</td>
</tr>
<tr>
<td>Expires</td>
<td>dateTime</td>
<td>Date/time when this Quotation becomes Invalid.</td>
</tr>
<tr>
<td>ReorderID ?</td>
<td>NMTOKENS</td>
<td>Whitespace-separated unique @BusinessID values that refer to PurchaseOrder PrintTalk Documents that are the basis for this Quotation. In this scenario the Quotation MAY be the starting point of the Negotiation Phase.</td>
</tr>
<tr>
<td>ReplaceID ?</td>
<td>NMTOKEN</td>
<td>Quotation/@BusinessID of the Quotation that this Quotation Supersedes.</td>
</tr>
</tbody>
</table>
### 3.8.2.1 Quote

**Modified in PrintTalk 1.3**

A Quote element describes a quote for a particular variation of a product.

Starting with PrintTalk 1.3, the Quote element is changed from a Business Object to a child element of a Quotation Business Object.

Table 15: Quote

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Currency</strong></td>
<td>NMTOKEN</td>
<td>Three-digit currency definition according to [ISO4217] Identifies the currency that this Quote uses. If not specified, the value of ../@Currency (in parent) SHALL be used.</td>
</tr>
</tbody>
</table>
| **DeviationFactor** = "None" | enumeration | The @DeviationFactor shows how close the Quote meets the requirements of the RFQ. Allowed values are:  
None | Proposed Print Product conforms to requirements in the RFQ.  
Significant | Major Deviation from the RFQ.  
Slight | Some minor deviation from the RFQ requirements – e.g. paper weight. |
| **Estimate** | boolean            | If "false", each price in this Quote SHALL be a binding amount; otherwise, the Print Buyer SHALL treat each price as an estimate only. If not specified, the ../@Estimate (in parent) SHALL be used. |
| **Expires**  | dateTime           | Date/time when this Quote becomes Invalid. This attribute SHALL NOT be specified in Quotation/Quote.  
Deprecation note: starting with PrintTalk 1.3, a Quote is only in the context of Quotation/Quote and thus this attribute SHALL NOT be used. |
| **QuoteID**  | NMTOKEN            | The unique identifier for this Quote element. @QuoteID SHALL be unique only in the context of a Quotation. If @QuoteID exists, @BusinessRefID SHALL be present.  
Modification note: starting with PrintTalk 1.5, this attribute is... |
<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ReorderID</strong></td>
<td>NMTOKENS</td>
<td>Whitespace-separated unique @BusinessID values that refer to PurchaseOrder PrintTalk Documents that are the basis for this (collected) Quote. In this scenario the Quote is the starting point of the Negotiation Phase and is intended to lead to a re-order. If not specified, the ..//ReorderID (in the parent Quotation) is used. <strong>Deprecation note:</strong> starting with PrintTalk 1.3, use ..//@ReorderID (in Quotation parent).</td>
</tr>
<tr>
<td><strong>ReplaceID</strong></td>
<td>NMTOKEN</td>
<td>Quote/@QuoteID of the Quote that this Quote Supersedes. Superseding is only allowed as long as the Quote to be Superseded is Pending. <strong>Modification note:</strong> starting with PrintTalk 1.2, @ReplaceID specifies Quote/@BusinessID of the Quote (if any) that this Quote Supersedes.</td>
</tr>
<tr>
<td><strong>ReturnJDF</strong></td>
<td>boolean</td>
<td>If @ReturnJDF = &quot;true&quot;, the Print Provider SHALL send to the Print Buyer a ReturnJob Business Object that has a completed JDF including Audit elements; otherwise the Print Provider SHALL NOT send a ReturnJob.</td>
</tr>
<tr>
<td>jdf:JDF *</td>
<td>element</td>
<td>JDF representing the returned values that this Quotation has been made for. Potentially this MAY differ significantly from the original RFQ. See @DeviationFactor for details on JDF Nodes that do not match the originating RFQ. See [JDF1.5].</td>
</tr>
<tr>
<td><strong>Pricing</strong></td>
<td>element</td>
<td>The price associated with this Quote. Pricing SHALL be used to indicate the price. See Table 16: Pricing.</td>
</tr>
</tbody>
</table>

Pricing

New in PrintTalk 1.3
3.8.2.2 Pricing

New in PrintTalk 1.3

The Pricing element SHALL contain a list of prices for all Items that are included in a Quote. The Pricing element MAY also have credit card information and terms of payment.

Table 16: Pricing

Referenced by: Quote, PurchaseOrder, Invoice
Subclass of: Abstract pt

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment ?</td>
<td>element</td>
<td>Payment details. See Table 17: Payment.</td>
</tr>
<tr>
<td>Price +</td>
<td>element</td>
<td>Each Price element represents the price for a single Item or service. See Table 20: Price.</td>
</tr>
</tbody>
</table>

3.8.2.3 Payment

New in PrintTalk 1.3

In the Payment element, additional details about payment MAY be specified using GeneralID elements. See Table 18: jdf:GeneralID – Payment.

Table 17: Payment

Referenced by: Pricing
Subclass of: Abstract pt

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CreditCard ?</td>
<td>element</td>
<td>Specifies credit card information. A Print Buyer MAY supply CreditCard. A Print Provider SHALL NOT supply CreditCard. See Table 19: CreditCard.</td>
</tr>
<tr>
<td>PayTerm ?</td>
<td>element</td>
<td>The text content of the PayTerm element describes the payment terms &amp; conditions in a human readable form. A Print Provider MAY supply PayTerm. A Print Buyer SHALL NOT supply PayTerm.</td>
</tr>
</tbody>
</table>
### 3.8.2.4 jdf:GeneralID – Payment

This section specifies particular Payment values for **jdf:GeneralID**.

#### Table 18: jdf:GeneralID – Payment

Referenced by: Payment  
Subclass of: Abstract pt

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDUsage</td>
<td>NMTOKEN</td>
<td>Values include:</td>
</tr>
<tr>
<td>Bank</td>
<td></td>
<td>The name of the bank.</td>
</tr>
<tr>
<td>BankAccount</td>
<td></td>
<td>The local bank account number.</td>
</tr>
<tr>
<td>BIC</td>
<td></td>
<td>The SWIFT Bank Identifier Code.</td>
</tr>
<tr>
<td>BLZ</td>
<td></td>
<td>The &quot;Bankleitzahl&quot;.</td>
</tr>
<tr>
<td>IBAN</td>
<td></td>
<td>The International Bank Account Number.</td>
</tr>
<tr>
<td>IDValue</td>
<td>string</td>
<td>See [JDF1.5].</td>
</tr>
</tbody>
</table>

### 3.8.2.5 CreditCard

*New in PrintTalk 1.3*

#### Table 19: CreditCard

Referenced by: Payment  
Subclass of: Abstract pt

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AuthorizationExpires ?</td>
<td>gYearMonth</td>
<td>Expiration date of the @Authorization.</td>
</tr>
<tr>
<td>Expires</td>
<td>gYearMonth</td>
<td>Expiration date of the credit card.</td>
</tr>
<tr>
<td>Number</td>
<td>NMTOKEN</td>
<td>Credit card number. The format is specified without blanks or any other separator characters.</td>
</tr>
</tbody>
</table>
| Type                 | NMTOKEN            | Credit card brand.  
Values include:                         |
| Amex                 |                     | This includes derived brands, (e.g., EuroCard).             |
| DinersClub           |                     |                                                             |
| Discover            |                     |                                                             |
| MasterCard           |                     |                                                             |
| Visa                 |                     |                                                             |
3.8.2.6 Price

New in PrintTalk 1.3

The Price element specifies the price of a single Item. These Items each have a value which can be taken from the @Price attribute or calculated based on other referenced Items. If a Price references other Price Items, then these referenced price Items SHALL NOT be taken into account when calculating a total price. To calculate this value, sum the values of the referenced Items. If @Unit is "Percentage", the value is calculated by taking that percentage of the resulting sum. The @Price attribute is either a calculated (optionally rounded) version of the value, or (for Items without any Item references) @Price SHALL be present. If @PriceType has the value "Discount","Handling","Markup" or "Shipping" and no @Unit is specified, the @Price value is a flat amount.

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>double</td>
<td>Amount of items that this Price refers to. If not specified and @UnitPrice is specified, the @Amount will be determined upon completion. If @UnitPrice is specified, @Amount SHALL be specified in an Invoice.</td>
</tr>
<tr>
<td>DescriptiveName</td>
<td>string</td>
<td>The description of the Item. Note that @DescriptiveName is required in Price, unlike @DescriptiveName in the Abstract pt element, where it is optional.</td>
</tr>
<tr>
<td>ItemRefs</td>
<td>NMTOKENS</td>
<td>List of jdf:JDF/@ProductID of Items within the associated jdf:JDF of this Quote that this Price relates to.</td>
</tr>
<tr>
<td>LineID</td>
<td>ID</td>
<td>The unique identifier for this (line) Item. One or more of the Price elements SHALL have a @PriceType with the literal value &quot;Product&quot;. The @LineID of these Price elements SHALL match up with a GeneralID[IDUsage = &quot;LineID&quot;]/@Value in a JDF ticket. These GeneralID elements SHOULD be contained in a jdf:Component.</td>
</tr>
<tr>
<td>LineIDRefs</td>
<td>NMTOKENS</td>
<td>References to line items that go into calculating the value of this Price element.</td>
</tr>
<tr>
<td>Option</td>
<td>NMTOKEN</td>
<td>Sets a @PartIDKey value. Optional items are expressed using resource partitioning.</td>
</tr>
<tr>
<td>Price</td>
<td>double</td>
<td>The price of the entire amount as specified by @Amount of the Item. @Price SHALL be specified in an Invoice. If neither @Price nor @UnitPrice is specified, the price is unknown at Quotation time and will be specified in the invoice, e.g., taxes or discounts. No-charge items, e.g., line items that are included within other line items, SHALL have a price of 0. @Price is a rounded version of the value that could be obtained by summing the values of each of the references in @LineIDRefs.</td>
</tr>
<tr>
<td>Name</td>
<td>Data Type</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><code>PriceType</code></td>
<td>NMTOKEN</td>
<td>Machine readable type of the price. The values specified below SHOULD be used in an open system. Values include:</td>
</tr>
<tr>
<td><code>Discount</code></td>
<td></td>
<td>Discount prices SHALL be negative.</td>
</tr>
<tr>
<td><code>Handling</code></td>
<td></td>
<td>This price relates to handling charges. If shipping and handling are combined in one line item the value &quot;Shipping&quot; SHOULD be used.</td>
</tr>
<tr>
<td><code>Markup</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>Other</code></td>
<td></td>
<td>This <code>PriceType</code> SHALL also be used for services such as shipping.</td>
</tr>
<tr>
<td><code>Product</code></td>
<td></td>
<td>The requested products. If `PriceType&quot;Product&quot;, then this line SHOULD be referenced from the JDF that describes the product.</td>
</tr>
<tr>
<td><code>Shipping</code></td>
<td></td>
<td>This price relates to shipping charges.</td>
</tr>
<tr>
<td><code>Subtotal</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>Total</code></td>
<td></td>
<td>Total.</td>
</tr>
<tr>
<td><code>TaxType</code></td>
<td>enumeration</td>
<td>Type of tax.     Allowed values are:</td>
</tr>
<tr>
<td><code>Gross</code></td>
<td></td>
<td>The price includes taxes. Note that the Gross Price MAY differ from the Net Price + the Tax portion due to rounding.</td>
</tr>
<tr>
<td><code>Net</code></td>
<td></td>
<td>The price excludes taxes.</td>
</tr>
<tr>
<td><code>Tax</code></td>
<td></td>
<td>The price is only the tax.</td>
</tr>
<tr>
<td><code>Unit</code></td>
<td>string</td>
<td>MAY be specified if <code>exists(@UnitPrice), otherwise SHALL NOT be specified. The unit of measurement for </code>Amount<code>and</code>UnitPrice<code>. If </code>Unit&quot;Percentage&quot;, <code>UnitPrice</code> is the percentage value of this <code>Price</code> element. All values derived from references in <code>LineIDRefs</code> SHALL be summed and the percentage applied to that sum.</td>
</tr>
<tr>
<td><code>UnitPrice</code></td>
<td>double</td>
<td>Price for one unit of the <code>Item</code>, i.e. the <code>Price</code> of the <code>Item</code> if <code>Amount&quot;1&quot;. If </code>Unit&quot;Percentage&quot;, then <code>UnitPrice</code> specifies the percentage of the total cost that this line item represents which will be negative for `PriceType=&quot;Discount&quot;.</td>
</tr>
<tr>
<td><code>Additional</code></td>
<td>element</td>
<td>Price for orders in excess of the nominal delivery quantity specified in <code>Amount</code>. Additional SHALL NOT be specified in an Invoice. See Table 21: Additional.</td>
</tr>
</tbody>
</table>
3.8.2.7 Additional

New in PrintTalk 1.3

Table 21: Additional

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>double</td>
<td>The additional number of Items that @Price refers to. The unit of measurement SHALL be the value of ./.@Unit.</td>
</tr>
<tr>
<td>Price</td>
<td>double</td>
<td>The price of the additional number of Items as specified in @Amount.</td>
</tr>
</tbody>
</table>

3.8.3 PurchaseOrder

The Print Buyer accepts a Quote of the Quotation for purchase of Print Product by creating and sending a PurchaseOrder that references the Quote. However, a PurchaseOrder can also be the first Business Object in a Negotiation Phase, especially for a reorder of a previously produced Print Product.

Table 22: PurchaseOrder

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency</td>
<td>NMTOKEN</td>
<td>Three-digit currency definition according to [ISO4217] Identifies the currency that this PurchaseOrder uses.</td>
</tr>
<tr>
<td>Expires</td>
<td>dateTime</td>
<td>Date/time when this PurchaseOrder becomes Invalid.</td>
</tr>
<tr>
<td>QuoteID</td>
<td>NMTOKEN</td>
<td>This PurchaseOrder PO selects the quote specified by Quotation[@BusinessID=Q]/Quote/[@QuoteID=q], where Q = PO/@BusinessRefID and q = PO/@QuoteID. Constraint: if @BusinessRefID is present @QuoteID SHALL exist.</td>
</tr>
<tr>
<td>ReorderID</td>
<td>NMTOKENS</td>
<td>Whitespace-separated unique @BusinessID values that refer to PurchaseOrder PrintTalk Documents that are the basis for this (collected) re-order, if the re-order is the starting point.</td>
</tr>
<tr>
<td>ReplaceID</td>
<td>NMTOKEN</td>
<td>PurchaseOrder/@BusinessID of the PurchaseOrder that this PurchaseOrder Supersedes. Superseding is only allowed as long as the PurchaseOrder to be Superseded is Pending.</td>
</tr>
<tr>
<td>ReturnJDF</td>
<td>boolean</td>
<td>If @ReturnJDF = &quot;true&quot;, the Print Provider SHALL send to the Print Buyer a ReturnJob Business Object that has a completed JDF including Audit elements; otherwise, the Print Provider SHALL NOT send a ReturnJob.</td>
</tr>
</tbody>
</table>
### 3.8.4 Confirmation

If a *Print Provider* accepts a *PurchaseOrder*, it **SHOULD** send a *Confirmation* whose `@BusinessRefID` references the accepted *PurchaseOrder*.

**Table 23: Confirmation**

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>jdf:Contact</td>
<td>element</td>
<td>Detailed contact information about the company.</td>
</tr>
</tbody>
</table>

**Deprecation note:** starting with PrintTalk 1.3, the [cXML 1.2] `PrintTalk/Header` specifies all necessary credentials. See [JDF1.5].

### 3.8.5 Cancellation

A *Print Buyer* or a *Print Provider* sends a *Cancellation* to cancel a previously sent *Business Object*.

For a *Print Provider* to cancel for a *Quotation* or *Confirmation*, it **SHOULD** send a *Cancellation* whose `@BusinessRefID` references the *Quotation* or *Confirmation*.

For a *Print Buyer* to cancel for an *RFQ* or *PurchaseOrder*, it **SHOULD** send to *Print Provider* a *Cancellation* whose `@BusinessRefID` references the *RFQ* or *PurchaseOrder*. 
### Table 24: Cancellation

**Subclass of:** Abstract BusinessObject

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JobIDRef ?</td>
<td>string</td>
<td>Reference to jdf:JDF/@JobID of the cancelled job. If not present, all jobs of the PurchaseOrder referred in @BusinessRefID are cancelled.</td>
</tr>
<tr>
<td>jdf:Contact *</td>
<td>element</td>
<td>Detailed contact information about the company. <strong>Deprecation note:</strong> starting with PrintTalk 1.3, the [cXML 1.2] PrintTalk/Header specifies all necessary credentials. See [JDF1.5].</td>
</tr>
</tbody>
</table>

### 3.8.6 Refusal

A *Print Buyer* or a *Print Provider* sends a **Refusal** to decline receipt of a *Business Object*.

If a *Print Buyer* chooses to decline a Quotation sent by a *Print Provider*, or if a *Print Provider* chooses to decline either an RFQ or a PurchaseOrder sent by a *Print Buyer*, it SHALL either send a Refusal whose @BusinessRefID references the declined *Business Object* or let the *Business Object* expire.

### Table 25: Refusal

**Subclass of:** Abstract BusinessObject

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>jdf:Contact *</td>
<td>element</td>
<td>Detailed contact information about the company. <strong>Deprecation note:</strong> starting with PrintTalk 1.3, the [cXML 1.2] PrintTalk/Header specifies all necessary credentials. See [JDF1.5].</td>
</tr>
</tbody>
</table>

### 3.8.7 OrderStatusRequest

An **OrderStatusRequest** allows the *Print Buyer* to query the *Print Provider* for details of the order status.

If a *Print Buyer* wants the status of an order, it SHALL send to the *Print Provider* an OrderStatusRequest whose @BusinessRefID references the order’s PurchaseOrder. The order’s PurchaseOrder is either the initial PurchaseOrder if no *Change Orders* have occurred or the latest accepted PurchaseOrder if a *Change Order* has been made.

In addition, the *Print Buyer* SHALL specify whether it wants status of the

- entire order (PurchaseOrder/jdf:JDF) or
- just a portion of the order (PurchaseOrder//jdf:JDF[@JobID = J and @JobPartID = P] for some J and some P defined in StatusRequest; the test for either J or P MAY be omitted.)
Table 26: OrderStatusRequest
Subclass of: Abstract BusinessObject

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>jdf:Contact *</td>
<td>element</td>
<td>Detailed information about the company.</td>
</tr>
<tr>
<td>Deprecated in PrintTalk 1.3</td>
<td></td>
<td><strong>Deprecation note:</strong> starting with PrintTalk 1.3, all necessary credentials are defined in the [cXML 1.2] PrintTalk/Header. See [JDF1.5].</td>
</tr>
<tr>
<td>StatusRequest *</td>
<td>element</td>
<td>Individual status request description.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If StatusRequest is not specified, the Print Provider SHALL provide status for the entire order (as explained just above this table). See Table 27: StatusRequest.</td>
</tr>
</tbody>
</table>

3.8.7.1 StatusRequest

Table 27: StatusRequest
Referenced by: OrderStatusRequest
Subclass of: Abstract pt

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JobIDRef?</td>
<td>string</td>
<td>Reference to a @JobID within the JDF Node in the corresponding PurchaseOrder. If not specified, this StatusRequest refers to the all jobs specified by @BusinessIDRef.</td>
</tr>
<tr>
<td>JobPartIDRef?</td>
<td>string</td>
<td>Reference to a @JobPartID within the JDF node in the corresponding PurchaseOrder. If not specified, this StatusRequest refers to the entire job or set of jobs specified in @JobIDRef.</td>
</tr>
<tr>
<td>ResponseDetails ?</td>
<td>enumeration</td>
<td>The level of detail requested in the OrderStatusResponse. Allowed values are:</td>
</tr>
<tr>
<td>New in PrintTalk 1.3</td>
<td></td>
<td><strong>Brief</strong> Include only the latest Milestone Notification of the current Job Status.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>CompletedMilestones</strong> Include all completed Milestone Notification elements of the current Job and the Milestone Notification elements of steps that have begun processing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Full</strong> Include all Milestone Notification elements as defined by &quot;CompletedMilestones&quot; and any additional detailed information. <strong>Modification note:</strong> starting with PrintTalk 1.3, the only defined details are jdf:DeliveryParams.</td>
</tr>
<tr>
<td>Name</td>
<td>Data Type</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Subscribed ?</td>
<td>boolean</td>
<td>If @Subscribed = &quot;true&quot;, then this StatusRequest is a subscription for multiple asynchronous OrderStatusResponse messages; else this StatusRequest is a Query for one individual, synchronous OrderStatusResponse message. The trigger conditions for asynchronous OrderStatusResponse messages are implementation dependent. Asynchronous OrderStatusResponse messages SHOULD be sent whenever a relevant status change of the subscribed order takes place.</td>
</tr>
</tbody>
</table>

### 3.8.8 OrderStatusResponse

An OrderStatusResponse is the response to an OrderStatusRequest.

If a Print Provider receives an OrderStatusRequest, it SHALL send to the Print Buyer an OrderStatusResponse whose @BusinessRefID references the OrderStatusRequest.

A Print Provider MAY send to a Print Buyer an automatically generated OrderStatusResponse which describes the status of an order whose associated PurchaseOrder is referenced by the @BusinessRefID.

Table 28: OrderStatusResponse  
Subclass of: Abstract BusinessObject

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>jdf:Contact *</td>
<td>element</td>
<td>Detailed information about the company. Deprecation note: starting with PrintTalk 1.3, the [cXML 1.2] PrintTalk/Header specifies all necessary credentials. See [JDF1.5].</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>jdf:DeliveryParams ?</td>
<td>element</td>
<td>Has details of the delivery status. jdf:DeliveryParams SHALL NOT be partitioned when specified in an OrderStatusResponse. Individual line Items that are described by a PrintTalk//Pricing/Price element MAY be referenced by jdf:DeliveryParams/Drop/DropItem/GeneralID[@IDUsage=&quot;LineID&quot;]. See [JDF1.5].</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>jdf:Notification *</td>
<td>element</td>
<td>Notification elements with @Type=&quot;Milestone&quot; that describe the current status of the job. jdf:Notification/@JobID SHOULD be specified and jdf:Notification/@JobPartID MAY be specified in jdf:Notification elements that reside in an OrderStatusResponse. See [JDF1.5].</td>
</tr>
</tbody>
</table>
### 3.8.8.1 Status

*Deprecated in PrintTalk 1.3*

**Table 29: Status**

Referenced by: OrderStatusResponse

Subclass of: Abstract pt

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status *</td>
<td>telem</td>
<td>Human-readable text for individual status description. <strong>Deprecation note:</strong> starting with PrintTalk 1.3, use jdf:Notification. See Table 29: Status.</td>
</tr>
</tbody>
</table>

### 3.8.9 StockLevelRequest

*New in PrintTalk 1.5*

A StockLevelRequest allows the Print Buyer to query the Print Provider for the available stock levels of pre-printed or non-printed items.

**Table 30: StockLevelRequest**

Subclass of: Abstract BusinessObject

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability ?</td>
<td>enumeration</td>
<td>@Availability filters the returned StockLevel elements. Allowed values are:</td>
</tr>
<tr>
<td>Any</td>
<td></td>
<td>All matching StockLevel elements SHALL be returned regardless of availability.</td>
</tr>
<tr>
<td>Available</td>
<td></td>
<td>Only StockLevel elements that are currently available and have StockLevel/@Amount &gt; 0 SHALL be included.</td>
</tr>
<tr>
<td>Deliverable</td>
<td></td>
<td>Only StockLevel elements that are currently available (StockLevel/@Amount &gt; 0) or can be procured or produced (StockLevel/@ProductionDuration != &quot;INF&quot;) SHALL be displayed.</td>
</tr>
</tbody>
</table>
### Name | Data Type | Description
--- | --- | ---
_Currency_ ? | NMTOKEN | Three-digit currency definition according to [ISO4217], e.g., USD, EUR, GBP. The value of _Currency_ identifies the currency that the _Print Provider_ SHALL use in the responding _StockLevelResponse_.

(DisplayPrice ? | boolean | If true, _StockLevel/@Price_ SHALL be included in the response.

ProductID ? | regexp | Regular expression that filters the returned list of _StockLevel_ elements to only include elements whose _StockLevel/@ProductID_ matches _ProductID_. If _ProductID_ is not specified, _StockLevel_ elements SHALL be specified for all Products.

---

### 3.8.10 StockLevelResponse

**New in PrintTalk 1.5**

A _StockLevelResponse_ is the response to a _StockLevelRequest_.

If a _Print Provider_ receives a _StockLevelRequest_, it SHALL send to the _Print Buyer_ a _StockLevelResponse_ whose _@BusinessRefID_ references the _StockLevelRequest_.

**Table 31: StockLevelResponse**

Subclass of: Abstract _BusinessObject_

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Currency</em></td>
<td>NMTOKEN</td>
<td>Three-digit currency definition according to [ISO4217], e.g., USD, EUR, GBP. The value of <em>Currency</em> identifies the currency of <em>StockLevel/@Price</em> elements.</td>
</tr>
<tr>
<td><em>StockLevel</em> *</td>
<td>element</td>
<td>Level of available stock.</td>
</tr>
</tbody>
</table>
3.8.10.1 StockLevel

New in PrintTalk 1.5

Table 32: StockLevel

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>integer</td>
<td>Number of items that are currently available or will be available within the time defined by @ProductionDuration.</td>
</tr>
<tr>
<td>Lot ?</td>
<td>string</td>
<td>Production Lot of this item. Used to separate available stock with different pricing based on production lots.</td>
</tr>
<tr>
<td>ProductID</td>
<td>string</td>
<td>ProductID of the respective item.</td>
</tr>
<tr>
<td>ProductionDuration</td>
<td>jdf:duration</td>
<td>Estimated time until non-available items will be deliverable. A value of &quot;INF&quot; specifies that the item is no longer available. If not specified @Amount specifies the number of currently available products. Note that @ProductionDuration excludes shipping times to the recipient.</td>
</tr>
<tr>
<td>jdf:Location ?</td>
<td>element</td>
<td>Location of the items specified by the StockLevel. Multiple StockLevel elements with identical @ProductID but differing jdf:Location MAY be specified to describe distributed warehousing.</td>
</tr>
<tr>
<td>Pricing ?</td>
<td>element</td>
<td>List of Price definitions for the item specified by this StockLevel. Multiple Price elements in this Pricing element specify the price for orders with an order amount greater than or equal to Price/@Amount. Price/@DescriptiveName SHALL be identical for all Pricing.Price elements in the scope of one StockLevel.</td>
</tr>
</tbody>
</table>

3.8.11 ProofApprovalRequest

A ProofApprovalRequest allows the Print Provider (in the context of an order) to request an Approval of a Proof from the Print Buyer.

If a Print Provider wants a Print Buyer to approve a soft or hard copy order, the Print Provider SHALL send to the Print Buyer a ProofApprovalRequest whose @BusinessRefID references the order’s PurchaseOrder. The order’s PurchaseOrder is either the initial PurchaseOrder if no Change Orders have occurred, or the latest accepted PurchaseOrder if a Change Order has been made.
Table 33: ProofApprovalRequest
Subclass of: Abstract BusinessObject

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>jdf:Contact *</td>
<td>element</td>
<td>Detailed information about the company.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Deprecation note:</strong> starting with PrintTalk 1.3, the [cXML 1.2] PrintTalk/Header specifies all necessary credentials. See [JDF1.5].</td>
</tr>
<tr>
<td>ProofRequest *</td>
<td>element</td>
<td>Individual proof request description.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See Table 34: ProofRequest.</td>
</tr>
</tbody>
</table>

3.8.11.1 ProofRequest

Table 34: ProofRequest
Referenced by: ProofApprovalRequest
Subclass of: Abstract pt

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JobIDRef ?</td>
<td>string</td>
<td>Reference to the @JobID this proof corresponds to. If not specified, the ProofRequest refers to the Job that was ordered by the PurchaseOrder that is referenced by @BusinessRefID.</td>
</tr>
<tr>
<td>JobPartIDRef ?</td>
<td>string</td>
<td>Reference to the @JobPartID this proof corresponds to.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Deprecation note:</strong> starting with PrintTalk 1.3, use jdf:ProofItem/@ProofTarget.</td>
</tr>
<tr>
<td>ProofLocation ?</td>
<td>URL</td>
<td>Identifies a remote target for the proof output. This can be either a soft or hard proofing target.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Deprecation note:</strong> starting with PrintTalk 1.3, use ProofItem/@ProofTarget.</td>
</tr>
<tr>
<td>jdf:ProofItem *</td>
<td>element</td>
<td>Details of the items to be proofed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>jdf:ProofItem/@ProofName and ProofItem/@ProofTarget SHALL be used to reference the proof that is requested. See [JDF1.5].</td>
</tr>
</tbody>
</table>
3.8.12 ProofApprovalResponse

A ProofApprovalResponse is the response to a ProofApprovalRequest.

If a Print Buyer receives a ProofApprovalRequest, it SHALL send to the Print Provider a ProofApprovalResponse whose @BusinessRefID references the ProofApprovalRequest and contains the Print Buyer’s approval or rejection of a proof.

Table 35: ProofApprovalResponse

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>jdf:Contact *</td>
<td>element</td>
<td>Detailed information about the company. The details of the individuals that signed off the proof are specified in jdf:ApprovalSuccess/ApprovalDetails/Contact. Deprecation note: starting with PrintTalk 1.3, the [cXML 1.2] PrintTalk/Header specifies all necessary credentials. See [JDF1.5].</td>
</tr>
<tr>
<td>ProofResponse *</td>
<td>element</td>
<td>Human-readable text for individual proof response. See Table 36: ProofResponse.</td>
</tr>
</tbody>
</table>

3.8.12.1 ProofResponse

Table 36: ProofResponse

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JobIDRef</td>
<td>string</td>
<td>Reference to the @JobID this proof corresponds to.</td>
</tr>
<tr>
<td>JobPartIDRef?</td>
<td>string</td>
<td>Reference to the @JobPartID this proof corresponds to.</td>
</tr>
<tr>
<td>pageIndex</td>
<td>IntegerRangeList</td>
<td>List of pages in the jdf:PageList that this ProofResponse applies to. If not specified, this ProofResponse applies to all pages specified in jdf:ProofItem.</td>
</tr>
<tr>
<td>response</td>
<td>enumeration</td>
<td>Describes the overall result of the approval. Deprecation note: starting with PrintTalk 1.3, use jdf:ApprovalSuccess to specify approval results. Allowed values are: Approved</td>
</tr>
</tbody>
</table>

Approved

Everything is fine.
<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ApprovedWithEdits</td>
<td></td>
<td>Minor changes required, but it’s ok.</td>
</tr>
<tr>
<td>Rejected</td>
<td></td>
<td>Major changes. New proof required.</td>
</tr>
<tr>
<td>jdf:ApprovalSuccess</td>
<td>element</td>
<td>Describes the overall result of the approval. See [JDF1.5].</td>
</tr>
<tr>
<td>New in PrintTalk 1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>jdf:ProofItem</td>
<td>element</td>
<td>Details of the items to be proofed. jdf:ProofItem/@ProofName and ProofItem/@ProofTarget SHALL be used to reference the proof that is requested. See [JDF1.5].</td>
</tr>
<tr>
<td>New in PrintTalk 1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;content of element&gt;</td>
<td>text</td>
<td>Body of the response description. Deprecation note: starting with PrintTalk 1.3, use jdf:Comment to specify human readable comments.</td>
</tr>
<tr>
<td>Deprecated in PrintTalk 1.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.8.13 Invoice

The *Print Provider* typically sends an *Invoice* to the *Print Buyer* after the job is shipped. It may also send an *Invoice* several times, when certain milestones during the *Production Phase* are reached or after a Job is cancelled. An *Invoice* MAY include additional charges or discounts.

To request payment, the *Print Provider* SHALL send an *Invoice* whose *BusinessRefID* references either the
- PurchaseOrder for a completed Job or for milestones during the *Production Phase* or
- Cancellation for a cancelled Job.

**Table 37: Invoice**

**Subclass of:** Abstract BusinessObject

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency</td>
<td>NMTOKEN</td>
<td>Three-digit currency definition according to [ISO4217] Identifies the currency that this <em>Invoice</em> uses.</td>
</tr>
<tr>
<td>Expires</td>
<td>dateTime</td>
<td>Date/time when this <em>Invoice</em> becomes <em>Invalid</em>. This date is the due date after which a subsequent <em>Invoice</em> MAY contain late payment fees.</td>
</tr>
<tr>
<td>jdf:JDF</td>
<td>element</td>
<td>Description of the <em>Print Product</em> or service. Deprecation note: starting with PrintTalk 1.5, use ReturnJob business object. See [JDF1.5].</td>
</tr>
<tr>
<td>New in PrintTalk 1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pricing</td>
<td>element</td>
<td>The price of the Products or services described by this <em>Invoice</em>. Note: starting with PrintTalk 1.3, the pricing information is moved from JDF to PrintTalk. See Table 16: Pricing.</td>
</tr>
</tbody>
</table>
### 3.8.14 ReturnJob

The *Print Provider* MAY send to the *Print Buyer* a *ReturnJob* whose `@BusinessRefID` references the order’s `PurchaseOrder`. The *ReturnJob/jdf:JDF* MAY contain all the production information for the Job.

#### Table 38: ReturnJob

**Subclass of:** Abstract BusinessObject

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>jdf:JDF *</td>
<td>element</td>
<td>The JDF Nodes after processing including the Audit Information. This is the PrintTalk equivalent to the JMF ReturnQueueEntry message. See [JDF1.5].</td>
</tr>
</tbody>
</table>
4 PrintTalk Workflow Diagram

The PrintTalk 1.5 workflow is described in the following diagrams:
- Figure 2: A simplified/streamlined Workflow Diagram, representative of web-based catalog ordering.
- Figure 3: Proof Cycle
- Figure 4: Status Request Cycle
- Figure 5: Change Order Cycle
- Figure 6: A detailed Workflow Diagram showing the possible workflows using PrintTalk Business Objects. The diagram covers both the Negotiation Phase and the Production Phase, along with all possible loops that might occur.

**Figure 2: Simplified Workflow Diagram**
Figure 3: Proof Cycle

- Start
  - PP: Generate proof or data for soft proof
    - PP: Proof Approval Request
      - PB: Proof Approval Response
        - Approval success
  - PP: Fix Problem or PB: Upload New Content
- End
Figure 4: Status Request Cycle

![Status Request Cycle Diagram]

Figure 5: Change Order Management

![Change Order Management Diagram]
Figure 6: Workflow Diagram
5 Usage of the PrintTalk IDs

This section illustrates the semantics and usage of the various IDs in typical workflow scenarios:

5.1 BusinessID and BusinessRefID:

This section illustrates the use of the @BusinessID and @BusinessRefID. The @BusinessRefID references a Business Object that originates from the other side of the Workflow. Thus, a Business Object that originates from the Print Buyer references a Business Object that originates from the Print Provider and vice versa. Once a PurchaseOrder has been placed, PurchaseOrder/@BusinessID SHALL be used as the @BusinessRefID of all following Business Objects.

5.1.1 Simple Negotiation

1. Print Buyer sends RFQ
   <RFQ BusinessID="RFQ_1"/>
2. Print Provider sends Quotation referencing RFQ "RFQ_1"
   <Quotation BusinessID="Quotation_1" BusinessRefID="RFQ_1">
     <Quote QuoteID ="Quote_1"/>
     <Quote QuoteID ="Quote_2"/>
   </Quotation>
3. Print Buyer sends PurchaseOrder referencing Quote "Quote_1"
   <PurchaseOrder BusinessID="PO_1" BusinessRefID="Quotation_1"
     QuoteID="Quote_1"/>
4. Print Provider sends Confirmation referencing PurchaseOrder "PO_1"
   <Confirmation BusinessID="Confirmation_1" BusinessRefID="PO_1"/>

5.1.2 Change Order Initiated by Print Buyer and Starting with RFQ

1. Print Buyer sends Change Order RFQ referencing earlier "Confirmation_1"
   <RFQ BusinessID="CO_RFQ" BusinessRefID="Confirmation_1"/>
2. Print Provider sends Change Order Quotation referencing "CO_RFQ"
   <Quotation BusinessID="Quotation_4" BusinessRefID="CO_RFQ">
     <Quote QuoteID ="Quote_1"/>
     <Quote QuoteID ="Quote_2"/>
   </Quotation>
3. Print Buyer sends Change Order PurchaseOrder referencing "Quote_1"
   <PurchaseOrder BusinessID="PO_3" BusinessRefID="Quotation_4"
     QuoteID="Quote_1"/>
4. Print Provider sends Change Order Confirmation referencing "PO_3"
   <Confirmation BusinessID="Confirmation_2" BusinessRefID="PO_3"/>

5.1.3 Change Order Initiated by Print Buyer and Starting with PurchaseOrder

1. Print Buyer sends Change Order PurchaseOrder referencing earlier "Confirmation_1"
   <PurchaseOrder BusinessID="PO_4" BusinessRefID="Confirmation_1"
     QuoteID="Quote_2"/>
2. Print Provider sends Change Order Confirmation referencing "PO_4"
   <Confirmation BusinessID="Confirmation_3" BusinessRefID="PO_4"/>
5.1.4 Change Order Initiated by Print Provider and Starting with Quotation

1. *Print Provider* sends *Change Order Quotation* referencing earlier "PO_1"
   <Quotation BusinessID="Quotation_5" BusinessRefID="PO_1"> 
   <Quote QuoteID ="Quote_1"/> 
   <Quote QuoteID ="Quote_2"/> 
   </Quotation>

2. *Print Buyer* sends *Change Order PurchaseOrder* referencing "Quote_2"
   <PurchaseOrder BusinessID="PO_5" BusinessRefID="Quotation_5" QuoteID="Quote_2"/>

3. *Print Provider* sends *Change Order Confirmation* referencing "PO_5"
   <Confirmation BusinessID="Confirmation_2" BusinessRefID="PO_5"/>

5.1.5 Complex Negotiation

1. *Print Buyer* sends *RFQ*
   <RFQ BusinessID="RFQ_1"/>

2. *Print Provider* sends *Quotation* referencing RFQ "RFQ_1"
   <Quotation BusinessID="Quotation_1" BusinessRefID="RFQ_1"> 
   <Quote QuoteID ="Quote_1"/> 
   <Quote QuoteID ="Quote_2"/> 
   </Quotation>

3. *Print Buyer* sends an RFQ for a *Re-Quote* referencing "Quotation_1".
   <RFQ BusinessID="RFQ_2" BusinessRefID="Quotation_1"/>

4. *Print Provider* sends *Quotation for Re-Quote* referencing RFQ_2
   <Quotation BusinessID="Quotation_2" BusinessRefID="RFQ_2" ReplaceID="Quotation_1"> 
   <Quote QuoteID="Quote_1" ReplaceID="Quote_1"/>
   </Quotation>

5. *Print Buyer* sends *PurchaseOrder* referencing "Quote_1".
   <PurchaseOrder BusinessID="PO_6" BusinessRefID="Quotation_2" QuoteID="Quote_1"/>

6. *Print Provider* sends *Confirmation* referencing "PO_6".
   <Confirmation BusinessID="Confirmation_6" BusinessRefID="PO_6"/>

5.2 ReplaceID

This section illustrates the @ReplaceID. A *Print Buyer* or *Print Provider* uses @ReplaceID to *Supersede* a previously sent *Business Object* that has not been answered yet by the counter party.

5.2.1 Print Buyer Supersedes RFQ

1. The *Print Buyer* sends an original RFQ identified by "RFQ_1"
   <RFQ BusinessID="RFQ_1"/>

2. The *Print Buyer* sends a superseding RFQ by referencing RFQ "RFQ_1":
   <RFQ BusinessID="RFQ_2" ReplaceID="RFQ_1"/>

5.2.2 Print Buyer Supersedes PurchaseOrder

1. The *Print Buyer* sends an original PurchaseOrder identified by "PO_1"
   <PurchaseOrder BusinessID="PO_1" BusinessRefID="Quotation_1" QuoteID="Quote_1"/>
2. The Print Buyer send a superseding PurchaseOrder by referencing PurchaseOrder "PO_1":
   <PurchaseOrder BusinessID="PO_2" BusinessRefID="PO_1" ReplaceID="PO_1"
   QuoteID="Quote_2"/>

5.2.3 Print Provider Supersedes Quotation
The Print Provider has replaced Quotation_1 which had two Quote elements. The new Quotation_2 retains ONLY
the Quote[Quote_ID="Quote_1"].
1. Print Provider sends Quotation identified "Quotation_1"
   <Quotation BusinessID="Quotation_1" BusinessRefID="RFQ_1">
   <Quote QuoteID ="Quote_1"/>
   <Quote QuoteID ="Quote_2"/>
   </Quotation>
2. Print Provider sends a superseding Quotation by referencing Quotation "Quotation_1":
   <Quotation BusinessID="Quotation_2" BusinessRefID="RFQ_1"
   ReplaceID="Quotation_1">
   <Quote QuoteID="Quote_1"/>
   </Quotation>

5.3 ReorderID
This section illustrates the @ReorderID. A Print Buyer or Print Provider uses a @ReorderID to place orders of
one or more previously sent PurchaseOrder Business Objects for which the Print Provider has also sent a
Confirmation. In all three examples below "old_PO_ID_1" and "old_PO_ID_2" refer to confirmed
PurchaseOrder Business Objects.

5.3.1 Print Buyer Reorders via an RFQ
1. Print Buyer sends a RFQ to start reorder process with "old_PO_ID_1" and "old_PO_ID_2"
   <RFQ BusinessID="RFQ_10" ReorderID="Master_PO_ID”>
Note that Master_PO_ID could be a contract reference and not require reference to the previous purchase orders.

5.3.2 Print Buyer Reorders via an PurchaseOrder
1. Print Buyer sends a PurchaseOrder to reorder "old_PO_ID_1" and "old_PO_ID_2"
   <PurchaseOrder BusinessID="PO_10" ReorderID="old_PO_ID_1 old_PO_ID_2”>

5.3.3 Print Provider Quotes using ReorderID
1. Print Provider sends a Quotation using as basis "old_PO_ID_1" and "old_PO_ID_2"
   <Quotation BusinessID="Quotation_10" ReorderID="old_PO_ID_1 old_PO_ID_2”>
Note that in the case where the original purchase orders were based upon a contract, no negotiation will be required
for this new Quotation.
5.4 JDF/@JobID:

The jdf:JDF/@JobID is the ID of the job within the Print Providers workflow system.

5.5 JDF/@JobPartID

The jdf:JDF/@JobPartID is the ID of a part of the job within the customer’s workflow system.

When a JDF is created by a Print Buyer, e.g. in an RFQ, @JobID SHOULD be specified. If a Print Provider cannot maintain an external @JobID, the @JobID SHOULD be copied to jdf:CustomerInfo/@CustomerOrderID.

All interactions between Print Buyer and Print Provider SHALL be based on the initial @JobID as specified by the Print Buyer.

Note that this implies that the JDF/@JobID within a production job of the Print Provider’s workflow system NEED NOT be identical to JDF/@JobID when communicating with the Print Buyer.

5.6 jdf:CustomerInfo/@CustomerOrderID?

The jdf:CustomerInfo/@CustomerOrderID is the ID of the job in the context of Print Buyer’s MIS or ERP system.
6 Examples

This section has four examples.

6.1 Example A – “Learn to Fly” Mailer

In the first example, a *Print Provider* produces a folded mailer, which is basically a sheet of paper that is printed, folded and delivered to two addresses.

6.1.1 Outline of JDF Structure

JDF provides us with a very flexible mechanism for specifying shipment information. This item is shipped to 2 different locations so, 2 DropIntents are used. Here’s the basic outline of the delivery portion of the ResourcePool:

```
1 <Component DescriptiveName="4 Page folded Flyer" ID="Item01" >
2 <Company OrganizationName="Pan-O-Ramic" ID="Company1"> 
3 <Company OrganizationName="Tinker Mailing" ID="Company2"> 
4 <DeliveryIntent>
5   <DropIntent>
6     <Required Actual="2013-07-26" ...>
7     <CompanyRef rRef="Company1"> 
8     <DropItemIntent Amount="10" 
9     <ComponentRef rRef="Item01"> 
10   </DropItemIntent> 
11 </DropIntent>
12 <DropIntent>
13   <Required Actual="2013-07-26" ...>
14   <CompanyRef rRef="Company2"> 
15   <DropItemIntent Amount="7990" 
16   <ComponentRef rRef="Item01"> 
17   </DropItemIntent> 
18 </DropIntent> 
19 <DeliveryIntent> 
```

Line 1 is the description of the shipped component.
Line 2 describes the first company to ship to
Line 3 describes the second company to ship to
Line 4 DeliveryIntent start tag
Line 5 DropIntent start tag
Line 6 with date / time required for first shipment
Line 7 CompanyRef pointing to the company for this shipment (Company1)
Line 8 DropItemIntent with amount to ship
Line 9 ComponentRef pointing to the component to ship (Item01)
Line 10 DropItemIntent end tag
Line 11 DropIntent end tag
Line 12 DropIntent start tag
Line 13 with date / time required for second shipment
Line 14 CompanyRef pointing to the company for this shipment (Company2)
Line 15 DropItemIntent with amount to ship
Line 16 ComponentRef pointing to the component to ship (Item01)
6.1.2 Text Version of RFQ

The following page contains the original text RFQ from the Print Buyer. Key reference points are annotated with AA, BB, and CC… in the text and cross-referenced in the PrintTalk XML.

Request for Quote -

Date: Today is 1 July 2013. AA

Printer: Polkadot Litho Inc. BB

ECommerce system: Ecompany Ltd. CC

Buyer:
Mary Martin  DD
1929 Peter Pan Wy.
Island Drive, CA 90028
213-555-1212
mmartin@pan-o-ramic.com

Description:
“Learn to Fly” seminar mailer EE

Quantity: 8,000 FF and addl. M GG

11”x17” Flyer HH, printed black plus 1PMS II on coated book JJ. Fold to 5.5”x8.5” KK, and ship to mail LL house (address below). Want 60 or 70# stock MM, but cannot exceed 1 oz. for mail purposes NN.

OO Customer will furnish Quark files for the 4 pages, with cropped and scaled scans for halftones in Photoshop files.

Bleeds, solids, and reverses completed and in the files. PP Proof PDF file to Mary.

Files in Jul 23, and finished product must be posted via 1st class mail August 1. QQ

Deliver 10 samples to Mary, balance to: LL

Tinker Mailing RR
1234 Hurryup Ave.
Hawthorne, CA 90250

Attn: Wendy

(No underruns allowed, up to 5% overs accepted) SS

Quote required by end of business 5 July 2013. TT
6.1.3 PrintTalk Version of RFQ

<?xml version="1.0" encoding="utf-8"?>
<PrintTalk xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.printtalk.org/schema_1.5"
xmlns:jdf="http://www.CIP4.org/JDFSchema_1.1"
xsi:schemaLocation="http://www.printtalk.org/schema PrintTalk_1.1.xsd"
version="1.1" payloadID="Christian 01 Jul 2013"
timestamp="2013-07-01T22:39:08:00" >
<!--version: This is the PrintTalk version; borrowed from cXML.-->
<!--payloadID: This is transport unique ID of the message; borrowed from cXML.-->
<!--AA timestamp: PrintTalk date/time taken from ISO 8601; the preferred representation is "complete (full date and time)" and "extended (with punctuation)" with a time zone designation; borrowed from cXML-->
</Header>
<!--Header, Request structure borrowed from cXML-->
<From>
<!--DD.-->
<!--The required credentials must be agreed upon by trading partners; here are some examples of what can be done.-->
<Credential domain="DNS">
<!--The originating organization identification within a public domain (Domain Name Service).-->
<Identity>pan-o-ramic.com</Identity>
</Credential>
<Credential domain="ECompany.com">
<!--The originating organization identification within a private domain (ECompany's private registry)-->
<Identity>PeterPan</Identity>
</Credential>
<Credential domain="DUNS">
<!--The originating organization identification within a public domain (Dun and Bradstreet registry).-->
<Identity>93009388</Identity>
</Credential>
</From>
>To>
<!--BB The required credentials must be agreed upon by trading partners; here are some examples of what can be done.-->
<Credential domain="DNS">
<!--The originating organization identification within a public domain (Domain Name Service).-->
<Identity>AnExcellentPrinter.com</Identity>
</Credential>
<Credential domain="ECompany.com">
<!--The originating organization identification within a private domain (ECompany's private registry)-->
<Identity>Polkadot</Identity>
</Credential>
<Credential domain="DUNS">
<!--The originating organization identification within a public domain (Dun and Bradstreet registry).-->
<Identity>3040392</Identity>
</Credential>
</To>
<Sender>
<!--CC The required credentials must be agreed upon by trading partners; here are some examples of what can be done.-->
<!--The Sender credential authenticate the message.-->
<Credential domain="DNS">

Page 51 of 81
<!The originating organization identification within a public domain (Domain Name Service).-->
<Identity>ECCompany.com</Identity>
<!The SharedSecret is part of the message authentication.-->
<SharedSecret>password</SharedSecret>
<!The UserAgent is unique to the Sender element and identifies the software agent that generated the message.-->
<UserAgent>Print Buyer v.54.9</UserAgent>
</Sender>
</Header>
<Request>
<!A PrintTalk Request for Quote document; the content of this element is independent of cXML-->
<RFQ AgentID="Lara" AgentDisplayName="Lara Garcia-Daniels"
BusinessID="RFQ 8884" Currency="USD"
DescriptiveName="RFQ for simple job" Estimate="false"
Expires="2013-07-05T17:00-08:00"
RequestDate="2013-07-01T22:39-08:00">
<!AgentID: The unique identity of the commerce system user that "pushed the button" to send this document.-->
<!AgentDisplayName: The dispaly name of the user.-->
<!BusinessID: A unique identifier for this document; opaque to the receiver.-->
<!Currency: For RFQ, preferred currency for quotes.-->
<!DescriptiveName: Human-readable description.-->
<!Estimate: For RFQ, whether a subsequent quote should be a casual "estimate" or
<!TT Expires: Date/time when financial information becomes invalid. -->
<!AA RequestDate: Date/time when Business Object was sent. -->
<jdf:Comment Attribute="Expires">If you send the Quote until midnight of that day, it's also ok.</jdf:Comment>
<jdf:JDF DescriptiveName="Learn to Fly seminar mailer" ID="root"
JobID="HDM20002124161007"
ProjectID="HDM_Prod20001124161007" Type="Product" Status="Waiting"
Version="1.1" xmlns="http://www.CIP4.org/JDFSchema_1_1">
<!A single JDF element is the only element content of an RFQ element.-->
<!Structure of a JDF node is defined by the JDF specification. However there is a best practice structure as indicated in section 3.3 of this spec. Alternative JDF structures are permitted although not illustrated here.-->
<!EE DescriptiveName: Courtesy display text.-->
<!ID: An XML ID-->
<!JobID: sender's reference to a job.-->
<!ProjectID: sender's reference to a project.-->
<!Type: For RFQ, always "Product."-->
<!SettingsPolicy: indicates what happens, when unsupported settings are present.-->
<!status: For RFQ, always "waiting."-->
<!Version: JDF version.-->
<!xmlns: XML namespace.-->
<AuditPool>
<!Not required by PrintTalk, may be used at the discretion of the document creator.-->
<Created Author="Christian@heidelberg.com"
TimeStamp="2013-07-01T1127+0100"/>
</AuditPool>
<ResourceLinkPool>
<!--In the root JDF node only a DeliveryIntentLink for each of the independent alternatives that constitute the request for quote; Usage = "Input."-->
<DeliveryIntentLink rRef="Deliv1" Usage="Input"/>
<CustomerInfoLink rRef="Customer1" Usage="Input"/>
</ResourceLinkPool>

<!--In the root JDF node any Resources required by the JDF structure rule like resources referenced in the CustomerInfo, but including the required DeliveryIntents and from the ResourceLinkPool.-->
<DeliveryIntent DescriptiveName="Delivery of samples to buyer, rest to mail house" ID="Deliv1" Class="Intent" Status="Available">

<!--Status: All intent resources are "Available."-->
<!--Other attribute values determined by JDF structure rules.-->

<Overage DataType="NumberSpan" Priority="Required" Preferred="5">
<!--SS Overage: Percentage by which actual count of delivered items may exceed ordered quantity.-->
</Overage>

<Underage DataType="NumberSpan" Priority="Required" Preferred="0">
<!--SS Underage: Percentage by which actual count of delivered items may be less than ordered quantity.-->
</Underage>

(Method DataType="NameSpan" Priority="Required" Preferred="1stClassMail">
<!--QQ-->
</Method>

<Required DataType="TimeSpan" Priority="Required" Preferred="2013-07-26T09:30-08:00">
<!--QQ-->
</Required>

<DropIntent>
<!--Amount: Count of items to be delivered.-->
<!--Delivery is made to the Contact(Ref) with ContactTypes including "Delivery" found in this element, or its parent, or its parent's parent.-->
<DropItemIntent Amount="10">
<!--FF LL-->
<!--GG AdditionalAmount: A quote returned for this RFQ should include a price for additional quantities of this amount.-->
<ComponentRef rRef="Item01"/>
</DropItemIntent>
</DropIntent>

<DropIntent>
<!--ContactRef rRef="Contact1"/>
<DropItemIntent Amount="7990" AdditionalAmount="1000">
<!--FF LL-->
<!--GG AdditionalAmount: A quote returned for this RFQ should include a price for additional quantities of this amount.-->
<ComponentRef rRef="Item01"/>
</DropItemIntent>
</DropIntent>

</DeliveryIntent>

<Contact ID="Contact1" Class="Parameter" Status="Available" ContactTypes="Customer Delivery">
<Address Street="1929 Peter Pan Wy." City="Island Drive" Region="CA" PostalCode="90028" Country="United States" CountryCode="US"/>

Page 53 of 81
<Person JobTitle="Print Buyer" FirstName="Mary" 
    FamilyName="Martin">
    <ComChannel ChannelType="Phone" Locator="1 213 555 1212"/>
    <ComChannel ChannelType="Email" Locator="mailto:mmartin@pan-o-ramic.com"/>
</Person>

<Company DescriptiveName="Customer: Pan-O-Ramic" ID="Company1" 
    Class="Parameter" Status="Available" OrganizationName="Pan-O-Ramic"/>
</Contact>

<Contact ID="Contact2" Class="Parameter" Status="Available" 
    ContactTypes="Delivery">
    <Address Street="1234 Hurry-up Avenue" City="Hawthorne" 
        Region="CA" PostalCode="90250" Country="United States" 
        CountryCode="US"/>
    <Person FirstName="Wendy"/>
    <Company DescriptiveName="Mail fulfillment: Tinker Mailing" 
    ID="Company2" Class="Parameter" Status="Available" 
    OrganizationName="Tinker Mailing"/>
</Contact>
</Company>
</ResourcePool>

<JDF DescriptiveName="folded flyer" ID="Link0005" 
    JobPartID="HDM20002124161007-folded" Type="Product" 
    Status="Waiting">
    <!--This element describes the folded flyer that is made up by the 
    the flat, printed article; the child JDF element makes the 
    flat, printed article.--> 
</JDF>

<ComponentLink rRef="Item01" Usage="Output"/>
<ComponentLink rRef="Item01flat" Usage="Input"/>
<FoldingIntentLink rRef="Fold1" Usage="Input"/>
</ResourceLinkPool>
</ResourcePool>

<Component DescriptiveName="4-page folded flyer" ID="Item01" 
    Class="Quantity" Status="Unavailable" 
    ComponentType="FinalProduct">
    <Comment Name="Instruction">NN Check that the weight of the 
    finished piece does not exceed 1 oz. (28.3 grams) to 
    qualify for U.S. postage 
</Comment>
</Component>

<FoldingIntent ID="Fold1" Class="Intent" Status="Available"> 
    <FoldingCatalog DataType="NameSpan" Preferred="F8-7" 
        Priority="Required"> 
   <!--KK Preferred: "F8-7" is an item from the folding 
    catalog in the JDF specification.--> 
</FoldingCatalog>
</FoldingIntent>
</ResourcePool>
</ResourceLinkPool>

<JDF DescriptiveName="flat flyer" ID="Link0006" 
    JobPartID="HDM20002124161007-flat" Type="Product" 
    Status="Waiting">
    <!--This element describes the flat flyer and the intents that 
    are used to describe it.--> 
</JDF>

<ComponentLink rRef="Item01flat" Usage="Output"/>
<ArtDeliveryIntentLink rRef="Art1" Usage="Input"/>
<ColorIntentLink rRef="Color1" Usage="Input"/>
<MediaIntentLink rRef="Media1" Usage="Input"/>
<ResourcePool>
  <Component DescriptiveName="flyer" ID="Item01flat"
    Class="Quantity" Status="Unavailable"
    ComponentType="PartialProduct"/>
  <LayoutIntent ID="Size1" Class="Intent" Status="Available">
    <Dimensions DataType="XYPairSpan" Preferred="1224 792"
      Priority="Required">
      <!--HH This is the size of the flat, printed article.-->    </Dimensions>
    <Pages DataType="IntegerSpan" Preferred="2"/>
  </LayoutIntent>
  <ArtDeliveryIntent ID="Art1" Class="Intent" Status="Available">
    <ArtDeliveryDate DataType="TimeSpan"
      Preferred="2013-07-23T17:00-08:00"/>
    <Transfer DataType="EnumerationSpan"
      Preferred="BuyerToPrinterDeliver"/>
    <ArtDelivery HasBleeds="true" PageList="0-3"
      ArtDeliveryType="DigitalMedia">
      <RunList Pages="0-3">
        <LayoutElement HasBleeds="true" ElementType="Image">
          <FileSpec Application="Photoshop"/>
          <Comment Name="Description"
            Attribute="ElementType">
            Cropped and scaled scans for halftones.
          </Comment>
        </LayoutElement>
      </RunList>
      <!-OO-->
      </ArtDelivery>
      <ArtDelivery HasBleeds="true"
        ArtDeliveryType="DigitalMedia">
        <RunList>
          <LayoutElement HasBleeds="true" ElementType="Document">
            <FileSpec Application="Quark"/>
          </LayoutElement>
        </RunList>
        <!-OO-->
        </ArtDelivery>
        <Comment Name="Description">Solids and reverses completed and in the files.
          <!-OO-->
          </Comment>
          </ArtDeliveryIntent>
          <ColorIntent ID="Color1" Class="Intent" Status="Available">
            <ColorStandard DataType="NameSpan" Preferred="MonoChrome"/>
            <ColorsUsed>
              <!--II This is a 2-color job; colors must be listed since they are exactly those implied by ColorStandard = "MonoChrome."-->
              <!--Here "PMSxxx" is used to mean "some unspecified PMS color."-->
              <SeparationSpec Name="Black"/>
              <SeparationSpec Name="PMSxxx"/>
            </ColorsUsed>
            </ColorIntent>
            <MediaIntent ID="Media1" Class="Intent" Status="Available">
              <!-JJ-->
<FrontCoatings DataTypes="EnumerationSpan"
    Preferred="Semigloss"/>
<StockType DataTypes="NameSpan" Preferred="Offset"/>
<USWeight DataTypes="NumberSpan" Range="60~70">
   <!--US-->
</USWeight>
</MediaIntent>
<ProofingIntent ID="Proof1" Class="Intent" Status="Available">
   <!--PP-->
   <ProofItem
      ProofTarget="mailto:mmartin@pan-o-ramic.com">
      <ColorType DataTypes="EnumerationSpan"
          Preferred="BasicColor"/>
      <ProofType DataTypes="EnumerationSpan" preferred="Page"/>
      <Technology DataTypes="NameSpan" Preferred="SoftProof">
         <Comment Name="Instruction">Send PDF file</Comment>
      </Technology>
   </ProofItem>
</ProofingIntent>
</ResourcePool>
</JDF>
</jdf:JDF>
</Request>
</PrintTalk>
6.2 Example B – Bible

In the second example, the Print Provider produces two Bibles, one with a soft cover and another with a hard case cover and dust jacket. Just to make things interesting, the text is shared by both versions of books. We are producing 5,000 soft cover versions and 7,500 hard case versions. All are shipping to the same address.

6.2.1 Outline of JDF Structure

A simple outline of the JDF for this project looks like this:

```
1 <JDF DescriptiveName="Hard & Soft Cover Book">
  2 <ResourcePool>
  3   <CustomerInfo>
  4     <DeliveryIntent>
  5   </ResourcePool>
  6   <JDF DescriptiveName="Hard Cover Bound Book">
  7     <ResourcePool>
  8       <BindingIntent>
  9         <ComponentLink DescriptiveName="Text for both">
 10       </ResourcePool>
 11     </JDF>
 12     <JDF DescriptiveName="Hard Cover">
 13       <MediaIntent>
 14   </JDF>
 15   </JDF>
 16 </JDF>
 17 <JDF DescriptiveName="Soft Cover Bound Book">
 18     <ResourcePool>
 19       <BindingIntent>
 20         <ComponentLink DescriptiveName="Text for both">
 21     </ResourcePool>
 22     <JDF DescriptiveName="Soft Cover">
 23       <MediaIntent>
 24   </JDF>
 25 </JDF>
 26 <JDF DescriptiveName="Text for both">
 27   <MediaIntent>
 28 </JDF>
```

Line 1 is the JDF description of the project.  
Line 3 represents the Print Buyer buying these books. It would refer to contact and address information.  
Line 4 explains the delivery instructions and refers to the same contact as on line 2 as the delivery destination.  
Line 6 is the JDF description of the hard cover version. 
Line 8 is the specification for the bindery used to bring the case, dust jacket, and text together to produce the hard cover version of the book. 
Line 9 is the link to the text being produced. 
Line 11 is the JDF describing the production of the case. 
Line 12 is the MediaIntent describing the stock used to produce the hard cover. 
Line 14 is the JDF describing the production specifications of the dust jacket. 
Line 15 is the MediaIntent describing the paper used to produce the dust jacket. 
Line 18 is the JDF description of the soft cover version. 
Line 19 is the specification for the bindery used to bring the soft cover and text together to produce the soft cover version of the book. 
Line 20 is the link to the text being produced. 
Line 21 is the JDF description of the soft cover itself. 
Line 22 is the MediaIntent describing the paper used to produce the soft cover. 
Line 25 is the description of the text used by both books. 
Line 26 is the MediaIntent describing the paper used to produce the text.

The JDF Root Node of this project combines the 2 finished Products (soft and hard cover book), with the DeliveryIntent. The second tier of JDF Nodes shows the individual intents to produce each book. The
specification for the text could be part of the specification on each of the books separately. Because it's a shared JDF Node, it is promoted to a higher level and can be referred (and consumed) by each of the lower JDF Nodes.

Figure 7: Outline of JDF Structure for the “Bible” Example

6.2.2 PrintTalk Version of RFQ
Both the RFQ and subsequent Quotation are included in this example. The major difference between the 2 PrintTalk Documents is the addition of Pricing in the quote.

```xml
<?xml version="1.0" encoding="utf-8"?>
<PrintTalk xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns="http://www.printtalk.org/schema"
    xmlns:jdf="http://www.CIP4.org/JDFSchema_1_1"
    xsi:schemaLocation="http://www.printtalk.org/schema PrintTalk_1_1.xsd"
    version="1.1" payloadID="107778" timestamp="2013-07-1T22:39:08:00">
<!--version: This is the PrintTalk version; borrowed from cXML.-->
<!--payloadID: This is transport unique ID of the message; borrowed from cXML.-->
<Header>
    <From>
        <Credential domain="DNS">
            <Identity>www.billsfinebooks.com</Identity>
        </Credential>
        <Credential domain="ECompany.com">
```

Page 58 of 81
<Request>

<Identity>Bill's Fine Books</Identity>
</Credential>
_cred_Identity<Identity>06-388-7745</Identity>
</From>
<To>
_cred_Credential<Identity>JJ Printing</Identity>
</Credential>
_cred_Identity<Identity>06-358-9998</Identity>
</To>
<Sender>
_cred_Credential<Identity>PrintORama.com</Identity>
_cred_SpecialSecret>rosebud</SharedSecret>
</Credential>
<UserAgent>Print Buyer v.54.9</UserAgent>
</Sender>
</Header>

<RFQ>
_credential-AgentID="Marge" AgentDisplayName="Margaret Simpson"
RequestDate="2013-07-1T10:00:00:00" BusinessID="RFQ_A3317" Currency="USD"
Estimate=true Expires="2013-08-25T1700-0800"/>

<jdf:JDF DescriptiveName="224 page hard and soft cover book" ID="JDF000-Root" JobID="BuyerJob001" Type="Product" Status="Waiting" Version="1.1"
xmlns="http://www.CIP4.org/JDFSchema_1_1"/>
<!--JobID: sender's reference to a job/project.-->
<!--Version: JDF version.-->
</Request>

</AuditPool>

<!--Not required by PrintTalk, may be used at the discretion of the document creator.-->

<Created Author="PrintTalk" TimeStamp="2013-07-1T11:20-08:00"/>
</AuditPool>
<ResourcePool>
<CustomerInfo CustomerID="pb4653/99">
_contactRef CDataRef="Contact01"/>
</CustomerInfo>
<LayoutIntent ID="Size001(Finished)" Class="Intent"
Status="Available">
<Dimensions Range="576 720-648 864" DataType="XYPairSpan"
Preferred="612 792"/>
<Pages DataType="IntegerSpan" Preferred="224"/>
</LayoutIntent>
<DeliveryIntent ID="Delivery001" Class="Intent" Status="Available">
<DropIntent>
<!--Date by which the product is to be delivered--> 
<Required DataType="TimeSpan"
Preferred="2013-09-30T09:30-8:00"/>
<contactRef CDataRef="Contact02"/>
<DropItemIntent Amount="7500" AdditionalAmount="1000">
<ComponentRef CDataRef="Item001(HardBook)"/>
</DropItemIntent>
<DropItemIntent Amount="5000" AdditionalAmount="1000">
<ComponentRef CDataRef="Item003(SofCover)"/>
</DropItemIntent>
</DropIntent>
<Comment>Delivery of hardcover and softcover job</Comment>
</DeliveryIntent>
</ResourcePool>

<!--Buyer requests a non-binding price. Just an estimate.-->

</JDF>
<Company ID="Company01" Class="Parameter" Status="Available" OrganizationName="Mega Corp"/>
<Contact ID="Contact01" Class="Parameter" Status="Available"
ContactTypes="Customer Billing">
<Address Street="920 H. French Street" City="Wilmington"
Region="DE" PostalCode="19801">
<ExtendedAddress>Attention: Accounts Payable</ExtendedAddress>
</Address>
<Person JobTitle="Purchasing Manager" FirstName="Lisa"
FamilyName="Luft"/>
</Contact>
</ResourcePool>
<ResourceLinkPool>
<DeliveryIntentLink rRef="Delivery001" Usage="Input"/>
<CustomerInfoLink rRef="pb4653/99" Usage="Input"/>
</ResourceLinkPool>
<JDF DescriptiveName=""224 page hard case bound book with a 4/0 dust jacket"
ID="JDF001(HardBook)" Type="Product" Status="Waiting">
<!--For RFQ, whatever JDF "Product" elements necessary to specify
components to be delivered.-->
</JDF>
</ResourcePool>
<Component ID="Item001(HardBook)" Class="Quantity"
Status="Unavailable"
DescriptiveName=""224 page hard case bound book with a 4/0 dust jacket"
ComponentType="FinalProduct"/>
</ComponentLink>
</ResourceLinkPool>
<BindingIntent ID="Bind001(HardCover)" Class="Intent"
Status="Available">
</BindingIntent>
</ResourceLinkPool>
<ComponentLink rRef="Item001(HardBook)" Usage="Output"/>
<ComponentLink rRef="Item002(HardCase)" Usage="Input"
ProcessUsage="Cover"/>
<ComponentLink rRef="Item004(Text)" Usage="Input"/>
<ComponentLink rRef="Item006(DustJacket)" Usage="Input"/>
<BindingIntentLink rRef="Bind001(HardCover)" Usage="Input"/>
</ResourceLinkPool>
<JDF DescriptiveName="DustJacket for Hard Cover"
ID="JDF004(DustJacket)" Type="Product" Status="Waiting">
</ResourcePool>
<Component ID="Item006(DustJacket)" Class="Quantity"
Status="Unavailable" DescriptiveName="Dust Jacket"
ComponentType="PartialProduct"/>
<ColorIntent ID="Color002(DustJacket)" Class="Intent"
Status="Available">
</ColorIntent>
</ResourceLinkPool>
<CoverageDataType="NumberSpan" Preferred="50"/>
<ColorStandard Range="CMYK" DataTye="NameSpan"
    Preferred="CMYK"/>
<InkManufacturer Range="ToyoCrayola" DataTye="NameSpan"
    Preferred="ToyoCrayola"/>
</ColorIntent>
<MediaIntent ID="Media002(DustJacket)" Class="Intent"
    Status="Available">
    <FrontCoatings DataTye="NameSpan" Preferred="None"/>
    <StockType DataTye="NameSpan" Preferred="Offset"/>
</MediaIntent>
</ResourcePool>
</ResourceLinkPool>
<ComponentLink rRef="Item005(DustJacket)" Usage="Input"/>
<LayoutIntentLink rRef="Size001(Finished)" Usage="Input"/>
<ColorIntentLink rRef="Color002(DustJacket)" Usage="Input"/>
</ResourceLinkPool>
</JDF>
</JDF>
<JDF DescriptiveName="Case for Hard Cover" ID="JDF006(Case)"
     Type="Product" Status="Waiting">
    <ResourcePool>
        <Component ID="Item002(HardCase)" Class="Quantity"
            Status="Unavailable" DescriptiveName="Book Case"
            ComponentType="PartialProduct"/>
        <MediaIntent ID="Media001(Case)" Class="Intent"
            Status="Available">
            <MediaColor DataTye="EnumerationSpan" Preferred="Black"/>
            <StockType DataTye="NameSpan" Preferred="Cloth"/>
        </MediaIntent>
    </ResourcePool>
</JDF>
</JDF>
<JDF DescriptiveName="224 page soft cover, perfect bound book"
     ID="JDF002(SoftBook)" Type="Product" Status="Waiting">
    <ResourcePool>
        <Component ID="Item003(SoftBook)" Class="Quantity"
            Status="Unavailable"
            DescriptiveName="soft cover, perfect bound book"
            ComponentType="FinalProduct"/>
        <BindingIntent ID="Bind002(SoftCover)" Class="Intent"
            Status="Available"/>
        <BindingType DataTye="EnumerationSpan" Preferred="Adhesive"/>
    </ResourcePool>
</JDF>
</ResourceLinkPool>
<ComponentLink rRef="Item005(SoftCover)" Usage="Output"/>
<ComponentLink rRef="Item005(SoftCase)" Usage="Input"/>
<MediaIntentLink rRef="Media003(SoftCover)" Usage="Input"/>
<MediaIntentLink rRef="Media004(Text)" Usage="Input"/>
<LayoutIntentLink rRef="Size001(Finished)" Usage="Input"/>
<BindingIntentLink rRef="Bind002(SoftCover)" Usage="Input"/>
</ResourceLinkPool>
</JDF>
<JDF DescriptiveName="Soft Cover" ID="JDF005(SoftCover)"
     Type="Product" Status="Waiting">
    <ResourcePool>
        <Component ID="Item005(SoftCover)" Class="Quantity"
            Status="Unavailable" DescriptiveName="soft cover"
            ComponentType="PartialProduct"/>
<MediaIntent ID="Media003(SoftCover)" Class="Intent"
    Status="Available">
    <FrontCoatings DataType="NameSpan" Preferred="None"/>
    <StockType DataType="NameSpan" Preferred="offset"/>
</MediaIntent>

<ColorIntent ID="Color003(SoftCover)" Class="Intent"
    Status="Available">
    <Coverage DataType="NumberSpan" Preferred="50"/>
    <ColorStandard Range="CMYK" DataType="NameSpan"
        Preferred="CMYK"/>
    <InkManufacturer Range="ToyoCrayola " DataType="NameSpan"
        Preferred="ToyoCrayola"/>
</ColorIntent>
</ResourcePool>

<ResourceLinkPool>
    <ComponentLink rRef="Item005(SoftCover)" Usage="Output"/>
    <LayoutIntentLink rRef="Size001(Finished)" Usage="Input"/>
    <ColorIntentLink rRef="Color003(SoftCover)" Usage="Input"/>
    <MediaIntentLink rRef="Media003(SoftCover)" Usage="Input"/>
</ResourceLinkPool>
</JDF>

</JDF>
6.2.3 PrintTalk Version of Quotation

```xml
<?xml version="1.0" encoding="utf-8"?>
<PrintTalk xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.printtalk.org/schema"
xmlns:jdf="http://www.CIP4.org/JDFSchema_1_1"
xsi:schemaLocation="http://www.printtalk.org/schema PrintTalk_1_1.xsd"
version="1.1"
payloadID="107778"
timestamp="2013-07-25T22:39:08:00">
<!--version: This is the PrintTalk version; borrowed from cXML.-->
<!--payloadID: This is transport unique ID of the message; borrowed from cXML.-->

<Header>
  <From>
    <Credential domain="ECompany.com">
      <Identity>JJ Printing</Identity>
    </Credential>
    <Credential domain="DUNS">
      <Identity>06-358-9998</Identity>
    </Credential>
  </From>
  <To>
    <Credential domain="DNS">
      <Identity>www.billsfinebooks.com</Identity>
    </Credential>
    <Credential domain="ECompany.com">
      <Identity>Bill's Fine Books</Identity>
    </Credential>
    <Credential domain="DUNS">
      <Identity>06-388-7745</Identity>
    </Credential>
  </To>
  <Sender>
    <Identity>www.JJPrinting.com</Identity>
    <SharedSecret>rosebud</SharedSecret>
  </Sender>
</Header>

<Request Quotation AgentID="Carlos" AgentDisplayName="Carlos Chavez" RequestDate="2013-07-25T10:00:00:08:00" BusinessID="Quote744910" BusinessRefID="RFQ_A3317" Currency="USD" Estimate="true" Expires="2013-08-26T1700-0800">
  <!--Print Provider sends a non-binding price. Just an estimate-->
  <Quote QuoteID="Quote_1">
    <Pricing>
      <Price LineID="DI1_1" DescriptiveName="Hard Cover Books"
        Amount="7500" Unit="copies" Price="24150.00"/>
      <jdf:Comment>Estimated price $3.22 per book. Additional price $2.65 per book + shipping</jdf:Comment>
    </Price>
    <Price LineID="DI1_2" DescriptiveName="Shipping" Price="1233.00"/>
      <jdf:Comment>Shipped UPS bookrate</jdf:Comment>
    </Price>
    <Price LineID="DI2_1" DescriptiveName="Soft Cover Book" Amount="7500"
      Unit="copies" Price="8800.00"/>
    <jdf:Comment>Shipping included</jdf:Comment>
  </Pricing>
</Quote>
</Request>
</PrintTalk>
```
<jdf:Comment>Estimated price $1.76 per book. Additional price $1.23 per book + shipping</jdf:Comment>
</Price>
<Price LineID="DI2_2" DescriptiveName="Shipping" Price="783.00"
<jdf:Comment>Shipped UPS bookrate</jdf:Comment>
</Price>
</Pricing>
<jdf:JDF DescriptiveName="224 page hard and soft cover book" ID="JDF000-Root" JobID="BuyerJob001"
xmlns="http://www.CIP4.org/JDFSchema_1_1">
<!--JobID: sender’s reference to a job/project.-->
<!--Version: JDF version.-->
<AuditPool>
<!--Not required by PrintTalk, may be used at the discretion of the document creator.-->
<Created Author="PrintTalk"
TimeStamp="2013-07-1T11:20:08:00"/>
</AuditPool>
<ResourcePool>
<CustomerInfo CustomerID="pb4653/99">
<ContactRef rRef="Contact01"/>
</CustomerInfo>
<DeliveryIntent ID="Delivery001" Class="Intent"
Status="Available">
<DropIntent>
<Required DataType="TimeSpan"
Preferred="2013-09-30T09:30-8:00"/>
<!--Date by which the product is to be delivered-->
<ContactRef rRef="Contact02"/>
<DropItemIntent Amount="7500">
<ComponentRef rRef="Item001(HardBook)"/>
<jdf:GeneralID IDUsage="LineID" IDValue="DI1_1"/>
<jdf:GeneralID IDUsage="LineID" IDValue="DI1_2"/>
</DropItemIntent>
<DropItemIntent Amount="5000">
<ComponentRef rRef="Item003(SoftBook)"/>
<jdf:GeneralID IDUsage="LineID" IDValue="DI2_1"/>
<jdf:GeneralID IDUsage="LineID" IDValue="DI2_2"/>
</DropItemIntent>
</DropIntent>
<Comment>Delivery of hardcover and softcover job</Comment>
</DeliveryIntent>
</ResourcePool>
<Company ID="Company01" Class="Parameter" Status="Available"
OrganizationName="Mega Corp"/>
<Contact ID="Contact01" Class="Parameter" Status="Available"
ContactTypes="Customer Billing">
<Address Street="820 N. French Street" City="Wilmington"
Region="DE" PostalCode="19801">
<ExtendedAddress>Attention: Accounts Payable</ExtendedAddress>
</Address>
<Person JobTitle="Purchasing Manager" FirstName="Lisa"
FamilyName="Luft"/>
</Contact>
<Contact ID="Contact02" Class="Parameter" Status="Available"
ContactTypes="Delivery">
<Address Street="555 Maple Drive" City="San Mateo" Region="CA"
PostalCode="94403">
<ExtendedAddress>Suite 245</ExtendedAddress>
</Address>
<Person JobTitle="Head of Book Division" FirstName="William" FamilyName="Johnson"/>
<CompanyRef rRef="Company01"/>
</Contact>
</ResourcePool>
<DeliveryIntentLink rRef="Delivery001" Usage="Input"/>
<CustomerInfoLink rRef="pb4653/99" Usage="Input"/>
</ResourceLinkPool>
<JDF DescriptiveName="224 page hard case bound book with a 4/0 dust jacket" ID="JDF001(HardBook)" Type="Product" Status="Waiting">
  <!--For Quote, whatever JDF "Product" elements necessary to specify components to be delivered.-->
  <ResourcePool>
    <Component ID="Item001(HardBook)" Class="Quantity"
      Status="Unavailable"
      DescriptiveName="224 page hard case bound book with a 4/0 dust jacket" ComponentType="FinalProduct"/>
    <LayoutIntent ID="Size001(Finished)" Class="Intent"
      Status="Available">
      <Dimensions DataType="XYPairSpan" Preferred="612 792"
        Range="576 720~648 864"/>
      <Pages DataType="IntegerSpan" Preferred="224"/>
    </LayoutIntent>
    <BindingIntent ID="Bind001(HardCover)" Class="Intent"
      Status="Available">
      <BindingType DataType="EnumerationSpan" Preferred="HardCover"/>
      <BindingLength DataType="EnumerationSpan" Preferred="Long"/>
    </BindingIntent>
  </ResourcePool>
</JDF>
<JDF DescriptiveName="DustJacket for Hard Cover" ID="JDF004(DustJacket)" Type="Product" Status="Waiting">
  <ResourcePool>
    <Component ID="Item006(DustJacket)" Class="Quantity"
      Status="Unavailable"
      DescriptiveName="Dust Jacket" ComponentType="PartialProduct"/>
    <ColorIntent ID="Color002(DustJacket)" Class="Intent"
      Status="Available">
      <Coverage DataType="NumberSpan" Preferred="50"/>
      <ColorStandard DataType="NameSpan" Preferred="CMYK"
        Priority="Required"/>
      <InkManufacturer DataType="NameSpan" Preferred="ToyoCrayola" Priority="Required"/>
    </ColorIntent>
    <MediaIntent ID="Media002(DustJacket)" Class="Intent"
      Status="Available">
      <FrontCoatings DataType="EnumerationSpan" Preferred="None"/>
      <StockType DataType="NameSpan" Preferred="Offset"/>
    </MediaIntent>
  </ResourcePool>
</JDF>
</ResourcePool>
</ResourceLinkPool>
<ComponentLink rRef="Item006(DustJacket)" Usage="Output"/>
<ColorIntentLink rRef="Color002(DustJacket)"
Usage="Input"/>
<LayoutIntentLink rRef="Size001(Finished)" Usage="Input"/>
<MediaIntentLink rRef="Media002(DustJacket)"
Usage="Input"/>
</ResourceLinkPool>
</JDF>
</JDF>
</JDF DescriptiveName="Case for Hard Cover" ID="JDF006(Case)"
Type="Product" Status="Waiting">
<ResourcePool>
<Component ID="Item002(HardCase)" Class="Quantity"
Status="Unavailable" DescriptiveName="Book Case"
ComponentType="PartialProduct"/>
<MediaIntent ID="Media001(Case)" Class="Intent"
Status="Available">
<MediaColor DataType="EnumerationSpan"
Preferred="Black"/>
<StockType DataType="NameSpan" Preferred="Cloth"/>
</MediaIntent>
</ResourcePool>
</JDF>
</JDF>
</JDF DescriptiveName="224 page soft cover, perfect bound book"
ID="JDF002(SoftBook)" Type="Product" Status="Waiting">
<ResourcePool>
<Component ID="Item003(SoftBook)" Class="Quantity"
Status="Unavailable"
DescriptiveName="soft cover, perfect bound book"
ComponentType="FinalProduct"/>
</ResourcePool>
</JDF>
</JDF DescriptiveName="Soft Cover" ID="JDF005(SoftCover)"
Type="Product" Status="Waiting">
<ResourcePool>
<Component ID="Item005(SoftCover)" Class="Quantity"
Status="Unavailable"
DescriptiveName="soft cover"
ComponentType="PartialProduct"/>
</ResourcePool>
</JDF>
</JDF DescriptiveName="Case for Hard Cover" ID="JDF006(Case)"
Type="Product" Status="Waiting">
<ResourcePool>
<Component Link rRef="Item002(HardCase)"
Usage="Output"/>
<LayoutIntentLink rRef="Size001(Finished)" Usage="Input"/>
<MediaIntentLink rRef="Media001(Case)" Usage="Input"/>
</ResourceLinkPool>
</JDF>
</JDF>
<BindingIntent ID="Bind002(SoftCover)" Class="Intent"
Status="Available">
<BindingType DataType="EnumerationSpan"
Preferred="SoftCover"/>
</BindingIntent>
</ResourcePool>
</ResourceLinkPool>
</JDF DescriptiveName="224 page soft cover, perfect bound book"
ID="JDF002(SoftBook)" Type="Product" Status="Waiting">
<ResourcePool>
<Component Link rRef="Item002(HardCase)" Usage="Output"/>
<LayoutIntentLink rRef="Size001(Finished)" Usage="Input"/>
<MediaIntentLink rRef="Media001(Case)" Usage="Input"/>
</ResourceLinkPool>
</JDF>
</JDF DescriptiveName="Case for Hard Cover" ID="JDF006(Case)"
Type="Product" Status="Waiting">
<ResourcePool>
<Component Link rRef="Item002(HardCase)" Usage="Output"/>
<ColorIntentLink rRef="Color002(DustJacket)"
Usage="Input"/>
<LayoutIntentLink rRef="Size001(Finished)" Usage="Input"/>
<MediaIntentLink rRef="Media002(DustJacket)"
Usage="Input"/>
</ResourceLinkPool>
</JDF>
<BindingIntent ID="Bind002(SoftCover)" Class="Intent"
Status="Available">
<FrontCoatings DataType="EnumerationSpan"
Preferred="None"/>
<StockType DataType="NameSpan" Preferred="Offset"/>
<ResourcePool>
  <Component ID="Item004(Text)" Class="Quantity" Status="Unavailable">
    <DescriptiveName>Reader text for hard or soft cover 224 page book</DescriptiveName>
    <ComponentType>PartialProduct</ComponentType>
  </Component>
  <ColorIntent ID="Color001(Text)" Class="Intent" Status="Available">
    <ColorStandard DataType="NameSpan" Preferred="MonoChrome" />
    <Coverage DataType="NumberSpan" Preferred="10" />
    <InkManufacturer Range="Black" DataType="NameSpan" />
  </ColorIntent>
  <MediaIntent ID="Media001(Text)" Class="Intent" Status="Available">
    <FrontCoatings DataType="EnumerationSpan" Preferred="None" />
    <Opacity DataType="EnumerationSpan" Preferred="Opaque" />
    <StockType DataType="NameSpan" Preferred="Bond" />
    <USWeight DataType="NumberSpan" Preferred="9" />
  </MediaIntent>
</ResourcePool>

<jdf:JDF>

</jdf:JDF>
6.3 Example C – Sunrise PurchaseOrder

In PrintTalk, the Quotation response to an RFQ looks similar to that RFQ, usually restating many of the items in the original RFQ. In the same way, a PurchaseOrder response to a Quotation looks similar to the Quotation. Of course, in the PurchaseOrder, any options are eliminated and the pricing specifies the exact quantity and tolerance for each delivery. It is also acceptable for the PurchaseOrder to simply acknowledge the quote and respond with acceptance without restating any of the specifications.

By using JDF, PrintTalk can support another kind of PurchaseOrder entirely. Sometimes, it’s necessary to purchase an item from a printer that has a pre-established price and well-defined content. To embrace this Catalog-based part of the print market, JDF/PrintTalk allows finished goods to be ordered in a PurchaseOrder as components using GeneralID[@IDUsage="CatalogID"].

The following example uses Catalog elements as the contents of a Purchase Order.

6.3.1 Text Version of RFQ
**PURCHASE ORDER**

**24022**

**Provider:**
Sunrise Printing  
444 South Main Street  
Albany, NY 12205

**Ship To:**
Phil Chavez  
c/o Reylon Division  
24 Madison Avenue  
Suite 1  
New York, NY 10022

<table>
<thead>
<tr>
<th>Terms</th>
<th>Shipping Method</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2% 10, Net 30</td>
<td>UPS</td>
<td>8/22/02</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>U / M</th>
<th>Description</th>
<th>Unit Price</th>
<th>Disc %</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>500</td>
<td>Business Cards–Phil Chavez</td>
<td>62.50</td>
<td>0</td>
<td>62.50</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>500</td>
<td>Notepad–Phil Chavez</td>
<td>54.00</td>
<td>10</td>
<td>48.60</td>
</tr>
<tr>
<td>3</td>
<td>250</td>
<td>1</td>
<td>Reylon Mailer</td>
<td>3.04</td>
<td>0</td>
<td>760.00</td>
</tr>
</tbody>
</table>

Please state our PO number on all invoices.

1. Refer all inquiries to buyer.  
2. We reserve the right to return all over shipments for credit at Vendor’s expense.  
3. This order subject to Terms and Conditions on reverse side.

<table>
<thead>
<tr>
<th></th>
<th>TOTAL:</th>
<th>871.10</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISCOUNT:</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>TAX:</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>SHIPPING:</td>
<td>12.00</td>
<td></td>
</tr>
<tr>
<td>OTHER:</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>ORDER TOTAL:</td>
<td>883.10</td>
<td></td>
</tr>
</tbody>
</table>
<xml version="1.0" encoding="UTF-8">
<PrintTalk xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:printtalk="http://www.printtalk.org/schema"
xmlns:jdf="http://www.CIP4.org/JDFSchema_1_1"
xsi:schemaLocation="http://www.printtalk.org/schema PrintTalk_1_1.xsd"
version="1.1" payloadID="107448"
timestamp="2013-07-10T22:39Z">
  <Header>
    <Credential domain="DNS">
      <Identity>www.megacorp.com</Identity>
    </Credential>
    <Credential domain="ECompany.com">
      <Identity>Mega Corp</Identity>
    </Credential>
    <Credential domain="DUNS">
      <Identity>063887745</Identity>
    </Credential>
    <From>
      <Identity>PrintORama.com</Identity>
      <SharedSecret>firehose</SharedSecret>
    </From>
    <To>
      <Identity>Sunrise Printing</Identity>
    </To>
    <Sender>
      <Identity>PrintORama.com</Identity>
      <UserAgent>Print Buyer v.54.9</UserAgent>
    </Sender>
  </Header>
  <Request>
    <PurchaseOrder AgentID="Patb" AgentDisplayName="Pat Butler" RequestDate="2013-07-10T1000-0800" BusinessID="24022" Currency="USD" Expires="2013-08-10T1700-0800"/>
    <Pricing>
      <Price LineID="D1_1" DescriptiveName="Total" Price="62.50"/>
      <Price LineID="D1_2" DescriptiveName="Discount" Unit="Percent"/>
      <Price LineID="D1_3" DescriptiveName="Tax"/>
      <Price LineID="D1_4" DescriptiveName="Shipping and Handling" Price="12.00"/>
      <PayTerm>2% 10, Net 30</PayTerm>
    </Pricing>
    <jdf:jDF DescriptiveName="Purchase Order 24022" ID="JDF000-Root"
      JobID="0901-1243" Type="Product" Status="Waiting" Version="1.1"
      xmlns="http://www.CIP4.org/JDFSchema_1_1">
<CustomerInfo>
  <Contact ID="Contact01" Class="Parameter" Status="Available"/>
  <Address Street="24 Madison Avenue" City="New York" Region="NY" PostalCode="10022"/>
</CustomerInfo>

<Contact ID="Contact02" Class="Parameter" Status="Available"/>
  <Address Street="4100 State Street" City="Little Rock" Region="AR" PostalCode="72201"/>
</Contact>

<DeliveryIntent ID="Delivery001" Class="Intent" Status="Available">
  <Method DataType="NameSpan" Preferred="UPS"/>
  <DropIntent>
    <Required DataType="TimeSpan" Preferred="2013-08-22T09:30-8:00"/>
    <DropItemIntent Amount="1" Unit="500">
      <ComponentRef rRef="Item001"/>
      <jdf:GeneralID IDUsage="LineID" IDValue="DI1_1"/>
      <jdf:GeneralID IDUsage="LineID" IDValue="DI1_2"/>
    </DropItemIntent>
    <DropItemIntent Amount="1" Unit="500">
      <ComponentRef rRef="Item002"/>
      <jdf:GeneralID IDUsage="LineID" IDValue="DI2_1"/>
      <jdf:GeneralID IDUsage="LineID" IDValue="DI2_2"/>
    </DropItemIntent>
    <DropItemIntent Amount="250" Unit="1">
      <ComponentRef rRef="Item003"/>
      <jdf:GeneralID IDUsage="LineID" IDValue="DI3_1"/>
    </DropItemIntent>
  </DropIntent>
</DeliveryIntent>

<Component ID="Item001" Class="Quantity" Status="Available"/>
  <DescriptiveName>Business Cards - Phil Chavez</DescriptiveName>
  <ComponentType>FinalProduct</ComponentType>
  <CatalogID>BC-Phil Chavez</CatalogID>
  <ProductID>Reylon-123</ProductID>
  <CatalogDetails>Business Cards - Phil Chavez</CatalogDetails/>

<Component ID="Item002" Class="Quantity" Status="Available"/>
  <DescriptiveName>Notepad - Phil Chavez</DescriptiveName>
  <ComponentType>FinalProduct</ComponentType>
  <CatalogID>NP-Phil Chavez</CatalogID>
  <ProductID>Reylon-124</ProductID>
  <CatalogDetails>Notepad - Phil Chavez</CatalogDetails/>

<Component ID="Item003" Class="Quantity" Status="Available"/>
  <DescriptiveName>Reylon Mailer</DescriptiveName>
  <ComponentType>FinalProduct</ComponentType>
  <CatalogID>RM 25.5</CatalogID>
  <ProductID>Reylon-125</ProductID>
  <CatalogDetails>Reylon Mailer</CatalogDetails/>
</ResourcePool>

<ResourceLinkPool>
  <DeliveryIntentLink rRef="Delivery001" Usage="Input"/>
</ResourceLinkPool>
6.4 Example D – Collaboration Scenario

The fourth example illustrates a scenario that occurs among four parties involved in a print production process. A *Print Buyer* PB1 and a *Print Buyer* PB2 both are ordering products via a “dealer” which in turns forwards the orders to a *Print Provider*.

In a first step, both *Print Buyers* send a *PurchaseOrder* to the dealer. The dealer then merges the two *PurchaseOrder* elements into a new *PurchaseOrder* (PO3) and sends it to the *Print Provider*. The *Print Provider* finally sends status information back to the dealer who in turn might forward that back to his customers. The *Print Provider* sends the physical products directly to the two *Print Buyers* and identifies them with the *Print Buyers’* purchase order numbers.

Note: the *Confirmation Business Objects* that are sent in between the *PurchaseOrder* elements and the *OrderStatusResponse* elements are not shown explicitly for sake of space.

![Figure 8: Diagram of Business Transactions among Four Collaborating Parties](image_url)
6.4.1 PrintTalk Version of PurchaseOrder for Print Buyer PB1

The PrintTalk/JDF files exchanged by the parties might look as follows (please note that the JDF part is not fully specified):

```xml
<?xml version="1.0" encoding="UTF-8"?>
<PrintTalk xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns="http://www.printtalk.org/schema"
    xmlns:jdf="http://www.CIP4.org/JDFSchema_1_1"
    xsi:schemaLocation="http://www.printtalk.org/schema PrintTalk_1_1.xsd"
    version="1.1"
    payloadID="107448"
    timestamp="2013-09-05T1000-0800">
    <Header>
        <From>
            <Credential domain="DNS">
                <Identity>www.fredsfinerugs.com</Identity>
            </Credential>
            <Credential domain="DUNS">
                <Identity>063333745</Identity>
            </Credential>
        </From>
        <To>
            <Credential domain="ECompany.com">
                <Identity>Print Dealer</Identity>
            </Credential>
            <Credential domain="DUNS">
                <Identity>063566668</Identity>
            </Credential>
        </To>
        <Sender>
            <Credential domain="DNS">
                <Identity>PrintORama.com</Identity>
                <SharedSecret>firehose</SharedSecret>
            </Credential>
            <UserAgent>PrintORama v.1.0</UserAgent>
        </Sender>
    </Header>
    <Request>
        <PurchaseOrder AgentID="LisaL" AgentDisplayName="Lisa Luft" RequestDate="2013-09-05T1000-0800" BusinessID="12345" Currency="USD" Expires="2013-09-10T1700-0800">
            <jdf:JDF DescriptiveName="Winter Sales Promo" ID="JDF000-Root" JobID="0901-1243" Type="Product" Status="Waiting" Version="1.1"
                xmlns="http://www.CIP4.org/JDFSchema_1_1">
                <ResourcePool>
                    <CustomerInfo ID="Customer01" CustomerID="952425">
                        <ContactRef rRef="Contact01"/>
                    </CustomerInfo>
                    <Contact ID="Contact01" Class="Parameter" Status="Available">
                        <Address Street="1745 First Street" City="Dublin" Region="OH" PostalCode="43202"/>
                        <Person JobTitle="Sales Administrator" FirstName="June" FamilyName="Jones"/>
                        <Company ID="Company01" Class="Parameter" Status="Available">
                            <OrganizationName>Fred's fine Rugs</OrganizationName>
                        </Company>
                    </Contact>
                    <DeliveryIntent ID="Delivery001" Class="Intent" Status="Available">
                        <Method DataType="NameSpan" Preferred="UPS"/>
                    </DeliveryIntent>
                </ResourcePool>
            </jdf:JDF>
        </PurchaseOrder>
    </Request>
</PrintTalk>
```
6.4.2 PrintTalk Version of PurchaseOrder for Print Buyer PB2

<?xml version="1.0" encoding="UTF-8"?>
<PrintTalk xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.printtalk.org/schema"
xmlns:jdf="http://www.CIP4.org/JDFSchema_1_1"
xsi:schemaLocation="http://www.printtalk.org/schema PrintTalk_1_1.xsd"
version="1.1" payloadID="273743" timestamp="2013-09-05T08:0800">
    <Header>
        <From>
            <Credential domain="DNS">
                <Identity>www.texascabinet.com</Identity>
            </Credential>
            <Credential domain="DUNS">
                <Identity>0528494563</Identity>
            </Credential>
        </From>
        <To>
            <Credential domain="ECompany.com">
                <Identity>Print Dealer</Identity>
            </Credential>
            <Credential domain="DUNS">
                <Identity>063589998</Identity>
            </Credential>
        </To>
        <Sender>

Page 74 of 81
6.4.3 PrintTalk Version of PurchaseOrder for Dealer

```xml
<?xml version="1.0" encoding="UTF-8"?>
<PrintTalk xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns="http://www.printtalk.org/schema"
    xmlns:jdf="http://www.CIP4.org/JDFSchema_1_1"
    xsi:schemaLocation="http://www.printtalk.org/schema PrintTalk_1_1.xsd"
    version="1.1"
    payloadID="13474875"
    timestamp="2013-09-06T1000-0800">
    <Header>
        <From>
            <Credential domain="DNS">
                <Identity>Print Dealer</Identity>
            </Credential>
            <Credential domain="DUNS">
                <Identity>063589998</Identity>
            </Credential>
        </From>
        <To>
            <Credential domain="AvalonPrinting.com">
                <Identity>Avalon Printing</Identity>
            </Credential>
            <Credential domain="DUNS">
                <Identity>012737459</Identity>
            </Credential>
        </To>
        <Sender>
            <Credential domain="DNS">
                <Identity>PrintORama.com</Identity>
                <SharedSecret>catsndogs</SharedSecret>
            </Credential>
            <UserAgent>PrintORama v.1.0</UserAgent>
        </Sender>
    </Header>
    <Request>
        <PurchaseOrder AgentID="MLow" AgentDisplayName="Margaret Low"
            RequestDate="2013-09-06T1000-0800" BusinessID="1111" Currency="USD"
            Expires="2013-09-10T1700-0800">
            <jdf:JDF DescriptiveName="Flyers" ID="JDF000-Root" JobID="0901-1299"
                Type="Product" Status="Waiting" Version="1.1"
                xmlns="http://www.CIP4.org/JDFSchema_1_1">
                <ResourcePool>
                    <CustomerInfo ID="Customer01" CustomerID="752354">
                        <ContactRef rRef="Contact01"/>
                    </CustomerInfo>
                    <Contact ID="Contact01" Class="Parameter" Status="Available"
                        ContactTypes="Billing Customer">
                        <Address Street="123 5th Street" City="New York" Region="NY"
                            PostalCode="10024"/>
                        <Person JobTitle="Sales Manager" FirstName="Bill"
                            FamilyName="Mayers"/>
                        <Company ID="Dealer01" Class="Parameter" Status="Available"
                            OrganizationName="Print Dealer"/>
                    </Contact>
                    <Contact ID="Contact02" Class="Parameter" Status="Available"
                        ContactTypes="Delivery">
                        <Address Street="1745 First Street" City="Dublin" Region="OH"
                            PostalCode="43202"/>
```
<Person JobTitle="Sales Administrator" FirstName="June"
FamilyName="Jones"/>
<Company ID="Company01" Class="Parameter" Status="Available"
OrganizationName="Fred’s Fine Rugs"/>
</Contact>
<Contact ID="Contact03" Class="Parameter" Status="Available"
ContactTypes="Delivery">
<Address Street="42425 Maple Street" City="San Antonio"
Region="TX" PostalCode="78294"/>
<Person JobTitle="Marketing Officer" FirstName="John"
FamilyName="Stockton"/>
<Company ID="Company02" Class="Parameter" Status="Available"
OrganizationName="Texas Cabinet Company"/>
</Contact>
<DeliveryIntent ID="Delivery001" Class="Intent" Status="Available">
<Method DataType="NameSpan" Preferred="UPS"/>
</DeliveryIntent>
<Required DataTypes="TimeSpan"
Preferred="2013-09-22T09:30-8:00"/>
<ContactRef rRef="Contact02"/>
<DropItemIntent Amount="1" Unit="500">
<ComponentRef rRef="Item001"/>
</DropItemIntent>
<jdf:GeneralID IDUsage="LineID" IDValue="DI1_1"/>
<jdf:GeneralID IDUsage="LineID" IDValue="DI1_2"/>
<jdf:GeneralID IDUsage="LineID" IDValue="DI1_3"/>
<jdf:GeneralID IDUsage="LineID" IDValue="DI1_4"/>
</DropItemIntent>
</ResourcePool>
<DeliveryIntentLink rRef="Delivery001" Usage="Input"/>
</ResourceLinkPool>
<jdf DescriptiveName="Winter Sales Promo" ID="JDF001" JobPartID="0901-1243"
Type="Product" Status="Waiting">
<ResourcePool>
<CustomerInfo ID="Customer02" CustomerJobName="0901-1243"
CustomerOrderID="12345"/>
<ContactRef rRef="Contact02"/>
</CustomerInfo>
</ResourcePool>
</JDF>
<!--Sub-JDF-node only added as placeholder-->
6.4.4 PrintTalk Version of OrderStatusResponse (1) for Dealer
6.4.5 PrintTalk Version of OrderStatusResponse (2) for Print Buyer PB1

<?xml version="1.0" encoding="UTF-8"?>
<PrintTalk xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.printtalk.org/schema"
xmlns:jdf="http://www.CIP4.org/JDFSchema_1_1"
xsi:schemaLocation="http://www.printtalk.org/schema PrintTalk_1_1.xsd"
version="1.1" payloadID="187655"
timestamp="2013-09-20T1030-0800">
  <Header>
    <From>
      <Credential domain="DNS">
        <Identity>Print Dealer</Identity>
      </Credential>
      <Credential domain="DUNS">
        <Identity>063589998</Identity>
      </Credential>
    </From>
    <To>
      <Credential domain="DNS">
        <Identity>www.fredsfinerugs.com</Identity>
      </Credential>
      <Credential domain="DUNS">
        <Identity>063887745</Identity>
      </Credential>
    </To>
    <Sender>
      <Credential domain="DNS">
        <Identity>PrintORama.com</Identity>
        <SharedSecret>catsndogs</SharedSecret>
      </Credential>
      <UserAgent>PrintORama v.1.0</UserAgent>
    </Sender>
    <Request>
      <OrderStatusResponse AgentID="Dealer" AgentDisplayName="Dealer User"
RequestDate="2013-09-20T1030-0800"
BusinessID="1222" BusinessRefID="Conf_12345">
        <jdf:Notification JobID = "0901-1243" Type = "Milestone">
          <Milestone MilestoneType = "ShippingCompleted"/>
        </jdf:Notification>
        <jdf:Notification JobID = "0901-1266" Type = "Milestone">
          <Milestone MilestoneType = "ShippingCompleted"/>
        </jdf:Notification>
      </OrderStatusResponse>
    </Request>
  </Header>
</PrintTalk>
6.4.6 PrintTalk Version of OrderStatusResponse (3) for Print Buyer PB2

<?xml version="1.0" encoding="UTF-8"?>
<PrintTalk xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.printtalk.org/schema"
xmlns:jdf="http://www.CIP4.org/JDFSchema_1_1"
xsi:schemaLocation="http://www.printtalk.org/schema PrintTalk_1_1.xsd"
version="1.1"
payloadID="187655"
timestamp="2013-09-20T1030-0800">
  <Header>
    <From>
      <Credential domain="DNS">
        <Identity>Print Dealer</Identity>
      </Credential>
      <Credential domain="DUNS">
        <Identity>063589998</Identity>
      </Credential>
    </From>
    <To>
      <Credential domain="DNS">
        <Identity>www.texascabinet.com</Identity>
      </Credential>
      <Credential domain="DUNS">
        <Identity>05284945563</Identity>
      </Credential>
    </To>
    <Sender>
      <Credential domain="DNS">
        <Identity>PrintORama.com</Identity>
      </Credential>
      <SharedSecret>catsndogs</SharedSecret>
    </Sender>
  </Header>
  <Request>
    <OrderStatusResponse AgentID="Dealer" AgentDisplayName="Dealer User"
      RequestDate="2013-09-20T1030-0800"
      BusinessID="1223" BusinessRefID="Conf_6789">
      <jdf:Notification JobID = "0901-1266" Type = "Milestone">
        <Milestone MilestoneType = "ShippingCompleted"/>
      </jdf:Notification>
    </OrderStatusResponse>
  </Request>
</PrintTalk>
7 References

7.1 Normative References


