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***cXML Design
Specifications
Ver 2.0***

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1. Change Log

This log is updated each time this Process Document is updated. The log identifies the version number, the date the version was completed, the author of the changes, and a brief description of the changes.

Version	Date	Author	Description
1.0	04/09/10	Ariba, Inc.	Initial version of Document
2.0	04/11/10	Ariba/Ryder	Added invoice details for Canadian suppliers; additional extrinsic clarification; update to special handling and shipping req.; OC's and ASN's are preferred but not required.
4.0	04/27/10	Ryder	Updates to non-supported invoice types; add Ryder contact email
5.0	04/30/2010	Ariba/Ryder	Include sample cXML PO and invoice

2. Introduction

This document contains customer specifications and requirements for supplier cXML invoice file transactions. Purchase order relevant data is included as well. The information in this document is specific to your customer's internal requirements, not necessarily the Ariba standard cXML invoice specification. Your customer, for example, may specify that a particular field is required, even if that field is not required per the general cXML guidelines. Invoice documents that do not adhere to the following requirements are likely to be rejected by the Ariba Supplier Network (Ariba SN) or your customer's invoicing system. At a minimum suppliers identified by your customer will need to receive test Purchase Orders and submit back test invoices successfully to the customer's application for final processing.

This is a supplemental guide detailing your customer's specific PO and invoice requirements which MUST be used concurrently with Ariba's standard cXML DTD's (<http://cxml.org>) and other documentation (<http://supplier.ariba.com/help>).

2.1. Audience

This document is intended for suppliers who integrate with the Ariba Supplier Network via cXML for the transmission of purchase orders and invoices. Suppliers using the on-line invoice user interface from their Network accounts (PO Flip) do not need to reference this document.

2.2. Requirements Overview

Suppliers that would like to automate the process of sending invoices to a customer will need to do so using this specification in conjunction with the Ariba specific guides noted below. The purpose of this document is to describe cXML specification from a technical point of view and provide a functional description of how this specification can be used. This section of the document will describe the functional requirements and some of the rules associated with the creating a cXML invoice.

The following section provides details regarding the types of cXML invoices that your customer supports, the required format for specific invoice scenarios, and the required content needed to process and pay a cXML invoice successfully. Addressed as well are Purchase Order specific details. **Ryder prefers all suppliers provide the Confirmation Request and Ship Notice transactions. If supported they must be sent via Ariba SN. Delivery Date is required. Attachments are supported with either the Confirmation Request or the Ship Notice.**

To download the complete cXML standard, please visit: <http://www.cxml.org>. Additional details regarding cXML invoice, confirmation request and ship notice transactions are available via your supplier account on the Ariba Supplier Network. To access, log on to your Ariba SN account at:

<https://supplier.ariba.com> and navigate to the Help link located in the upper right hand corner of the Home page. Scroll down to the relevant documentation including:

- cXML Release Notes: this will take you to the url: <http://cxml.org>. Click on the Downloads link from the menu on the left of the page. Under Complete Downloads, click on [InvoiceDetail.zip](#) for the InvoiceDetailRequest.dtd.
- <http://cxml.org> Download cXML 1.2.021 for the OrderRequest
- <http://cxml.org> Download Fullfill.dtd for ConfirmationRequest and ShipNoticeRequest
- <http://cxml.org> cXML 1.2.021 User's Guide
- <https://supplier.ariba.com> Help link: Ariba cXML Solutions Guide

2.3. Support

Depending on your transaction volume you will be required to subscribe to Ariba Premier Membership. Premier Membership gives your organization access to many premium features and services that are exclusively available to only Premier Members.

For more information about Ariba's Supplier Membership program, access the supplier membership website at: www.ariba.com/suppliermembership.

Optionally, for ongoing electronic document support, you may want to subscribe to Supplier Technical Support (Ariba STS). To find out if you have Supplier Technical Support (STS) and for details on Premier Membership, log on to <https://supplier.ariba.com>, click **Manage Services** on the Property Navigator toolbar on the upper right of the page to view your account status with regards to program subscription.

For program FAQ, Fact Sheet, and sign-up instructions, please go to <http://www.ariba.com/suppliersupport>.

Until subscribed to one of Ariba's support programs, limited assistance regarding account registration, access and configuration is available from Ariba:

By Telephone: 1-800-577-1522

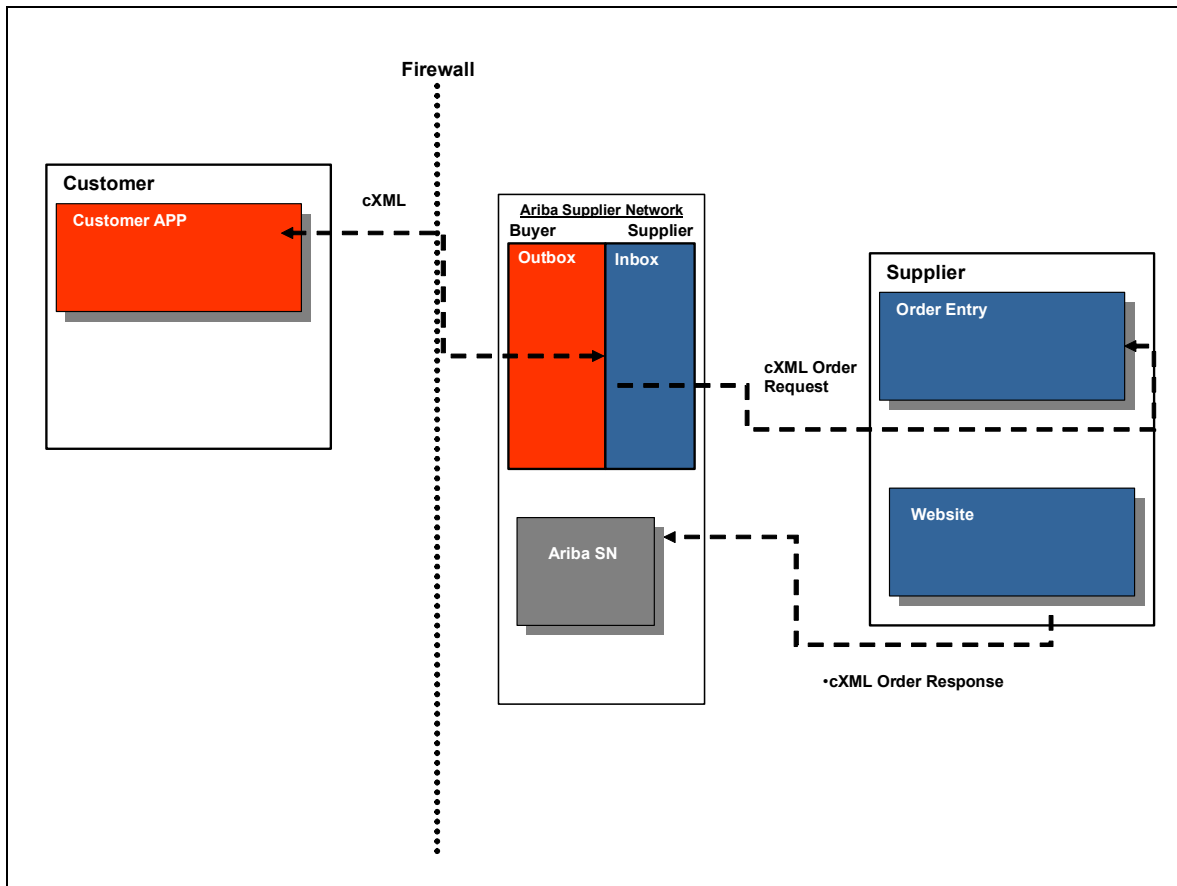
By Web form:

If you can log into your Ariba SN Account	If you cannot log into your account
<ul style="list-style-type: none"> ▪ Go to http://supplier.ariba.com ▪ Log in with your company's username and password ▪ Once logged in, click on the 'Help' link located on the upper right hand side of the page and choose <i>Contact Support</i>. ▪ Completely fill out the web form and submit 	<ul style="list-style-type: none"> ▪ Go to http://supplier.ariba.com ▪ Click on the "Account Problems?" link in the middle of the page (for password issues, select the "Forgot Your Password?" link) ▪ Completely fill out the web form and submit

In addition, all supplier accounts have access to self-help tools and comprehensive documentation resources available by clicking the HELP button from supplier accounts.

3. Architecture, Configuration and Data Validation

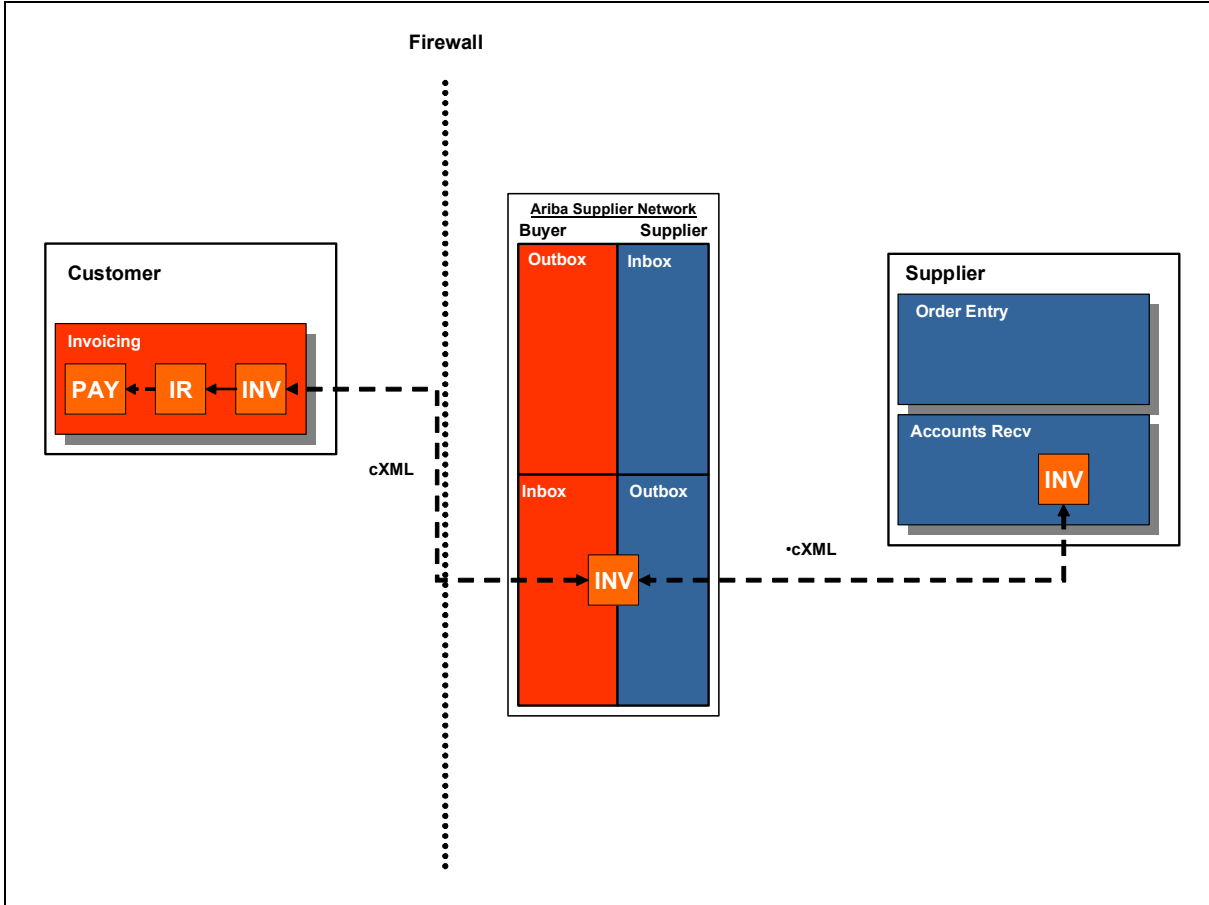
3.1. Architecture: OrderRequest



The above diagram depicts the different systems working together to automate this purchase order process. A step-by-step description is as follows:

- Ryder user creates order
- cXML OrderRequest is transmitted from Ryder to Ariba SN.
- Ariba SN stores a copy of the OrderRequest in the buyers Outbox and the suppliers Inbox.
- cXML Order sent to suppliers' network commerce hub via URL specified on Ariba SN.
- PO sent to supplier's internal order management system and fulfilled.
- Supplier website returns Order Response document to Ariba SN, which tells the buyer that supplier successfully received and parsed the purchase order.

3.2. Architecture: InvoiceDetailRequest



The above diagram depicts the different systems working together to automate this invoice process. A step by step description is as follows:

- Supplier Generates a cXML invoice from internal system. This will usually be the supplier's accounts receivable system.
- Supplier transmits the cXML to the Ariba Supplier Network by performing an https post to a specific URL. Ariba SN has a different set of URLs for shared-secret-authenticated and certificate-authenticated cXML documents as shown below:

Authentication Method	Ariba SN URL
shared secret	https://service.ariba.com/service/transaction/cxml.asp
certificate	https://certservice.ariba.com/service/transaction/cxml.asp

The certificate URL works for both certificate- and shared-secret-based authentication.

For additional details on posting invoices, please see the *cXML User's Guide* (chapters 1 and 2) available from your account by clicking the HELP button or from www.cxml.org.

- When the document is received at the Ariba SN, certain syntactic checks are made to ensure the invoice is properly formatted before it is sent to Ryder. If the invoice does not pass all the checks it will fail and the supplier will receive a Failed Invoice message. If everything is correct at the Network level, the invoice is forwarded to Ryder.

- Once Ryder receives the invoice there are a number of checks performed to ensure the data is correct and it is then sent for approval to the contact in the invoice. The checks on the data may result in an invoice rejection and a Rejected Invoice message will be sent to the supplier. The reasons an invoice may be rejected are outlined later in this document.
- Once the invoice is approved it is then sent to Ryder Accounts Payable for payment.

3.3. Ariba SN Configuration

To post cXML invoices to the Ariba SN, you must configure your production and test accounts appropriately. Please follow the steps below to enable your account(s) appropriately.

1. Login to your production account on the Network
2. From the Home page, click the **Administration** tab
3. From the **Administration** page, click the **Configuration** link
4. Under **Electronic Order Routing**, click the check box and then click on the **Configure** link. If you have already configured your account, this link will read **Configured** with the date that the configuration was completed. You can always update your configuration by clicking on the **Edit Configuration** link
5. Click on the **Configure cXML setup** link at the top of the page.
6. Select your preferred authentication method: Certificate or Shared Secret. This document addresses Shared Secret authentication.
7. Enter an appropriate Shared Secret and make a note of the shared secret you have entered. The shared secret acts like a password for when you will be submitting invoices to the Ariba SN and must be populated as part of the Sender credential at the header of your invoice transaction.
8. Click OK.
9. Click Save.
10. Click on **Electronic Invoice Routing** and then click the **Configuration Required** link. If you have already configured your account, this link will read Configured with the date that configuration was completed. You can always update your configuration by clicking on the **Edit Configuration** link.
11. Select cXML from the drop down menu under the **Sending Method** section of the page.
12. Enter the required email address field and click the checkbox if you want to receive notification when an invoice fails or is undeliverable.
13. Click the Save button at either the top or bottom of the page.
14. Click Done
15. Click the **Switch to Test Account** link on the upper right hand side of the screen from the Home page.
16. **Follow the same steps above (1-12) to configure your test account accordingly.**

NOTE: Ariba SN configuration supports the capability to route order types using different methods. Suppliers, for example, can route new orders via cXML, change orders via fax and orders with attachments via email to accommodate internal transaction processing.

Order Response Account Configuration

In order to send order confirmation and ship notice information via cXML, it is required that you set the response document configuration to cXML as well as order and invoice. To configure for response documents:

- Login to your production account on the Network
- From the Home page, click the **Administration** tab
- From the **Administration** page, click the **Configuration** link
- Under **Electronic Order Routing**, click the check box and then click on the **Configure** link. If you have already configured your account, this link will read **Configured** with the date that the configuration was completed. You can always update your configuration by clicking on the **Edit Configuration** link.
- Next to the Order Response Document Type, select cXML from the routing method drop down list
- Save your changes

- **Make sure you complete this same configuration in your test and production accounts.**

4. Purchase Order Specifics

Review this section if you are implementing the cXML OrderRequest for order receipt.

4.1. Supported Order Types

Ryder will support the following order types:

- New orders
- Change / cancel orders
- Non-catalog items
- Orders with attachments
- Blanket purchase orders
- Service purchase orders

4.2. Purchase Order Extrinsic

Purchase orders to legal entities will contain a (Legal Matters) extrinsic at the item level. This data applies to law firms only and must be returned on the invoice against PO and any invoices against contract. For additional details please contact Ryder directly at:

supplier_enablement@ryder.com.

Line Level

4.3. Purchase Order Terms and Conditions

The PO will contain a <URL> noting the web address where Ryder terms and conditions may be viewed and downloaded.

4.4. Purchase Order Comments

Ryder POs may include comments. This message will be captured at the header of the OrderRequest as follows:

```
<OrderRequest>
<OrderRequestHeader>
<Comments>
PO changed 3/20/2010
</Comments>
```

4.5. Purchase Order Attachments

All orders may have an attachment, a PDF file – which would contain information related to the PO. No other attachments will be sent. This can be sent as part of the cXML message or left online for later viewing.

4.6. Purchase Order Settings

Review Ryder's Order Routing Rules from the Customer Relationships page of your account for information regarding change orders and cancel orders with orders that have a shipped status. Customer Order Routing Configuration Rules (and invoice rules) are visible from the Customer Relationships page by clicking on Customer's name in your Current Customer list.

Below are Ryder current PO settings:

Do not allow change orders for fully shipped orders
 Allow change orders for partially shipped orders
 Allow change orders for invoice aggregation (one invoice for multiple purchase orders)
 Do not allow cancel orders for fully shipped orders
 Do not allow cancel orders for partially shipped orders

4.7. Notes / General Guidelines: Buyer ANIDs

- Refer to “cXML_1.2.21.pdf” for detailed information on the cXML InvoiceDetail specification. This document can also be obtained at the following site: <http://www.cxml.org>.
- Additional test and development tools are available at the following site: <https://alive.ariba.com/supplier/>. You will need to register to access the information available.
- cXML documents cannot have the ampersand character “&” unless it is properly escaped using the syntax: &
- **Ariba SN test accounts are identified by appending “-T” to the production number. For example, the Network production account “AN01000816813” test account would be “AN01000816813 -T”.**

4.8. Header Element

The Header Element contains the cXML addressing and authentication information. The Header child elements are the From, To, and Sender. All elements below are mandatory. Please reference the cXML User’s Guide for element definition.

4.9. From Element (Inbound from Supplier)

The Header.From element identifies the supplier who is the creator of the Invoice. The “From” element contains the Credential which identifies the supplier. An example is below:

```
<From>
  <Credential domain="NetworkID">
    <Identity>AN01000111111-T</Identity> ← Supplier test account ANID
  </Credential>
</From>
```

4.10. To Element (Inbound from Supplier)

The Header.To element identifies the recipient of the Invoice, ie. Ryder. The Credential element contains Ryder Ariba SN information. This can be hard-coded to use Ryder’s NetworkID number. An example is below:

```
<To>
  <Credential domain="NetworkID">
    <Identity> AN01000816813-T</Identity> ← Ryder Test Account ANID
  </Credential>
</To>
```

NOTE: For testing purposes you will have a relationship created with Ryder’s Test account using the ANID noted above. Production data will be sent and received by Ryder’s production ANID: AN01000816813. Test data will be sent and received by Ryder’s test ANID: AN01000816813-T.

4.11. Sender Element (Inbound from Supplier)

The Header.Sender element information is used by the Ariba SN to authenticate the From sender. An example is below:

```
<Sender>
  <Credential domain="NetworkID">
    <Identity>AN01000111111-T </Identity>
  <SharedSecret>*****</SharedSecret> ← supplier shared secret configured in supplier acct. on ASN
  </Credential>
  <UserAgent>Ariba Network V1.1</UserAgent>
</Sender>
```

5. Invoice Specifics

5.1. Ariba SN Invoice Validation

The Ariba SN will reject invoices under the following conditions:

- Invoice files that do not meet the defined cXML specification or are missing required cXML data elements
- Invoices greater than the Network supported file size of 4 MB or containing greater than 3,000 line items
- Invoices that fail to validate against the Document Type Definition (DTD)

In addition to the above network validation rules, Ryder has configured their **buyer account** on the Ariba SN to **Reject** invoices under the following criteria, which will cause the invoice Status to go to **Failed** state:

- Invoices against PO's not received via Ariba SN
- Invoices with a change in currency for unit price from what was on the PO
- Invoices with a change in unit price from what was on the PO
- Invoices with a change in unit of measure from what was on the PO
- Invoices with an increase in quantity from what was on the PO
- Invoices with an increase in line item subtotal from what was on the PO
- Invoices with additional line items that were not on the PO
- Invoices with a **change** in payment discount terms from what was on the PO
- Invoices where the Sold To name and country do not match the PO Bill To name and country
- Invoice missing line item description
- Invoices backdated greater than 1 day
- Invoices with summary level shipping tax
- Invoices missing tax information
- Invoice missing bill-to address
- Invoice missing sold-to address
- Invoice missing from address
- Invoice missing remit-to address
- Invoice missing remit-to ID
- Invoice missing ship from or ship to address
- Invoices with a change in Ship To from what was on the PO
- Invoices with a change in Bill To Info from what was on the PO

Blanket PO Rules

In addition to the above network validation rules, Ryder has configured their **buyer account** on the Ariba SN to **Reject** invoices against blanket purchase orders under the following criteria, which will cause the invoice Status to go to **Failed** state:

- Invoices with a change in currency for unit price
- Invoices with a change in unit of measure
- Invoices with an increase in item quantity
- Invoices with an increase in line item subtotal
- Invoices missing line item description
- Invoices with a change in line item description

Additional Validation Rules

- Allow case sensitive invoice matching has been enabled. The addressing on the invoice for required roles is **not** required to syntactically match the address received on the PO
- Enforce strict address validation for required address fields has been enabled. Complete addressing must be provided for required address roles.

Example:

<InvoicePartner>

```

<Contact role="billTo">
  <Name xml:lang="en">Ariba Headquarters</Name>
  <PostalAddress>
    <Street>1314 Chesapeake Terrace</Street>
    <City>Sunnyvale</City>
    <State>CA</State>
    <PostalCode>94089</PostalCode>
    <Country isoCountryCode="US"></Country>
  </PostalAddress>
</Contact>
</InvoicePartner>

```

In addition to the above, Ryder will only allow the reuse of invoice numbers in the case that the original invoice **Failed invoice validation at the Network**.

Ryder allows for omission of payment terms though if sent must match the PO.

5.2. Ryder Specific Validation

Ryder invoices defined:

- Invoice against an existing purchase order (referenced by this document as a **PO Invoice**)
- Invoice against order or contract not received via Ariba SN (referenced by this document as a **Non-PO Invoice**)
- Invoice against contract or master agreement (collaborative invoice). A contract number is required for Non-PO invoices against contract

Ryder supported invoice types:

- **Individual Detail Invoice** – applies against a single purchase order referencing line items; line items may be material items or service items
- **Partial Invoice** – applies against specific line items from a single purchase order; line items may be material items or service items
- **Invoice Against Services**
- **Credit** - item level credit supported by sending standard invoice with negative quantity and positive dollar amount at each line item to which credit applies
- **Invoice against Blanket Purchase Order (BPO) / Contract**
- **lineLevelCreditMemo** – item level credit supported by sending the <InvoiceDetailRequestHeader> attribute “purpose” equal to “lineLevelCreditMemo”. Ariba SN will default all amounts and quantities to negative on suppliers behalf. **(cXML 1.2.018 and higher)**
- **Credit Memo** – Supplier must provide a reason <comment> for each credit memo submitted to Ryder
- **Debit Memo** - Supplier must provide a reason <comment> regarding correction for debit memo submitted to Ryder

Non-supported invoice types:

- **Paper Invoice** – Ryder requests that invoices be submitted electronically through Ariba SN for all enabled suppliers doing business at enabled sites.
- **Invoices for Purchasing Cards (P-Cards)**
- **Information Only Invoices (isInformationOnly)**
- **Duplicate Invoices** – Invoice numbers may not be reused unless the original invoice failed validation
- **Header Invoice**– a single invoice applying to multiple purchase orders, also called consolidated invoices
- **Non-PO** - invoice against orders not received via Ariba SN
- **Cancel** – Ryder does support the Network capability to cancel invoices.

5.2.1. Unit of Measure

Ariba applications and transactions support the UNUOM (United Nations Unit of Measure) standard. Suppliers must be compliant with UNUOM in transaction receipt and posting subsequent transactions to Ariba SN.

5.2.2. Tax Requirements (update as appropriate)

- Tax is required and supported at the item level only
- Tax can be passed as a dollar amount or as a percentage. Tax percentage must be passed as percentage values, not as fractional amount values. For example, a 9% tax rate should be represented as **9.0**, not 0.09.
- Tax information (detail) is required on all invoices
- If tax does not apply to the invoice, a summary tax amount of zero is required.

5.2.3. Remit To Address Information

- Ryder will provide the Remit-To IDs and addresses to suppliers as part of the onboarding process. Invoices will be rejected that have incorrect Remit-To IDs.
- Remit-To configuration may be viewed in the Settlement configuration section of your supplier account on Ariba SN.
- Remit-To ID is required on the invoice. Contact Ryder directly for your Remit-To ID if it is not present on your supplier account, or if you have any questions regarding your Remit-To ID.
- Suppliers should notify Ryder of any changes to their Remit-To address information.

5.2.4. Shipping & Special Handling Charges

Shipping Address

- Ship-to and Ship-from address information is required on all invoices.
- Shipping address information is supported at the header level only.
- Shipping and Special Handling charges if applicable may be sent on the invoice as separate line items. cXML suppliers must leverage InvoiceDetailServiceItem for this purpose. Sample mapping included in appendix B.

Ryder will not provide a ship to code at the header level on the cXML OrderRequest. Complete shipping and sold to addressing details will be on every purchase order.

Shipping Amount

- Ryder must have agreed to absorb additional shipping charges with each supplier. If this agreement exists, shipping charges may be passed at the summary or item level.

Special Handling

- Ryder must have agreed to absorb additional special handling with each supplier. If this agreement exists, special handling charges may be passed at the summary or item level.

5.3. Invoice Extrinsic

Purchase orders to legal entities will contain a (Legal Matters) extrinsic at the item level. ***This data applies to law firms only and must be returned on the invoice against PO and any invoices against contract.*** For additional details please contact Ryder directly at:

supplier_enablement@ryder.com.

Line Level

5.4. Ariba SN Invoice Status Updates

Whenever an invoice is rejected, Ryder's ERP will check to see if that invoice originated from Ariba SN.

- If the invoice did originate from Ariba SN, Ryder's ERP sends a status update back to Ariba SN.

Ryder can send the following standard status updates to suppliers:

- **Processing (cXML status = 'Sent')** – Invoice has been sent to the customer.
- **Reconciled – (cXML Status = 'Approved')** – The invoice reconciled. The amounts in the invoice have not been paid.
- **Rejected** – The invoice failed to reconcile. Ryder is rejecting the invoice. The Comments element should contain text explaining why the invoice was rejected, and the actions the supplier should take. Suppliers can view comments explaining why the invoice was rejected by accessing the invoice from their Ariba SN outbox and clicking on the History tab. Suppliers can also configure their account to receive invoice status notifications via email on the *Configuration -->Email Notifications* page of their account. Suppliers can resubmit a corrected invoice. The same invoice number can be used for invoices that have a Rejected or Failed status.
- **Paying** Invoice has been approved for payment or has been partially paid.
- **Paid** – The invoice has been paid by Ryder.

5.5. Canada Specific Invoice Validation Requirements

In addition to the above invoicing requirements, Ryder has configured their **buyer account** on the Ariba SN to **Reject** invoices from Canadian suppliers under the following criteria, which will cause the invoice Status to go to **Failed** state:

Canadian suppliers only:

- Supplier VAT ID is required on all invoices
- VAT details are required at the item level
- Tax amounts must be sent in local currency
- Explanation (Comment) is required for zero rate VAT
- Detailed tax information is required in tax summary:
 - Tax Category
 - Tax Location
 - Tax Description
 - Taxable Amount
 - Tax Rate
 - Tax Amount

Note: you may view the invoicing rules Ryder has set up for you as a supplier at the Network level by performing the following steps:

1. Login to your supplier account on the Ariba SN.
2. Click on the **Administration tab at the top of the page** then click **Customer Relationships** from the navigational bar just below.
3. Click on **Ryder** under your list of **Current** trading partners
4. Scroll down to the Invoice setup section.

You are only able to view invoice rules for customers which have enabled you as an invoicing supplier on Ariba SN.

5.6. Invoice Detail Request Element

The InvoiceDetailRequest element represents the cXML Invoice. The InvoiceDetailRequest child elements group the Invoice data by header, line items and summary information. The child elements are as follows:

- InvoiceDetailRequestHeader – this element contains all the Invoice header information and the line item details
- InvoiceDetailOrder – contains the line items and associated purchase order (if applicable)

- InvoiceDetailSummary – summary invoice information such as tax, discounts, and total.

6. cXML Mapping

The following attributes and elements are either required or specifically not supported by Ryder.

Ryder related data elements impacted per requirements described above are noted. The mapping below is not representative of all cXML InvoiceRequest.DTD requirements for compliant transactions. Suppliers must use the standard Ariba cXML guidelines and DTD's for successful implementation.

6.1.1. InvoiceDetailRequestHeader

This is the actual header of the Invoice and contains the following fields.

Attribute	Description	Notes
Purpose	Purpose of the invoice.	Required "standard", "lineLevelCreditMemo", "creditMemo", "debitMemo"
operation	Determines type of invoice	Required "new", "delete"

6.1.2. InvoicePartner

InvoicePartner defines a party involved in invoicing. **The Bill To, From, Remit To and Sold To roles are required.** Bill To and Ship To must match what was received on the PO.

Attribute	Description	Notes
Contact role="soldTo"		Required
Name	Sold-To Company Name. (Customer site or plant). Free- form name.	Required
PostalAddress <Street> <City> <State> <PostalCode> <Country isoCountryCode>		Required
Contact role="billTo"		Required
addressID	Bill To addressID	Required
Name	Bill-To Company Name. Free- form name	Required
PostalAddress <Street> <City>		Required

<State> <PostalCode> <Country isoCountryCode>		
Contact role="from"		Optional
Name	From Company Name. (supplier company name). Free- form name.	Optional
PostalAddress <Street> <City> <State> <PostalCode> <Country isoCountryCode>		Optional
Contact role="remitTo"		Required
addressID	Remit To address ID <input type="checkbox"/> (Both are the same as the Vendor I.D #)	Required Please contact Ryder with questions regarding this information.
Name	Supplier Remit To Company Name. Free-form name	Required
PostalAddress <Street> <City> <State> <PostalCode> <Country isoCountryCode>		Required

6.1.3. InvoiceDetailShipping

InvoiceDetailShipping contains shipping related details of the order: ShipTo and ShipFrom are required. Ship To must match what was received on the PO.

Attribute	Description	Notes
Contact role="shipTo"		Required
Name	Ship-To Company Name (Customer site or plant). Free- form name.	Required
PostalAddress <Street> <City> <State> <PostalCode> <Country isoCountryCode>		Required

Contact role="shipFrom"		Required
Name	Ship-From Company Name. Free-form name.	Required
PostalAddress <Street> <City> <State> <PostalCode> <Country isoCountryCode>		Required

6.1.4. InvoiceDetailLineIndicator

Indicates the presence of invoicing details at the line item level. By default, all indicators are set to false, assuming that these details are included at the header level. Customer strongly recommends suppliers provide tax at the item level.

Attribute	Description	Notes
IsTaxInLine	Indicates if Tax is provided at invoice line level.	Required Customer will accept tax at item level only. Set the value to "yes".

6.2. InvoiceDetailOrder

Indicates the beginning of line items section of the invoice. InvoiceDetailOrder is a parent to the following child elements:

- InvoiceDetailOrderInfo
- InvoiceDetailItem

6.2.1. InvoiceDetailOrderInfo

Defines information related to the corresponding order, including order reference. This information is used to match the invoice with the corresponding purchase order.

6.3. Referencing the PO number on the invoice

PO-based requirements

- **A valid customer purchase order number is required for all Ariba PO-based invoices.** Note: PO's received prior to e-enablement, should not be invoiced through Ariba Supplier Network and should be invoiced using your current method with Customer.
- For a PO based Invoice, the **OrderReference element orderID attribute** should be used to store this information.
- **The orderID is the purchase order number.**
- **The invoiceID is the suppliers unique invoice number on the inbound invoice transaction**

PO Matching

Ariba SN performs document matching immediately after cXML validation to find pre-existing purchase orders..

- If invoices use **payload ID in the DocumentReference element**, but that value does not match purchase orders on Ariba SN, Ariba SN considers the purchase orders to be external.

Example: <OrderReference orderID="PO4000118">


```

<DocumentReference
payloadID="1165611125703.425570795.000000219@RyKVBLhncvPz3rDQcL4pMmG+3
Zs="/> ← the header payloadID of the PO
</OrderReference>

```

- If invoices use only **orderID** and **orderDate**, Ariba SN attempts to match based on the purchase order number and optional order date.

Example:

```

orderID and orderDate are mapped at the header as follows:
<InvoiceDetailOrder>
<InvoiceDetailOrderInfo>
....
<<OrderIDInfo orderID="PO4000118" orderDate="2007-01-01T00:00:00-12:00"/>
</InvoiceDetailOrderInfo>

```

- If invoices use only **orderID** and **orderDate**, and those values match multiple purchase orders, Ariba SN rejects the invoices.
- If invoices use both **payload ID** and **orderID**, Ariba SN makes sure these values match the same purchase orders. If they do not match, Ariba SN considers the purchase orders to be external, even if payloadID matches a purchase order.
- If invoices match an obsolete purchase order, Ariba SN rejects the invoices.

Successful Matches

If Ariba SN successfully matches invoices with purchase orders, it creates online hyperlinks to them available to both trading partners.

Ariba SN then tests invoice contents against the buying organization’s business validation rules.

6.3.1. InvoiceDetailItemReference

Line item level Subtotal Amount and Tax (child of InvoiceDetailItem):

Element	Description	Notes
SubtotalAmount		Required
Money	Monetary Amount	Required
Tax	Opens tax details	Required
Money	Monetary Amount	Required when Ship To and Ship From roles are present at item level even if the shipping amount is equal to zero dollars.
Description		Required with language qualifier: <Description xml:lang="en">
TaxDetail	Specify tax type	Required
category		Required
TaxRate	Specify percentage rate	Required
TaxableAmount	The amount that is taxable.	Required
TaxAmount	Monetary Amount	Required
Money	Monetary Amount	Required
Description		Required with language qualifier: <Description xml:lang="en">
GrossAmount		Optional
NetAmount		Optional

Appendix A – Sample cXML PO

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE cXML SYSTEM "http://xml.cxml.org/schemas/cXML/1.2.020/cXML.dtd">
<cXML
payloadID="1272549644772.1050674118.000000197@2Vmg9c/TnwT1ZqGdAuiHQvbDmNc="
timestamp="2010-04-29T07:00:44-07:00" version="1.2.020" xml:lang="en-US"> <Header>
<From>
<Credential
    domain="NetworkId">
<Identity>AN01000816813-T</Identity>
</Credential>

</From>
<To>
<Credential
    domain="NetworkId">
<Identity>AN01003876123-T</Identity>
</Credential>
</To>
<Sender>
<Credential domain="AribaNetworkUserId">
<Identity>sysadmin@ariba.com</Identity>

</Credential>
<UserAgent>Buyer 10s1</UserAgent>
</Sender>

</Header>
<Request deploymentMode="test"><OrderRequest><OrderRequestHeader orderDate="2010-
04-29T07:00:43-07:00" orderID="PO86"
    orderType="regular" orderVersion="1" type="new">

<Total>
<Money
    alternateAmount="" alternateCurrency=""
    currency="USD">257.5</Money>
</Total>
<ShipTo>

<Address
    addressID="US001" isoCountryCode="US">
<Name
    xml:lang="en">Miami HQ</Name>

<PostalAddress
    name="default">
<DeliverTo>Vijayan Chacko 3rd flr cube</DeliverTo>
<DeliverTo>Miami HQ</DeliverTo>
<Street>11690 NW 105 STREET</Street>
<City>MIAMI</City>
<State>FL</State>
<PostalCode>33178-1103</PostalCode>
<Country
    isoCountryCode="US">United States</Country>
</PostalAddress>

<Email
    name="default"
    preferredLang="en-US">noreply@ryder.com</Email>
</Address>
```

```

</ShipTo>
<BillTo>

<Address
  addressID="US001" isoCountryCode="US">
<Name
  xml:lang="en"> Ryder Transportation Services ATTN: P2P Invoice</Name>

<PostalAddress
  name="default">
<Street> P.O. Box 3990</Street>
<City> Alpharetta</City>
<State>GA</State>
<PostalCode> 30023-3990</PostalCode>
<Country
  isoCountryCode="US">United States</Country>
</PostalAddress>

</Address>
</BillTo>

<PaymentTerm
  payInNumberOfDays="30">
</PaymentTerm>

<Comments>
Comment Type: Terms and Conditions
Body: This order is expressly subject to seller's acceptance of Ryder's Standard Terms and
Conditions of Purchase and Supplier Code of Conduct located at
http://www.ryder.com/suppliers\_home.shtml. Seller's performance will be deemed
acceptance of these terms and conditions. Any additional or different terms in forms provided
by seller will be deemed objected to and no effect.
</Comments>

<Extrinsic name="PUName">US</Extrinsic>

</OrderRequestHeader>
<ItemOut quantity="5" lineNumber="1">
<ItemID>
<SupplierPartID>705981</SupplierPartID></ItemID>
<ItemDetail>
<UnitPrice>
<Money alternateCurrency="" alternateAmount="" currency="USD">0.5</Money>

</UnitPrice>
<Description xml:lang="en">Safco(R) Vista Drawing Table Top, 48in.W x 36in.D,
White</Description>
<UnitOfMeasure>EA</UnitOfMeasure>
<Classification domain="UNSPSC">56101707</Classification>
<ManufacturerPartID>SAF3951</ManufacturerPartID>
<ManufacturerName>Safco</ManufacturerName>
<URL
name="__lr2bb">https://b2b.officedepot.com/invoke/pub.catalog/getSKUInfo?sku=705981</
URL>
<LeadTime>3</LeadTime>
<Extrinsic name="Requester">Vijayan Chacko</Extrinsic>
<Extrinsic name="PR No.">PR261</Extrinsic>
<Extrinsic name="Final Destination"></Extrinsic>
</ItemDetail>
<Distribution>
<Accounting name="DistributionCharge">

```

```

<Segment description="ID" id="059" type="Company"></Segment>
<Segment description="ID" id="090" type="Product Line"></Segment>
<Segment description="Percentage" id="100" type="Percentage"></Segment>
<Segment description="ID" id="03152" type="Location Code"></Segment>
<Segment description="UniqueName" id="US" type="Purchasing Unit"></Segment>
<Segment description="ID" id="07" type="Function Code"></Segment>
<Segment description="ID" id="78600" type="Account"></Segment>
</Accounting>
<Charge>
<Money alternateCurrency="" alternateAmount="" currency="USD">2.50</Money>

</Charge>
</Distribution>

</ItemOut>
<ItemOut quantity="1" lineNumber="2">
<ItemID>
<SupplierPartID>903039</SupplierPartID></ItemID>
<ItemDetail>
<UnitPrice>
<Money alternateCurrency="" alternateAmount="" currency="USD">222</Money>

</UnitPrice>
<Description xml:lang="en">Office Depot(R) Brand Premier Round Folding Table, 60in.
Diameter, Walnut/Beige</Description>
<UnitOfMeasure>EA</UnitOfMeasure>
<Classification domain="UNSPSC">56111802</Classification>
<ManufacturerPartID>CF60PX-01</ManufacturerPartID>
<ManufacturerName>Correll</ManufacturerName>
<URL
name=" __lr2bb">https://b2b.supplier.com/invoke/pub.catalog/getSKUInfo?sku=903039</UR
L>
<LeadTime>1</LeadTime>
<Extrinsic name="Requester">Vijayan Chacko</Extrinsic>
<Extrinsic name="PR No.">PR261</Extrinsic>
<Extrinsic name="Final Destination"></Extrinsic>
</ItemDetail>
<Distribution>
<Accounting name="DistributionCharge">

<Segment description="ID" id="059" type="Company"></Segment>
<Segment description="ID" id="090" type="Product Line"></Segment>
<Segment description="Percentage" id="100" type="Percentage"></Segment>
<Segment description="ID" id="03152" type="Location Code"></Segment>
<Segment description="UniqueName" id="US" type="Purchasing Unit"></Segment>
<Segment description="ID" id="07" type="Function Code"></Segment>
<Segment description="ID" id="78600" type="Account"></Segment>
</Accounting>
<Charge>
<Money alternateCurrency="" alternateAmount="" currency="USD">222.00</Money>

</Charge>
</Distribution>

</ItemOut>
<ItemOut quantity="3" lineNumber="3">
<ItemID>
<SupplierPartID>982829</SupplierPartID></ItemID>
<ItemDetail>
<UnitPrice>
<Money alternateCurrency="" alternateAmount="" currency="USD">11</Money>

```

```

</UnitPrice>
<Description xml:lang="en">LAB WIRED PS2/USB OPT SIL/BLK MOUSE</Description>
<UnitOfMeasure>EA</UnitOfMeasure>
<Classification domain="UNSPSC">43211708</Classification>
<ManufacturerPartID>931734-0403</ManufacturerPartID>
<ManufacturerName>Labtec Enterprises</ManufacturerName>
<URL name="__lr2bb">http://www.cdw.com/r.asp?n=22616&cdwedc=982829</URL>
<LeadTime>4</LeadTime>
<Extrinsic name="Requester">Vijayan Chacko</Extrinsic>
<Extrinsic name="PR No.">PR261</Extrinsic>
<Extrinsic name="Final Destination"></Extrinsic>
</ItemDetail>
<Distribution>
<Accounting name="DistributionCharge">

<Segment description="ID" id="059" type="Company"></Segment>
<Segment description="ID" id="090" type="Product Line"></Segment>
<Segment description="Percentage" id="100" type="Percentage"></Segment>
<Segment description="ID" id="03152" type="Location Code"></Segment>
<Segment description="UniqueName" id="US" type="Purchasing Unit"></Segment>
<Segment description="ID" id="10" type="Function Code"></Segment>
<Segment description="ID" id="74200" type="Account"></Segment>
</Accounting>
<Charge>
<Money alternateCurrency="" alternateAmount="" currency="USD">33.00</Money>
</Charge>
</Distribution>

</ItemOut>

</OrderRequest>
</Request>

</cXML>

```

Appendix B – Sample cXML Invoice

(NOTE: Accounting data in the <Distribution> element from the PO does not need to be returned on the invoice)

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE cXML SYSTEM "http://xml.cxml.org/schemas/cXML/1.2.021/InvoiceDetail.dtd">
<cXML payloadID="1272551722141-953756822946840837@216.109.111.62"
timestamp="2010-04-29T07:35:22-07:00"><Header>
  <From>
    <Credential
      domain="NetworkID">
    <Identity>AN01003876123-T</Identity>

  </Credential>

  </From>
  <To>
    <Credential
      domain="NetworkID">
    <Identity>AN01000816813-T</Identity>

  </Credential>

  </To>
  <Sender>
    <Credential domain="NetworkID">
    <Identity>AN01003876123-T</Identity>

  <SharedSecret>abc1xyz</SharedSecret>

  </Credential>

  <UserAgent>Supplier</UserAgent>
</Sender>

</Header>
<Request deploymentMode="test">
<InvoiceDetailRequest>
<InvoiceDetailRequestHeader invoiceDate="2010-04-29T10:35:22-04:00"
invoiceID="SampleInvoiceFormat" operation="new" purpose="standard">
<InvoiceDetailHeaderIndicator>
</InvoiceDetailHeaderIndicator>
<InvoiceDetailLineIndicator isAccountingInLine="yes" isTaxInLine="yes">
</InvoiceDetailLineIndicator>
<InvoicePartner>
<Contact role="remitTo">
<Name xml:lang="en-US">Ryder System, Inc. - TEST</Name>
<PostalAddress>
<Street>3600 NW 82nd Ave</Street>
<City>Miami</City>
<State>FL</State>
<PostalCode>33166</PostalCode>
<Country isoCountryCode="US">United States</Country>
</PostalAddress>
</Contact>
</InvoicePartner>
```

```
<InvoicePartner>
<Contact role="billTo">
<Name xml:lang="en-US"> Ryder Transportation Services ATTN: P2P Invoice</Name>
<PostalAddress>
<Street> P.O. Box 3990</Street>
<City> Alpharetta</City>
<State>GA</State>
<PostalCode> 30023-3990</PostalCode>
<Country isoCountryCode="US">United States</Country>
</Contact>
</InvoicePartner>
```

```
<InvoicePartner>
<Contact role="from">
<Name xml:lang="en-US">Supplier System, Inc. - TEST</Name>
<PostalAddress>
<Street>3600 NW 82nd Ave</Street>
<City>Miami</City>
<State>FL</State>
<PostalCode>33166</PostalCode>
<Country isoCountryCode="US">United States</Country>
</PostalAddress>
</Contact>
</InvoicePartner>
```

```
<InvoicePartner>
<Contact addressID="US001" role="soldTo">
<Name xml:lang="en-US">Miami HQ</Name>
<PostalAddress><Street>11690 NW 105 STREET</Street>
<City>MIAMI</City>
<State>FL</State>
<PostalCode>33178-1103</PostalCode>
<Country isoCountryCode="US">United States</Country>
</PostalAddress></Contact>
</InvoicePartner>
```

```
<InvoiceDetailShipping>
<Contact role="shipFrom">
<Name xml:lang="en-US">Supplier System, Inc. - TEST</Name>
<PostalAddress>
<Street>3600 NW 82nd Ave</Street>
<City>Miami</City>
<State>FL</State>
<PostalCode>33166</PostalCode>
<Country isoCountryCode="US">United States</Country>
</PostalAddress></Contact>
<Contact addressID="US001" role="shipTo">
<Name xml:lang="en">Miami HQ</Name>
<PostalAddress name="default">
<DeliverTo>Vijayan Chacko 3rd flr cube</DeliverTo>
<DeliverTo>Miami HQ</DeliverTo>
<Street>11690 NW 105 STREET</Street>
<City>MIAMI</City>
<State>FL</State>
<PostalCode>33178-1103</PostalCode>
<Country isoCountryCode="US">United States</Country>
</PostalAddress>
<Email name="default" preferredLang="en-US">noreply@ryder.com</Email>
</Contact>
</InvoiceDetailShipping>
```

```
</InvoiceDetailRequestHeader>
<InvoiceDetailOrder><InvoiceDetailOrderInfo>
<OrderReference orderID="PO86">
```

```

<DocumentReference
payloadID="1272549644772.1050674118.000000197@2Vmg9c/TnwT1ZqGdAuiHQvbDmNc="
>
</DocumentReference>
</OrderReference>
</InvoiceDetailOrderInfo>
<InvoiceDetailItem invoiceLineNumber="1" quantity="5">
<UnitOfMeasure>EA</UnitOfMeasure>
<UnitPrice><Money currency="USD">0.5</Money>
</UnitPrice><InvoiceDetailItemReference lineNumber="1">
<ItemID><SupplierPartID>705981</SupplierPartID>
</ItemID><Description xml:lang="en">Safco(R) Vista Drawing Table Top, 48in.W x 36in.D,
White</Description>
<ManufacturerPartID>SAF3951</ManufacturerPartID>
<ManufacturerName>Safco</ManufacturerName>
</InvoiceDetailItemReference><SubtotalAmount>
<Money currency="USD">2.5</Money>
</SubtotalAmount><Tax><Money currency="USD">0.18</Money>
<Description xml:lang="en-US"></Description>
<TaxDetail category="sales" percentageRate="7">
<TaxableAmount><Money currency="USD">2.50</Money>
</TaxableAmount>
<TaxAmount>
<Money currency="USD">0.18</Money>
</TaxAmount>
<TaxLocation xml:lang="en-US">Dade County Miami, FL</TaxLocation>
<Description xml:lang="en-US">7% Sales Tax</Description>
</TaxDetail>
</Tax>
<GrossAmount>
<Money currency="USD">2.68</Money>
</GrossAmount>
<NetAmount>
<Money currency="USD">2.68</Money>
</NetAmount>
</InvoiceDetailItem>
<InvoiceDetailItem invoiceLineNumber="2" quantity="1">
<UnitOfMeasure>EA</UnitOfMeasure>
<UnitPrice>
<Money currency="USD">222</Money>
</UnitPrice>
<InvoiceDetailItemReference lineNumber="2">
<ItemID><SupplierPartID>903039</SupplierPartID>
</ItemID><Description xml:lang="en">Office Depot(R) Brand Premier Round Folding Table,
60in. Diameter, Walnut/Beige</Description>
<ManufacturerPartID>CF60PX-
01</ManufacturerPartID><ManufacturerName>Correll</ManufacturerName>
</InvoiceDetailItemReference>
<SubtotalAmount>
<Money currency="USD">222</Money>
</SubtotalAmount>
<Tax><Money currency="USD">15.54</Money>
<Description xml:lang="en-US">
</Description>
<TaxDetail category="sales" percentageRate="7">
<TaxableAmount><Money currency="USD">222.00</Money>
</TaxableAmount><TaxAmount><Money currency="USD">15.54</Money>
</TaxAmount>
<TaxLocation xml:lang="en-US">Dade County Miami, FL</TaxLocation>
<Description xml:lang="en-US">7% Sales Tax</Description>
</TaxDetail></Tax><GrossAmount><Money currency="USD">237.54</Money>
</GrossAmount><NetAmount><Money currency="USD">237.54</Money>

```



```

</NetAmount>

</InvoiceDetailItem>
<InvoiceDetailItem invoiceLineNumber="3" quantity="3">
<UnitOfMeasure>EA</UnitOfMeasure><UnitPrice><Money currency="USD">11</Money>
</UnitPrice><InvoiceDetailItemReference lineNumber="3">
<ItemID><SupplierPartID>982829</SupplierPartID>
</ItemID><Description xml:lang="en">LAB WIRED PS2/USB OPT SIL/BLK
MOUSE</Description>
<ManufacturerPartID>931734-0403</ManufacturerPartID><ManufacturerName>Labtec
Enterprises</ManufacturerName></InvoiceDetailItemReference><SubtotalAmount>
<Money currency="USD">33</Money>
</SubtotalAmount>
<Tax><Money currency="USD">2.31</Money>
<Description xml:lang="en-US"></Description>
<TaxDetail category="sales" percentageRate="7">
<TaxableAmount><Money currency="USD">33.00</Money>
</TaxableAmount><TaxAmount><Money currency="USD">2.31</Money>
</TaxAmount><TaxLocation xml:lang="en-US">Dade County Miami, FL</TaxLocation>
<Description xml:lang="en-US">7% Sales Tax</Description>
</TaxDetail>
</Tax>
<GrossAmount><Money currency="USD">35.31</Money>
</GrossAmount>
<NetAmount>
<Money currency="USD">35.31</Money>
</NetAmount>

</InvoiceDetailItem>
</InvoiceDetailOrder>
<InvoiceDetailSummary>
<SubtotalAmount>
<Money currency="USD">257.5</Money>
</SubtotalAmount>
<Tax><Money currency="USD">18.03</Money>
<Description xml:lang="en-US"></Description>
<TaxDetail category="sales" percentageRate="7">
<TaxableAmount><Money currency="USD">257.50</Money>
</TaxableAmount>
<TaxAmount>
<Money currency="USD">18.03</Money>
</TaxAmount>
<TaxLocation xml:lang="en-US">Dade County Miami, FL</TaxLocation>
<Description xml:lang="en-US">7% Sales Tax</Description>
</TaxDetail>
</Tax>
<ShippingAmount>
<Money currency="USD">0</Money>
</ShippingAmount>
<GrossAmount>
<Money currency="USD">275.53</Money>
</GrossAmount>
<NetAmount>
<Money currency="USD">275.53</Money>
</NetAmount>
<DueAmount>
<Money currency="USD">275.53</Money>
</DueAmount>
</InvoiceDetailSummary>
</InvoiceDetailRequest>

</Request>
</cXML>

```

