

Ariba Network™

Ariba Network EDI Configuration Guide

Release 49

Document Version 1

January 2011

For these users:

- ☒ Business Managers
- ☒ Integration Engineers



Copyright © 1996–2011 Ariba, Inc. All rights reserved.

This documentation, as well as the Ariba software and/or services described in it, contain proprietary information. They are provided under a license or other agreement containing restrictions on use and disclosure and are also protected by copyright, patent and/or other intellectual property laws. Except as permitted by such agreement, no part of the document may be reproduced or transmitted in any form by any means, electronic, mechanical or otherwise, without the prior written permission of Ariba, Inc.

Ariba, Inc. assumes no responsibility or liability for any errors or inaccuracies that may appear in the documentation. The information contained in the documentation is subject to change without notice.

Ariba, the Ariba logo, AribaLIVE, SupplyWatch, Ariba.com, Ariba.com Network and Ariba Spend Management. Find it. Get it. Keep it. and PO-Flip are registered trademarks of Ariba, Inc. Ariba Procure-to-Pay, Ariba Buyer, Ariba eForms, Ariba PunchOut, Ariba Services Procurement, Ariba Travel and Expense, Ariba Procure-to-Order, Ariba Procurement Content, Ariba Sourcing, Ariba Savings and Pipeline Tracking, Ariba Category Management, Ariba Category Playbooks, Ariba StartSourcing, Ariba Spend Visibility, Ariba Analysis, Ariba Data Enrichment, Ariba Contract Management, Ariba Contract Compliance, Ariba Electronic Signatures, Ariba StartContracts, Ariba Invoice Management, Ariba Payment Management, Ariba Working Capital Management, Ariba Settlement, Ariba Supplier Information and Performance Management, Ariba Supplier Information Management, Ariba Discovery, Ariba Invoice Automation, Ariba PO Automation, Ariba Express Content, Ariba Ready, and Ariba LIVE are trademarks or service marks of Ariba, Inc. All other brand or product names may be trademarks or registered trademarks of their respective companies or organizations in the United States and/or other countries.

Ariba Sourcing solutions (On Demand and software) are protected by one or more of the following patents, including without limitation: U.S. Patent Nos. 6,199,050; 6,216,114; 6,223,167; 6,230,146; 6,230,147; 6,285,989; 6,408,283; 6,499,018; 6,564,192; 6,871,191; 6,952,682; 7,010,511; 7,072,061; 7,130,815; 7,146,331; 7,152,043; 7,225,152; 7,277,878; 7,249,085; 7,283,979; 7,283,980; 7,296,001; 7,346,574; 7,383,206; 7,395,238; 7,401,035; 7,407,035; 7,444,299; 7,483,852; 7,499,876; 7,536,362; 7,558,746; 7,558,752; 7,571,137; 7,599,878; 7,634,439; 7,657,461; and 7,693,747. Patents pending.

Other Ariba product solutions are protected by one or more of the following patents:

U.S. Patent Nos. 6,199,050, 6,216,114, 6,223,167, 6,230,146, 6,230,147, 6,285,989, 6,408,283, 6,499,018, 6,564,192, 6,584,451, 6,606,603, 6,714,939, 6,871,191, 6,952,682, 7,010,511, 7,047,318, 7,072,061, 7,084,998; 7,117,165; 7,225,145; 7,324,936; and 7,536,362. Patents pending.

Certain Ariba products may include third party software or other intellectual property licensed from a third party. For information regarding software or other intellectual property licensed from a third party, go to <http://www.ariba.com/copyrights.cfm>.

Revision History

The following table provides a brief history of the updates to this guide. Ariba updates the technical documentation for its On Demand solutions when:

- Software changes delivered in service packs or hot fixes require a documentation update to correctly reflect the new or changed functionality;
- The existing content is incorrect or user feedback indicated that important content is missing.

Ariba reserves the right to update its technical documentation without prior notification. Most documentation updates will be made available in the same week as the software service packs are released, but critical documentation updates may be released at any time.

To provide feedback on this guide or any Help@Ariba resources, click the **Submit Feedback** link on any Help@Ariba page.

Document Version	Month/Year of Update	Updated Chapter/Section	Short Description of Change
1	January 2011	n/a	AN49 GA version

Table of Contents

Revision History	iii
 Chapter 1 Introduction to EDI on Ariba Network	9
Document Flow	9
VAN Transport	9
EDIINT AS2 Transport	11
Document Mapping	13
Single Map for Each Document Type	13
Data Preservation	13
Documentation	13
Example EDI Documents	14
Ariba Network Account Prerequisites	14
Overview of Configuration Tasks	15
Ariba EDI Resources	15
First Steps	15
Ariba Knowledgebase	16
Ariba Network Technical Support	16
Ariba Supplier Services	16
 Chapter 2 Supported EDI Documents	17
EDI Languages	17
Maximum Interchange Size	17
Document Types	17
Purchase Orders	18
Functional Acknowledgments	18
Order Confirmations	18
Ship Notices	19
Invoices	19
Remittance Advice	19
Requirements for Functional Acknowledgments	20
Allotted Time	20
Acknowledging Failed Orders	20
Other Ways to Acknowledge Purchase Orders	20
Transaction-Level Acknowledgments	20

Chapter 3 Configuring and Testing EDI VAN	21
Sign up for Integrated Package	21
Configure Your Ariba Network Account	21
Configuring EDI Settings	21
Using Multiple Routing Methods	23
Identifying Your EDI Administrator	24
Request an Interconnect from Your VAN	24
Request an Interconnect from Ariba	25
Configure Your EDI Application	25
Configuring Your Data Maps	25
Specifying Ariba Network's Interchange IDs	26
Identifying Your Customers	26
Detecting Test/Production Mode	27
Test on Your Own	27
Sending Functional Acknowledgments	28
Checking Order-Routing Status	28
Testing Inbound X12 Documents	29
Sending Subsequent Documents (OCs, ASNs, and Invoices)	29
Test with Customers	30
Requesting Test Orders	30
Checking Basic Routing	30
Viewing cXML Source Data	31
Recognizing Extrinsic Data	31
Sending Functional Acknowledgments	32
Sending Subsequent Documents (OCs, ASNs, and Invoices)	32
Switch to Production Mode	32
 Chapter 4 Configuring EDIINT AS2 Routing	 33
EDIINT AS2 Requirements	33
Create a Digital Certificate	34
Send EDIINT AS2 Information to Ariba Network	34
Configure Your EDIINT AS2 Server	35
Test and Deploy	36
 Chapter 5 Troubleshooting EDI Problems	 37
Orders Do Not Appear in Your Ariba Network Inbox	37
Orders Do Not Appear in Your EDI System	38
Your EDI System Issues Errors	39
FA Does Not Update Order Status	40
Invoices Do Not Appear in Your Outbox	41

Appendix A Example Documents	43
About the Examples	43
cXML OrderRequest	43
X12 850	47
X12 997	49
EDIFACT ORDERS	50
EDIFACT CONTRL	51
Appendix B Support for X12 and EDIFACT Features	53
Purchase Order Contact Mapping	53
ANSI X12	54
EDIFACT	54
Purchase Order REF Mapping	54
Invoice REF/RFF Mapping	55
ANSI X12 REF Mapping	55
EDIFACT RFF Mapping	56
Unsupported Segments	57
Unsupported ANSI UOMs	57
Index	59

Chapter 1 Introduction to EDI on Ariba Network

- “[Document Flow](#)” on page 9
- “[Document Mapping](#)” on page 13
- “[Ariba Network Account Prerequisites](#)” on page 14
- “[Overview of Configuration Tasks](#)” on page 15
- “[Ariba EDI Resources](#)” on page 15

Document Flow

The Ariba Network™ supports Electronic Data Interchange (EDI) document routing along with other routing methods, such as fax, email, and cXML. The EDI routing method enables you to automate order processing and connect your order management, shipping, and invoicing systems with your customers through Ariba Network.

To successfully integrate your EDI order receiving system with Ariba Network, you need to know how documents flow through Ariba Network.

Buying organizations (your customers) generate electronic purchase orders in Ariba Buyer, which transmits them to Ariba Network as commerce eXtensible Markup Language (cXML) documents. Ariba Network receives the cXML documents, authenticates them, and validates them. It then looks up the document routing settings in your account. If you configured your account for EDI routing, Ariba Network converts the cXML documents to either ANSI X12 or UN EDIFACT documents, depending on your preference, and sends them to you.

Document flow is bidirectional (incoming and outgoing). You send documents such as acknowledgments, order confirmations, and invoices back to your customers. Ariba Network converts those EDI documents to cXML as it routes them.

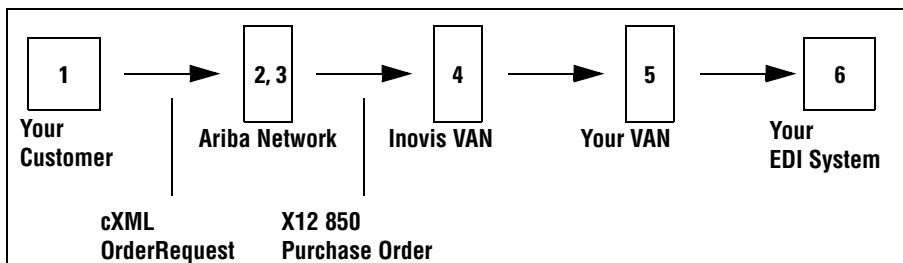
Ariba Network supports two transports for EDI documents: VAN (Value Added Network) and EDIINT AS2(EDI over the Internet). You decide which transport to use when you configure your Ariba Network account.

VAN Transport

You can configure your Ariba Network account to use VAN-to-VAN interconnects to route EDI documents. Ariba Network uses an EDI mailbox on the Inovia VAN.

Incoming Documents

Incoming documents are purchase orders and remittance advice from your customers. The following figure illustrates the flow of an ANSI X12 purchase order to you:



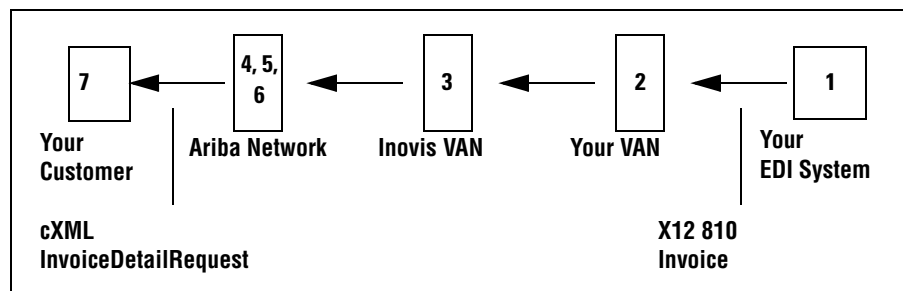
The following steps describe this flow:

- 1 Ariba Buyer generates a purchase order as a cXML OrderRequest and sends it securely over the Internet to Ariba Network.
- 2 Ariba Network receives the document and stores a copy of it in your customer's Outbox and in your Inbox.
- 3 Ariba Network translates the OrderRequest into an ANSI X12 850 document or a UN EDIFACT ORDERS document, depending on your order-routing settings.
- 4 Ariba Network sends the EDI purchase order securely over the Internet to Ariba's Outbox on the Inovisworks VAN.
- 5 The Inovisworks VAN receives it and forwards it to your VAN.
- 6 Your VAN stores it in your Inbox for manual or automatic retrieval.

You retrieve purchase orders using the medium your VAN supports—private telephone lines in most cases. You can use EDI retrieval and translation software to read your EDI mailboxes and translate orders for your order-fulfillment system.

Outgoing Documents

Outgoing documents are functional acknowledgments, order confirmations, ship notices, and invoices from you. The following figure illustrates the flow of an ANSI X12 invoice from you to one of your customers:



The following steps describe this flow:

- 1 You generate an EDI document and send it to your VAN.
- 2 Your VAN forwards it to the Inovisworks VAN.
- 3 The Inovisworks VAN sends it to Ariba's Inbox, which forwards it securely over the Internet to Ariba Network.
- 4 Ariba Network receives it and translates it to a cXML invoice.
- 5 Ariba Network applies any order status information to the purchase order and its line items displayed online. It stores a copy of the invoice in your Outbox and your customer's Inbox.
- 6 Ariba Network sends the cXML invoice to a download queue for your customer.
- 7 Ariba Buyer periodically queries Ariba Network for new documents and downloads them securely over the Internet if any are waiting.

About Inovis

Ariba Network uses the Inovis, Inc. VAN for EDI document routing. Inovis (formerly Harbinger and Extricity) has provided B2B solutions to the world's most successful companies since 1984. The Inovisworks network provides mission critical and flexible connectivity to electronic B2B trading communities. For more information, see www.inovis.com.

EDIINT AS2 Transport

You can configure your Ariba Network account to route EDI over the Internet (EDIINT AS2). For additional security, Ariba Network uses Secure Hypertext Transfer Protocol (HTTPS) on the Internet to communicate directly to your EDIINT AS2 server and it encrypts the transport so that only their intended recipient can read them.

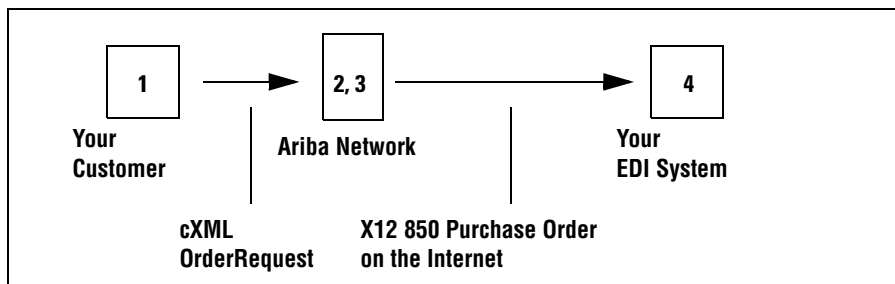
Some of the advantages of using EDIINT AS2 transport are as follows:

- Transmitting EDI documents securely and seamlessly using its own communication protocols
- Improving business processes and reducing transaction turnaround time as customers can send and receive EDI documents quickly
- Enhancing communication with customers efficiently
- Reducing manual data entry which in turn eliminates errors
- Leveraging the Internet and helps reduce high cost on installation and maintenance

For more information, see “[Configuring and Testing EDI VAN](#)” on page 21.

Incoming Documents

Incoming documents are purchase orders and remittance advice from your customers. The following figure illustrates the flow of an ANSI X12 purchase order to you:

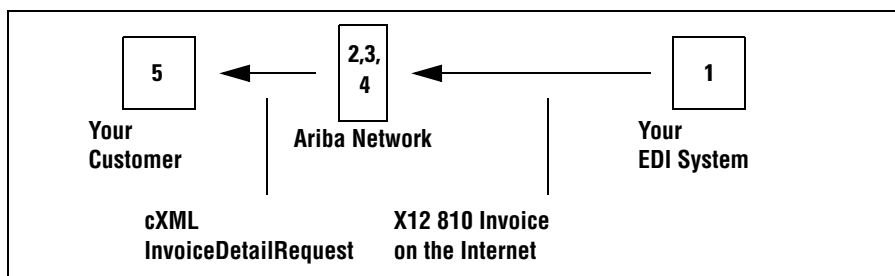


The following steps describe this flow:

- 1 Ariba Buyer generates a purchase order as a cXML OrderRequest and sends it securely over the Internet to Ariba Network.
- 2 Ariba Network receives the document and stores a copy of it in your customer's Outbox and in your Inbox.
- 3 Ariba Network translates the OrderRequest into an ANSI X12 850 document or a UN EDIFACT ORDERS document, depending on your order-routing settings.
- 4 Ariba Network sends the EDI purchase securely order through the Internet to your EDIINT AS2 server.

Outgoing Documents

Outgoing documents are functional acknowledgments, order confirmations, ship notices, and invoices from you. The following figure illustrates the flow of an ANSI X12 invoice from you to one of your customers:



The following steps describe this flow:

- 1 You generate an EDI invoice and send it to Ariba Network securely over the Internet.
- 2 Ariba Network receives it and translates it to a cXML invoice.
- 3 Ariba Network applies any order status information to the purchase order and its line items displayed online. It stores a copy of the invoice in your Outbox and your customer's Inbox.
- 4 Ariba Network sends the cXML invoice to a download queue for your customer.
- 5 Ariba Buyer periodically queries Ariba Network for new documents and downloads them if any are waiting.

Document Mapping

As Ariba Network routes documents between you and your customers, it translates them between cXML and EDI and maps data between those two formats. It is especially important to know the requirements of outbound documents, such as invoices, because your customers' procurement systems must process them without human intervention.

Single Map for Each Document Type

Ariba Network uses a single data map for each EDI document type. For example, there is a single data map for translating cXML purchase orders to X12 purchase orders. Ariba Network

You must adhere to these data maps when receiving or transmitting EDI documents. Ariba Network does not support custom implementations, custom mappings, or per-supplier mappings. By using a single set of data maps, Ariba Network makes it easy for you to integrate with additional customers after your initial configuration.

Data Preservation

Ariba Network maps all EDI documents to or from cXML. This mapping dictates a set of required fields and segments that you might not be accustomed to interpreting or populating. Use the implementation guides as the primary source for EDI document content.

When Ariba Network maps data between cXML and EDI documents, it passes as much of the original data as possible. For example, an EDI purchase order is as complete a rendering of a cXML OrderRequest that can be produced within the confines of the X12 or EDIFACT languages. EDI documents derived from cXML documents might contain optional content, such as currency declarations, redundant postal addresses, or text comments, because that data is present in the original document.

Documentation

To learn about Ariba Network EDI mapping, consult the EDI implementation guides and Standard Exchange Format (SEF) files. This documentation describes the cXML/EDI mapping performed by Ariba Network and data requirements. It is available to both buying organizations and suppliers.

▼ **To access the EDI documentation:**

- 1 Log in to your Ariba Network account.
- 2 Choose **Documentation and Tutorials** from the **Help** menu at the top of the page.

Ariba Network displays the Help@Ariba website. This website lists all the available documentation, including the EDI implementation guides and SEF files.

- 3 Scroll down to the EDI Documentation section and click to open a guide.

Implementation Guides

Ariba Network contains an implementation guide for each EDI document type. You must read these guides to understand how to interpret incoming documents and generate valid outgoing documents.

EDI implementation guides are updated when there is a change to the existing EDI mapping. When changed, the revision date for each document is also updated. You can find the revision date in the footer of the document.

Note: The EDI implementation guides are required reading for all suppliers that want to use EDI. Most EDI routing problems occur when suppliers fail to comply with the requirements described in these guides.

SEF Files

SEF is an open, machine-readable standard for defining specific implementations of EDI transaction sets. Many EDI applications can use SEF files to validate incoming and outgoing documents. You can use them to ensure you are generating documents that meet the Ariba Network EDI guidelines.

Example EDI Documents

Some EDI implementors prefer to see example documents when setting up their data maps. For example EDI documents, see Appendix A, “[Example Documents](#).”

Ariba Network Account Prerequisites

Before you can configure your Ariba Network account for EDI document routing, it must meet the following prerequisites:

- **Fully enabled account**—You must have a fully enabled Ariba Network account. Fully enabled accounts have at least one trading relationship with a buying organization. After a trading partner confirms your account, Ariba Network sends you a notification indicating that your account is fully enabled and you can begin transacting.
- **Sufficient permissions**—You must have sufficient permissions in your Ariba Network account to set up EDI routing. Account administrators have all available permissions. Other users must have the following permissions:

This permission...	Allows users to...
Contact Administration	Maintain information about contact personnel
Transaction Configuration	Configure electronic transactions
Catalog Management	Upload and test catalogs
Outbox Access	View and search documents in the Outbox tab and take action based on your role
Inbox Access	View and search documents in the Inbox tab and take action based on your role

Note: It is recommended that you sign up for Ariba Network Supplier Technical Support (STS) before you use EDI document routing. For more information, see “[Ariba Network Technical Support](#)” on page 16.

Overview of Configuration Tasks

Configuring your Ariba Network account for EDI document routing is straightforward. First you set up a test environment to ensure proper document flow. Then you move to your production environment.

The main tasks are:

- **Configure your Ariba Network test account**
Set parameters for EDI routing in your test account.
- **Request an interconnect from your VAN**
Ask your VAN provider to enable communication with Ariba Network's VAN, Inovisworks. (This is not applicable for EDIINT AS2 customers.)
- **Request an interconnect from Ariba Network**
Ask Ariba to enable communication with your VAN. (This is not applicable for EDIINT AS2 customers.)
- **Configure your EDI application**
Enable your EDI system to map incoming data and send functional acknowledgements.
- **Test on your own**
Use Ariba Network's catalog tester to check basic communication between Ariba Network and your EDI system and verify that your system can process orders.
- **Test with customers**
Verify that your EDI system can process test orders from your customers forwarded by Ariba Network.
- **Switch to production**
Propagate your test configuration to your production Ariba Network account and inform your customers you can receive production orders through EDI.

These tasks are described in detail in Chapter 3, “**Configuring and Testing EDI VAN.**”

Allow adequate time to implement and test EDI integration with Ariba Network and your customers before switching to production. A reasonable estimate for implementation and testing is two to three weeks, depending on the business complexity of the documents you receive and transmit.

Ariba EDI Resources

Ariba can help you integrate your EDI systems with Ariba Network, whether you are encountering problems or you want Ariba to perform integration work for you.

First Steps

Before asking for help, see whether your question is addressed in the documentation. Check the following areas:

- Be sure you have followed all the steps in Chapter 3, “**Configuring and Testing EDI VAN.**”
- Look for your question or problem in Chapter 5, “**Troubleshooting EDI Problems.**”
- Double-check the Ariba Network EDI implementation guide for the document you have questions about. For more information, see “**Implementation Guides**” on page 14.
- If you use EDI applications that recognize SEF files, use Ariba Network's SEF files to validate the document you have questions about. For more information, see “**SEF Files**” on page 14.

Ariba Knowledgebase

The Ariba Knowledgebase is a searchable online database of commonly asked questions, including EDI questions. It is available from your Ariba Network account.

▼ **To search the Ariba Knowledgebase:**

- 1 Log in to your Ariba Network account.
- 2 Choose **Contact Support** from the **Help** menu in the masthead.
Ariba Network displays the Support page.
- 3 Click **Ariba Network Knowledgebase**.
Ariba Network displays the Search Knowledgebase page.
- 4 Enter keywords to search for, such as “EDI” or “X12.”
- 5 Click **Search**.

The Ariba Knowledgebase returns all support notes that contain your keywords.

Ariba Network Technical Support

If you sign up for optional Supplier Technical Support (STS), you can get help with troubleshooting any problems encountered during your EDI implementation through Ariba Network. For example, you might need help identifying the cause of any errors you encounter during configuration and testing.

STS offers an enhanced level of support, such as direct access to EDI support specialists, extended support hours, and guaranteed response times. To access STS, click **Manage Services** in the Property Navigator and then go to the **Optional Services** section.

For more information, go to http://www.ariba.com/suppliers/support_program.cfm.

Ariba Supplier Services

For more comprehensive assistance, including creating plans for implementation, testing, consulting on how to implement trading partners' business requirements, and leveraging experiences from other EDI supplier implementations, consider working with the Ariba Supplier Services team. Ariba Supplier Services can significantly reduce implementation time. For more information, see the *Ariba Network Getting Started Guide*.

Chapter 2 Supported EDI Documents

- “[EDI Languages](#)” on page 17
- “[Maximum Interchange Size](#)” on page 17
- “[Document Types](#)” on page 17
- “[Requirements for Functional Acknowledgments](#)” on page 20

EDI Languages

Ariba Network supports document types required for commerce between you and your customers. Ariba Network supports the following EDI languages:

- **ANSI ASC X12 version 004010**
American National Standards Institute Accredited Standards Committee X12
- **UN EDIFACT version D98A with syntax version 3**
United Nations Electronic Data Interchange For Administration Commerce And Transport

You select a language when configuring your Ariba Network account. Ensure that your EDI system is configured for the exact version listed above.

Maximum Interchange Size

EDI interchanges must be smaller than 60 MB. Ariba Network rejects interchanges that exceed this limit. If you have more than 60 MB of data to transmit to Ariba Network, break it into multiple interchanges.

Document Types

Ariba Network supports the EDI documents described in the following sections. For implementation guides, click **Help** at the top of any Ariba Network page.

Some of these documents are optional. The business rules you establish with your customers determine which documents you receive and send.

For examples of these documents, see Appendix A, “[Example Documents](#).”

Purchase Orders

Procurement applications send purchase orders to Ariba Network as cXML OrderRequest documents. Ariba Network translates them into the corresponding EDI document:

ANSI X12 **850** (Purchase Order)

EDIFACT **ORDERS** (Purchase Order)

Ariba Network then sends the EDI documents to you. After you receive a purchase order, you must send a functional acknowledgment.

These documents describe a request for goods and services. They are also used for change and cancel orders, which replace the original purchase order. After receiving a change or cancel order, you must send a functional acknowledgment.

Ariba Network keeps purchase order attachments in your online Inbox, because it cannot send them through EDI. It adds an extrinsic element in the purchase orders to inform you that attachments reside in your Inbox. Log in to your account to view them.

Functional Acknowledgments

After you receive any document, you must send one of the following documents to Ariba Network:

ANSI X12 **997** (Functional Acknowledgment)

EDIFACT **CONTRL** (Syntax and Service Report Message)

These documents notify your customers that the document you received is functionally and syntactically correct; however, they do not confirm quantities or dates. They change the status of purchase orders on Ariba Network from “Sent” to “Acknowledged.”

You must send functional acknowledgments for all purchase orders. For more information, see [“Requirements for Functional Acknowledgments”](#) on page 20.

Order Confirmations

After you examine the contents of a purchase order, you can optionally send the following order confirmation document to Ariba Network:

ANSI X12 **855** (Purchase Order Acknowledgment)

This document sets the line item status in the purchase order on Ariba Network to “Accepted,” “Rejected,” or “Backordered.” It can also specify estimated delivery dates. Buying organizations can configure Ariba Network to convert order confirmations to cXML ConfirmationRequest documents and route them to their procurement applications for display.

Ship Notices

After you ship ordered items, you can optionally send the following ship notice document to Ariba Network:

ANSI X12 **856** (Ship Notice/Manifest)
EDIFACT **DESADV** (Despatch Advice)

This document sets the line item status in the purchase order on Ariba Network to “Shipped.” It can also specify carrier information. Buying organizations can configure Ariba Network to convert ship notices to cXML ShipNoticeRequest documents and route them to their procurement applications for display.

Invoices

After you ship items or perform services, you can optionally send the following invoice documents to Ariba Network:

ANSI X12 **810** (Invoice)
EDIFACT **INVOIC** (Invoice)

These documents create an invoice associated with one or more purchase orders or master agreements. Buying organizations can configure Ariba Network to convert invoices to cXML InvoiceDetailRequest documents and route them to their procurement applications for reconciliation and payment.

You can send invoices only to customers that have enabled their Ariba Network accounts to accept invoices. To see a customer’s invoicing settings, go to the **Customer Relationships** page in the **Administration** tab and click the customer’s name.

For more information, see the EDI implementation guides for invoices.

When generating invoices, do not use any of the units of measure codes listed in “**Unsupported ANSI UOMs**” on page 57.

Remittance Advice

Buying organizations or Ariba Network can generate remittance advice documents as cXML PaymentRemittanceRequest documents after sending payments to you. Ariba Network translates them into the EDI document:

ANSI X12 **820** (Payment Order/Remittance Advice)

Ariba Network then sends the EDI document to you. After you receive a remittance advice, you must send a functional acknowledgment.

This document describes payments, payment schedules, payment method, and financial institution information.

Requirements for Functional Acknowledgments

Functional acknowledgments (997 or CONTRL documents) confirm the acceptance of documents. For example, they change the status of purchase orders on Ariba Network from “Sent” to “Acknowledged,” which is visible to both you and your customers.

Allotted Time

Ariba Network must receive a functional acknowledgment within 72 hours after it sends a document, otherwise it considers the document to have failed to route and sets its status to “Failed.” For your customers’ convenience, it is recommended that you send acknowledgments within 24 hours.

After 24 hours, Ariba Network sends a warning message to the email address for the EDI administrator specified in the **EDI Configuration** page.

Acknowledging Failed Orders

After a document has failed, sending an acknowledgment does not set it to “Acknowledged.” Set it to “Acknowledged” by logging in to your Ariba Network account, resending the document to yourself, and returning an acknowledgment. Make sure the resent document does not create a duplicate document in your system.

Other Ways to Acknowledge Purchase Orders

You can acknowledge “Sent” or “Failed” purchase orders by sending invoices against them. You can use any invoicing method: online, cXML, or EDI. Ariba Network considers invoices to be acknowledgments and sets purchase order status to “Acknowledged.”

Transaction-Level Acknowledgments

You must generate transaction-level, not group-level functional acknowledgments. That is, they must reference each document being acknowledged.

ANSI X12 997 functional acknowledgments must contain an AK2/AK5 segment for each document in the functional group. Similarly, EDIFACT CONTRL functional acknowledgments must contain a UCM segment for each document in the interchange.

Chapter 3 Configuring and Testing EDI VAN

Configure EDI VAN on Ariba Network and test your configuration in this order:

- 1 “[Sign up for Integrated Package](#)” on page 21
- 2 “[Configure Your Ariba Network Account](#)” on page 21
- 3 “[Request an Interconnect from Your VAN](#)” on page 24
- 4 “[Request an Interconnect from Ariba](#)” on page 25
- 5 “[Configure Your EDI Application](#)” on page 25
- 6 “[Test on Your Own](#)” on page 27
- 7 “[Test with Customers](#)” on page 30
- 8 “[Switch to Production Mode](#)” on page 32

Sign up for Integrated Package

Sign up for Ariba Network Supplier Membership Integrated package. The Integrated package offers an enhanced level of support, such as direct access to EDI support specialists, extended support hours, and guaranteed response times. For more information, click **Manage Services** in the Property Navigator and then go to the **Optional Services** section in your Ariba Network account.

Configure Your Ariba Network Account

Configure your EDI settings and identify your EDI administrator in your Ariba Network account. You configure your production and test account and perform testing. After fixing any problems, you configure your production account. The settings in your test and production accounts are completely separate.

While testing, you can receive production purchase orders through another routing method, such as fax or email.

Before configuring your Ariba Network account, be sure it meets the requirements listed in “[Ariba Network Account Prerequisites](#)” on page 14.

Configuring EDI Settings

Use the EDI Configuration page on Ariba Network to enter your EDI connection values.

Configuring these EDI settings does not require that you begin using the EDI routing method immediately. You can use EDI routing in your test account, but continue to receive orders in your production account through another method, such as fax or email. When you finish testing and you are ready to use EDI in production, you change the order routing method in your production account to EDI.

▼ **To configure your EDI settings:**

- 1 Log in to your Ariba Network account.
- 2 Go to your test account by clicking **Switch to Test Account** in the masthead.
This link is available only to account administrators. The first time you click the link, Ariba Network creates your test account and prompts you to assign a username and password.
- 3 In the Property Navigator, click **Manage Profile**.
Ariba Network displays the Profile Configuration page.
- 4 Click **Electronic Order Routing** on the Company Profile page.
- 5 For “New Orders,” select **EDI** from the Routing Method list.
- 6 Click the **Click here for Configuration** link. Ariba Network displays the EDI Routing Configuration page.
- 7 Fill out all the fields in the EDI Routing Configuration page.

Field	Description	Example
Value Added Network (VAN)	The name of your EDI VAN.	Sterling
Interchange Control Number	Interchange sequence start number. The default is 100.	123

- 8 Select an EDI language: **ANSI X12** or **EDIFACT**.
- 9 Fill in the configuration fields for the EDI standard you selected. Do not leave any field blank unless it is optional.

ANSI X12:

Field	Description	Example
Application (GS) ID	The ID of your relationship. Used in GS03 (application receiver ID).	942888710
Functional Group Control Number	Functional group sequence start number. The default is 100.	456
Interchange (ISA) Qualifier	The domain of the ISA Identifier.	01 -DUNS
Interchange (ISA) Identifier	The ID your VAN uses for your mailbox.	942888710

UN EDIFACT:

Field	Description	Example
Syntax Identifier	The character encoding required for your locale and catalogs.	UNOC-ISO 8859-1: Latin alphabet
Interchange ID	The ID your VAN uses for your mailbox.	942888710
Interchange Qualifier	The domain of the Interchange ID.	1 -DUNS
Routing Address	(Optional) Your destination application.	ORDERENTRY

- 10 Enter an email address for receiving warning and failed routing notifications. Enter only one email address. Click **Send notification if outgoing documents are undeliverable or FAs are overdue** to enable these notifications.
- 11 To receive additional tax information in purchase orders, click **Map purchase order tax details to EDI**. Ariba Network then maps cXML purchase order TaxDetail elements (in cXML 1.2.005 or later) to EDI purchase orders. cXML TaxDetail elements specify taxable amount, tax amount, tax location, tax purpose, tax category, and tax rate. If this box is not checked, Ariba Network ignores TaxDetail elements during cXML-to-EDI translation.
- 12 To map payment terms from cXML to EDI purchase orders, click **Map payment terms**. By default, this box is deselected, so the mapping behavior is unchanged.
- 13 To map the complete purchase order date that includes the time and timezone from cXML to EDI X12 purchase orders, click **Map order date with complete date, time, and zone for X12 850 documents**. By default, this box is deselected, so the mapping behavior is unchanged.
- 14 Click **Submit**.

Whenever you make changes to the EDI Configuration page, you must send an EDI interconnect request to Ariba Network Customer Support. This process is described in “[Request an Interconnect from Ariba](#)” on page 25.
- 15 Select EDI routing for the other types of documents you want to route, such as change/cancel orders, non-catalog orders, and invoices.

You do not need to fill out the EDI Configuration page for these additional documents.

Most suppliers use different Interchange IDs for test and production configurations. You can enter up to two Interchange IDs, one in your test account and one in your production account. If your VAN provider later changes your Interchange IDs, you must update the EDI Configuration page in both your test account and production account with the new values. Although Ariba Network uses only ARIBAEDI to identify itself both in test and production accounts, you can use separate IDs for yourself in your test and production accounts.

Before EDI documents can route, Ariba must create a VAN interconnect for you.

Using Multiple Routing Methods

You can use different routing methods for inbound and outbound communication simultaneously. For example, you can choose to receive purchase orders through fax and send invoices through EDI.

Incoming document (purchase order and remittance advice) routing is determined by your Ariba Network account settings. However, outbound document (functional acknowledgment, order confirmation, ship notice, and invoice) routing is not restricted by your Ariba Network account settings. For example, you can generate invoices online even if you configured your account for ANSI X12 invoicing.

Note: If you have set the order confirmation status through cXML or EDI, you cannot subsequently update the order confirmation status manually using the **Create Confirmation** button in the **Inbox** tab of your Ariba Network account. If you have set the shipping status through cXML or EDI, you can subsequently update the shipping status manually using the **Create Ship Notice** button for that order.

Suppliers should ensure that they keep the source system up-to-date when they change their order shipping status manually.

However, use the same routing method for functional acknowledgments that you use to receive purchase orders. For example, if you receive an X12 purchase order, send an X12 functional acknowledgment.

Identifying Your EDI Administrator

Specify your EDI administrator's name and contact information so Ariba Network and your customers can contact the appropriate person if needed.

Ariba Network might need to contact your EDI administrator if there is a configuration problem or if EDI processing changes in the future. Your customers might need to contact your EDI administrator if they change the content of purchase orders, such as adding new extrinsic data.

▼ To identify your EDI administrator:

- 1 On the Home dashboard, click the **Administration** tab.

Ariba Network displays the Users page.

- 2 Click **Customer Contacts**.

The Customer Contacts page appears.

- 3 Click **Create** and enter the name, email address, and phone number of your EDI administrator. This should be the person who performs the setup and maintenance of your EDI processing system.

- 4 Click **Companywide Assignments**.

"EDI Administrator" is listed as a predefined category.

- 5 Click **Edit** for "EDI Administrator" and select the contact person you just entered.

Be sure to check this information periodically to keep it up to date.

Request an Interconnect from Your VAN

Contact your Value Added Network (VAN) provider to request EDI interconnects between your VAN and Ariba Network's VAN, Inovisworks. EDI interconnects allow your documents to travel from VAN to VAN to reach their intended destination. You need two bidirectional interconnects: one for test transactions and one for production transactions.

When you request interconnects, send the following information about Ariba Network to your VAN provider:

Interconnect Direction	Bidirectional
Company Name	Ariba
VAN Name	Inovisworks
Interchange IDs	ARIBAEDI
Interchange ID Qualifier	ZZ (ANSI X12) ZZZ (EDIFACT)

Request an Interconnect from Ariba

Ask Ariba Network Customer Support to create an EDI interconnect for you between Inoovisworks (Ariba Network's VAN) and your VAN. Ariba Network Customer Support creates an EDI interconnect for you.

▼ **To request an EDI interconnect:**

- 1 Log in to your Ariba Network account.
- 2 In the masthead, choose **Contact Support** from the **Help** menu.
Ariba Network displays the Support page.
- 3 Select “EDI Interconnect Setup” in the **Category of Issue** list.
- 4 In the Issue Description box, request an EDI interconnect and identify your VAN. For example:
We are requesting an EDI interconnect to the Sterling VAN.
- 5 Click **Submit**.

Ariba Network sends your EDI interconnect request to Ariba Network Customer Support.

Ariba Network Customer Support creates EDI interconnects within a few hours and sends you an email notification. While waiting for your EDI interconnect, configure your EDI application.

Configure Your EDI Application

Configure your EDI application to map data, recognize Ariba Network's interchange IDs, send functional acknowledgments, and identify your customers.

Configuring Your Data Maps

Configure your EDI application to map data in incoming and outgoing documents according to Ariba Network's requirements. To learn the data and format requirements, see the following resources:

- **EDI implementation guides**—These guides describe the EDI document requirements that all suppliers must meet. For more information, see “**Implementation Guides**” on page 14.
- **Standard Exchange Format (SEF) files**—These files can be used by EDI validators to ensure data and format compliance with the requirements of Ariba Network. For more information, see “**SEF Files**” on page 14.
- **Example EDI documents**—Appendix A, “**Example Documents**” contains examples of basic EDI documents.

Specifying Ariba Network's Interchange IDs

Configure your EDI application to recognize Ariba Network's Interchange ID (ISA05-06 or UNB02):

Parameter	Value
Interchange ID	ARIBAEDI
ID Qualifier	ZZ (ANSI X12) ZZZ (EDIFACT)

In most EDI applications, you add a new Interchange ID by adding a new partner relationship. Configure it to send functional acknowledgment (997 or CONTRL) documents to this Interchange ID.

Identifying Your Customers

Your customer is identified using the ANID that is always the GS sender for outgoing documents and the GS receiver in incoming documents.

The ISA element in EDI documents from Ariba Network identifies Ariba Network, not your customers. Ariba Network specifies your customers' ANID (Network ID) in the following element:

Standard	Element Name	Example
ANSI X12	Application Sender ID (GS02)	AN0100000001234
EDIFACT	Reverse Routing ID (UNB0203)	AN0100000001234

You can look up your customers' Network IDs in your Ariba Network account.

Note: Ensure that you do not use the Test Indicator element ('-T').

▼ To look up your customers' Network IDs:

- 1 Log in to your Ariba Network account.

Be sure to use the correct test or production account. Account administrators can switch between the two types of accounts from the Home page.

- 2 On the **Administration** tab, click **Customer Relationships**.

Ariba Network displays a list of all your customers in the Customer Relationships page.

- 3 Click a customer.

Ariba Network displays information about the customer, including its Network ID.

Detecting Test/Production Mode

It is important not to mix test orders with production orders. Most suppliers keep the two types of orders separate by using two different mailboxes on their VAN or by using two different EDIINT AS2 URLs. However, your order-processing system might need to detect the production mode of purchase orders.

Use the Test Indicator element to detect the production mode of purchase orders:

Standard	Element Name	Value
ANSI X12	Test Indicator (ISA15)	T (test) P (production)
EDIFACT	Test Indicator (UNB11)	1 (test) (UNB11 is absent for production)

Test on Your Own

Send test EDI purchase orders to yourself to check basic communication from Ariba Network to your EDI processing system. This testing also checks that your EDI system can accept, interpret, and process orders from Ariba Network and generate a correct functional acknowledgment.

To perform testing on your own, you must have the following:

- **An Ariba Network test account.** The catalog tester is available only in supplier test accounts. Create your test account by clicking **Switch to Test Account** in the masthead. The first time you click this link, Ariba Network prompts for a username and password.

The catalog tester's Network ID is AN01000002779-T, which appears in the GS02 or UNB0203 segment.

- **Your test account configured for EDI order routing.** The document-routing settings in your production account are separate from the ones in your test account.
- **A test catalog.** Upload a product catalog to your test account and use the catalog tester to generate simple test purchase orders. Catalogs in your production account are not available in your test account. Complete instructions for generating orders with the catalog tester are in the *Ariba Network Catalog Administration Guide for Suppliers*.

After you accumulate purchase orders in your Ariba Network account, you can resend them. Go to your online Inbox, select a purchase order, and click **Resend**.

Ariba Network transmits test purchase orders within 10 minutes of generating them. When you receive test purchase orders, verify that your system can process them. You might need to iterate to debug your configuration. To send another purchase order, log in to your Ariba Network test account and either generate a new order with the catalog tester or resend an existing order. You cannot delete purchase orders from your Ariba Network account.

Sending Functional Acknowledgments

Send EDI functional acknowledgment (997 or CONTRL) documents to ensure you can generate them correctly. When you compose acknowledgments, reverse the sender/receiver IDs from purchase orders.

You can check whether you successfully acknowledged orders by logging in to your Ariba Network account and viewing them in your online Inbox. Successful functional acknowledgments change order status from “Sent” to “Acknowledged.”

As with all documents you send, start with the minimum required information and confirm that Ariba Network accepts the basic document, then add any additional data you want to send.

For more information about functional acknowledgments, see “[Requirements for Functional Acknowledgments](#)” on page 20.

Checking Order-Routing Status

You can view order-routing status in your Ariba Network account, which is helpful when debugging routing problems.

To view order-routing status, go to your online Inbox tab, select a purchase order, and click the **Order History** tab.

Purchase orders go through the following status levels on Ariba Network:

Step	Status	Explanation
1	Accepted	Ariba Network accepted the purchase order from your customer or from the catalog tester.
2	Order Queued	Ariba Network queued the purchase order for cXML processing.
3	Sent	Ariba Network successfully converted the purchase order from cXML to EDI and has forwarded it to you in an interchange.
4	Acknowledged	Ariba Network received a positive functional acknowledgment from you.
	Failed	Ariba Network could not route the purchase order and lists the reason for the failure. Failure can occur if you do not send a functional acknowledgment within the allotted time. For more information, see “ Requirements for Functional Acknowledgments ” on page 20.

Testing Inbound X12 Documents

This function is available only to account administrators and in the test account. To use the EDI Tester, you must configure your Ariba Network account to use the EDI routing method.

You can test your inbound X12 EDI documents (order confirmations, invoices, and ship notices) using the EDI Tester. This tool uploads your implemented EDI document and validates them against Ariba Network EDI implementation guidelines to ensure that your documents are error-free when sending them to your customers.

In case there are any errors, correct the EDI file and upload the document again.

▼ To test your EDI documents:

- 1 Log in to your Ariba Network account.
- 2 On the Home dashboard, click the **Home** tab.
Ariba Network displays the Home page.
- 3 Go to your test account by clicking **Switch to Test Account** in the masthead.
The first time you click this button, Ariba Network creates your test account and prompts you to assign a username and password.
- 4 Click **EDI Tester** in the Quick Links panel on the Home dashboard. This link is available only if you have configured your EDI settings. For more information on configuring EDI settings, see “**Configuring EDI Settings**” on page 21
- 5 Click **Browse**.
- 6 In the Choose File dialog box, navigate and select the EDI file.
- 7 Click **Open**. Ariba Network returns to the EDI Tester page.
- 8 Click **Upload**. Ariba Network displays the contents of the uploaded EDI document in the text box below.
- 9 Click **Validate Document**.

If your EDI document contains errors, Ariba Network displays the error details in the Validation Result section. Correct the errors, upload, and validate the file again.

Notes:

- The file size of your EDI document cannot exceed 500 KB.
- The EDI tester does not validate against your customer’s invoice validation rules. It only confirms that the EDI X12 documents are error-free and translate successfully.
- You must ensure that each inbound transaction to Ariba Network must have a unique ISA control number. This is also applicable when the previous transaction failed during translation.

Sending Subsequent Documents (OCs, ASNs, and Invoices)

You cannot send subsequent outbound documents (order confirmation, ship notices, or invoices) against purchase orders generated by the catalog tester. To test these subsequent documents, you must test against purchase orders generated by your customers.

Test with Customers

After testing on your own, test with purchase orders generated by your customers. This step requires coordination with your customers.

Buying organizations each have an Ariba Network test account, similar to your test account, and they can configure Ariba Buyer to connect to that account. Test accounts cannot communicate with production accounts, which ensures that test orders are not mixed with production orders.

Requesting Test Orders

Inform your customers that you have performed basic EDI configuration and testing and are ready to test with them. Ask them to create relationships with your Ariba Network test account and to send several test purchase orders to you.

Make sure your customers are using their test accounts. They must perform the same supplier-relationship activation process for supplier test accounts as they do for supplier production accounts.

Your customers might want to create purchase orders that contain items from your catalogs. In this case, upload catalogs to your test account and publish them to your customers.

Checking Basic Routing

After your customers create relationships with your test account and send purchase orders to it, look for the orders in:

- 1 Your online Inbox. Log in to your Ariba Network account and click the **Inbox** tab on the Home Dashboard. Ariba Network stores a copy of each received purchase order in your online Inbox, regardless of your order routing method.
- 2 Your EDI order receiving system. If orders routed successfully, they appear in your EDI application.

The following table lists symptoms and suggested actions for order routing problems:

Symptom	Suggested Action
Orders do not appear in your Ariba Network online Inbox	<p>Ask your customers to check their Ariba Network online Outboxes. Ariba Network creates copies all customers' orders in their Outboxes. If test orders do not appear there, the buying organizations have not successfully integrated with Ariba Network.</p> <p>You must wait for at least one of your customers to finish integrating their procurement applications with Ariba Network before you can continue testing.</p>
Orders do not appear in your EDI system	<p>There was a problem during cXML-to-EDI translation or during routing. Log in to your Ariba Network account, go to your online Inbox, find a failed order, and click Order History to see more information about it.</p>

For other common problems, see Chapter 5, “[Troubleshooting EDI Problems](#).”

Viewing cXML Source Data

You might find it helpful to look at the cXML source generated by your customers to understand the data, including extrinsic data, that they send.

▼ To view the cXML source of purchase orders:

- 1 Log in to your Ariba Network test account.
- 2 On the Home dashboard, click the **Inbox** tab.

Ariba Network displays the Purchase Order page and all purchase orders you have received.

- 3 Select a purchase order. Ariba Network displays the purchase order details.
- 4 Click **Export cXML**.

Your web browser prompts you to save the file or open it. You can view cXML documents in your web browser or any text editor.

Recognizing Extrinsic Data

Your customers might include extrinsic data in their purchase orders. When Ariba Network maps data from cXML to ANSI X12 or EDIFACT, it attempts to preserve data from Extrinsic elements. You might need to configure your order receiving system to recognize and use extrinsic data.

For example, Ariba Network maps the following cXML Extrinsic element:

```
<Extrinsic name="UniqueName">Andrew Jackson</Extrinsic>
```

to the following EDI elements:

Standard	Data
ANSI X12S	N9*ZZ*UniqueName~ MSG*Andrew Jackson~
EDIFACT	FTX+ZZZ+UniqueName:ZZZ:ZZZ+Andrew Jackson'

Extrinsic Data Mapping

Due to the nature of extrinsic data, Ariba Network can map it only to general purpose message segments, not to data-specific segments. Ariba Network does not know the specific purpose of extrinsic data used by trading partners.

Extrinsic data mapping is bidirectional; Ariba Network maps extrinsic data for both purchase orders and invoices. For purchase orders, it maps all extrinsic data. For invoices, it maps buying organizations' part numbers. It also maps extrinsic data from invoice REF/RFF segments. For more information about extrinsic mapping, see [“Support for X12 and EDIFACT Features”](#) on page 53.

Ariba Network does not map extrinsic data you include in functional acknowledgments, order confirmations, or ship notices.

Default Extrinsic Data

By default, Ariba Buyer includes extrinsics named `UniqueName`, `UserEmail`, and `CostCenter` in cXML purchase orders. However, your customers can modify Ariba Buyer to include any extrinsics they want.

Sending Functional Acknowledgments

Send a functional acknowledgment (997 or CONTRL) document for each test purchase order you receive from your customers. Then, in your Ariba Network account, check that the status of purchase orders changes from “sent” to “acknowledged.”

As with all documents you send, start with the minimum required information and confirm that Ariba Network accepts the basic document, then add any additional data you want to send.

Sending Subsequent Documents (OCs, ASNs, and Invoices)

When testing with your customers, you can also send subsequent outbound documents: ANSI X12 855, 856, and 810, or EDIFACT DESADV and INVOIC. You can send invoices only if your customers have configured their Ariba Network accounts to accept them.

Consult the EDI implementation guides available in your Ariba Network account for the data requirements of these documents.

Switch to Production Mode

After testing EDI routing and fixing any problems, switch to production mode. You might make this change at an idle time, such as during the evening, so your EDI processing system can send functional acknowledgments to the correct account.

▼ To switch to production mode:

- 1 Propagate any configuration changes you made during testing to your Ariba Network production account. Be sure to use your production EDI values. Do not select **EDI** in the Electronic Order Routing Configuration page yet.
- 2 If you do not yet have EDI interconnects for your production account, perform the steps in “[Request an Interconnect from Your VAN](#)” on page 24 and “[Request an Interconnect from Ariba](#)” on page 25 for your production account.
- 3 After receiving notification that the VAN interconnect has been created, activate EDI routing for your production account. Activate EDI routing by clicking **EDI** in the Electronic Order Routing configuration page and submitting the page.
- 4 Inform your customers to start sending transactions through their production Ariba Network accounts.

Immediately after switching to production mode, monitor the initial transactions closely to make sure Ariba Network and your system processes documents as expected.

Chapter 4 Configuring EDIINT AS2 Routing

You can route EDI documents over the Internet (EDIINT AS2) instead of through a Value Added Network (VAN). Complete the process in this order:

- 1 “[EDIINT AS2 Requirements](#)” on page 33
- 2 “[Create a Digital Certificate](#)” on page 34
- 3 “[Create a Digital Certificate](#)” on page 34
- 4 “[Send EDIINT AS2 Information to Ariba Network](#)” on page 34
- 5 “[Configure Your EDIINT AS2 Server](#)” on page 35
- 6 “[Test and Deploy](#)” on page 36

EDIINT AS2 Requirements

To use this routing method, you must:

- Only use Secure Hypertext Transfer Protocol (HTTPS) on the Internet to communicate directly to your EDIINT AS2 server. To ensure additional security, Ariba Network only support use HTTPS on the Internet.
- Have the software that supports IETF Applicability Statement 2 (AS2) documents.

Ariba Network encloses AS2 documents within Secure/Multipurpose Internet Mail Extensions (S/MIME) envelopes and secures them by routing them over the Hypertext Transfer Protocol Secure (HTTPS) transmission channel. It authenticates AS2 documents using the National Institute of Standards and Technology (NIST) Secure Hash Algorithm 1 (SHA-1) with your digital certificate. After it transmits or receives AS2 documents, it uses IETF Message Disposition Notification (MDN) protocol to generate and receive message confirmations.

Note: The MDN protocol is mandatory and Ariba Network only supports the synchronous MDN protocol.

The EDIINT AS2 routing method supports both ANSI X12 and UN EDIFACT languages.

Create a Digital Certificate

Create a X.509 V3 Class 3 signed digital certificate for document authentication and security. This certificate acts as both a client certificate (for authentication) and a server certificate (for SSL). It enables Ariba Network to authenticate messages from you. It also enables your web server to establish an HTTPS connection, which is required by Ariba Network.

This certificate can be self-signed; it does not need to refer to a trusted Certificate Authority (CA). It can be in binary Distinguished Encoding Rules (DER) format or base64-encoded Privacy-Enhanced Mail (PEM) format.

You will use this certificate in “[Send EDIINT AS2 Information to Ariba Network](#)” on page 34 and in “[Configure Your EDIINT AS2 Server](#)” on page 35.

Note: Suppliers can also use an existing digital certificate for their EDIINT AS2 server.

Send EDIINT AS2 Information to Ariba Network

Provide Ariba Network Technical Support with information about your EDIINT AS2 environment. Gather the following information:

Value	Description	Example
Your Ariba Network Identifier (ANID)	A unique number Ariba Network assigns to your organization. Your ANID appears on the Home page of your AN account. Test accounts have a “-T” suffix.	AN02-000-123-456(production) AN02-000-123-456-T(test)
Your EDIINT AS2 server URL	The externally accessible address of your EDIINT AS2 web server. This URL must begin with https so the HTTP connection is encrypted.	https://edi.workchairs.com/ediint
Your EDIINT AS2 ID	An identifier for your relationship with Ariba Network. Ariba Network embeds this ID in the header of EDIINT AS2 messages it sends to you.	ZZMYCOMPANY
Your certificate	An ITU X.509 digital certificate, which allows Ariba Network to authenticate your messages. You created this certificate in step “ Create a Digital Certificate ” on page 34.	<pre> -----BEGIN CERTIFICATE----- 2767CCAvaGawIBAgIQAREdumEudPn39jEBzY2Y4DA NBgkqhkiG9w0BAQUFAD276 MQswCQYDVQQGEwJVUzEgMB4GA1UEChMXU1NBIERhd GEgU2VjdXJpdHksIE1u532 LjAsBgNVBAsTJVNTY3VyZSBTZXJ2ZXIgcQ2VydG1ma WNhdGlvbiBBdXRob3Jp765 HhcNMDMwNDExMDAwMDAwWWhcNMDUwNTA5MjM1OTU5W jCB1jELMAKGA1UEBhMC65434 ... -----END CERTIFICATE----- </pre> <p>(The above example is a PEM file. You can also send a DER file.)</p>

Contact Ariba Network Technical Support, request to have your account enabled for EDIINT AS2, and provide the above information. Wait for a confirmation email indicating that your account has been enabled for EDIINT AS2 routing.

Configure Your EDIINT AS2 Server

Configure your EDIINT AS2 server to accept documents from Ariba Network. Ariba Network requires specific transmission, authentication, and message-receipt protocols.

▼ To configure your EDIINT AS2 server:

- 1 Enable SSL on your web server by installing the certificate you created in step “**Create a Digital Certificate**” on page 34. Consult your web server instructions for installing the certificate and enabling HTTPS communication. All communication with Ariba Network must go through HTTPS.
- 2 Configure your EDIINT AS2 server to use Ariba Network’s URL and its protocols:

Parameter	Setting
Ariba Network’s EDIINT AS2 URL	https://service.ariba.com/EDIIntHandler.aw/ad/ediInt
Ariba Network’s EDIINT AS2 ID	ZZARIBAEDI
Transmission Protocol	HTTPS with encryption
Document Envelope	S/MIME without encryption
Authentication Protocol	SHA-1 without encryption
Message receipt protocol	Synchronized and signed MDN

- 3 Configure your firewall to support two-way communication over Transmission Control Protocol (TCP) port 443, which is the default port used by HTTPS. You can restrict your firewall to allow incoming connections only from Ariba Network.

After you receive a document from Ariba Network, send both an MDN receipt message and a functional acknowledgement document as described in “**Requirements for Functional Acknowledgments**” on page 20. Be sure your EDIINT AS2 server is available all the time. If it is down, Ariba Network resends the document every half hour for ten hours (20 times). At the end of ten hours, Ariba Network marks the document as “Failed.” Ariba Network requires both an MDN receipt and a functional acknowledgment document, otherwise it marks the document as “failed.”

Test and Deploy

Use the order tester in your Ariba Network test account to test document routing before deploying to production. Use the testing instructions in step “**Test on Your Own**” on page 27 and “**Test with Customers**” on page 30.

After testing and debugging any document routing problems, copy the settings to your production account. Test and production accounts can use the same EDI configuration values. For more information, see “**Switch to Production Mode**” on page 32.

Chapter 5 Troubleshooting EDI Problems

- “Orders Do Not Appear in Your Ariba Network Inbox” on page 37
- “Orders Do Not Appear in Your EDI System” on page 38
- “Your EDI System Issues Errors” on page 39
- “FA Does Not Update Order Status” on page 40
- “Invoices Do Not Appear in Your Outbox” on page 41

Orders Do Not Appear in Your Ariba Network Inbox

The first step in troubleshooting order-routing problems is to verify whether your Ariba Network account received purchase orders.

▼ **To check your online Inbox:**

- 1 Log in to your account.

Be sure to choose the correct account: test or production. Account administrators can switch between the two types of accounts from the Home page.

- 2 On the Home dashboard, click the **Inbox** tab.

Ariba Network displays the Purchase Order page.

- 3 Locate the purchase order in the list.

If no purchase orders from your customers are listed, your customers have not properly integrated with Ariba Network or they are addressing documents incorrectly.

Check Buyer Integration with Ariba Network

Your customers must properly integrate their applications with Ariba Network before they can successfully send purchase orders to you.

If purchase orders do not appear in your online Inbox, ask your customers to check their online Outboxes. Ariba Network creates copies of all orders in buying organizations' Outboxes. If purchase orders do not appear there, your customers have not successfully integrated their applications with Ariba Network.

Be sure your customers send test orders to their Ariba Network test accounts and production orders to their Ariba Network production accounts.

Check Your ID

Your customers must properly address purchase orders to you. If orders do not appear in your online Inbox, ask them for the exact organization ID and ID domain they are using for you.

Ariba Network recognizes the following organization ID domains in cXML documents:

ID Domain	Example	Description
NetworkId	AN01000000123	A unique alphanumeric value assigned to each organization registered on Ariba Network. Also called ANID. You can see your NetworkId by logging on to Ariba Network
duns	942888711	A unique number assigned to organizations by Dun & Bradstreet; for example. To request a Dun & Bradstreet D-U-N-S® number or to see if your organization already has one, go to www.dnb.com .
AribaNetworkUserId	judy@workchairs.com	The username of an Ariba Network account administrator. These names typically have the format of an email address. This ID domain is not preferred, because if users change their usernames, cXML documents might fail to route.

Orders Do Not Appear in Your EDI System

If purchase orders appear in your Ariba Network account but not in your EDI order receiving system, there is a problem either during cXML-to-EDI translation or during document routing.

Check Order History on Ariba Network

Log in to your Ariba Network account, go to your online Inbox, select an order, and examine the order history for warnings. Any cXML-to-EDI translation errors or transmission errors appear in the order history.

Ariba Network transmits orders within ten minutes of receiving them.

Verify Your EDI Configuration Settings

Go to the EDI Configuration page in your Ariba Network account and check the values entered there. Your Interchange ID must match the one used by your VAN.

If your VAN changes your Interchange IDs, you must update the EDI Configuration page in both your test and production accounts with the new values. Then you must request a new EDI interconnect from Ariba Network Technical Support. For more information, see “[Request an Interconnect from Ariba](#)” on page 25.

Check for Common Order-Routing Problems

The following issues could cause EDI order routing failure. In these cases, Ariba Network sets the order routing status to “Failed.”

Interconnect Not Set up

You might not have set up interconnects with your VAN. You must request proper interconnects to enable your VAN to communicate with Inovisworks (Ariba’s VAN). For more information, see “[Request an Interconnect from Ariba](#)” on page 25.

Missing Required Data

Purchase order data required by the EDI standard might be missing. The cXML standard (published on www.cXML.org) specifies the names of element tags and basic syntax and semantic rules. The EDI standards, however, are much stricter about the data. If the required data is absent, the document is non-compliant, and Ariba Network cannot route it.

Non-Compliant Data

Values in purchase orders might be too long or too short. A common example of this problem is unrealistic test data, such as random characters entered for addresses. ANSI X12 requires at least two characters for a city name, but test orders might contain `<City>A</City>`, which is non-compliant.

Other examples of data restrictions in ANSI X12 that can cause non-compliance are: state names must have exactly two characters and postal codes must have 3-15 characters.

Invalid UOM (unit of measure) codes in purchase orders are another common cause of routing failure.

FA Overdue

If you do not successfully send a functional acknowledgment within the allotted time, Ariba Network sets the order-routing status to “Failed.” The transaction log indicates:

Document failed because FA has not been received.

For more information, see “[FA Does Not Update Order Status](#)” on page 40.

Your EDI System Issues Errors

If your EDI system issues mapping or semantic errors, you have not configured it for the specific mapping used by Ariba Network or for the specific data included by your customers.

Verify the EDI Mapping

Ariba Network uses a single EDI map for all suppliers. For more information, see “[Document Mapping](#)” on page 13.

Check for Extrinsic Data

Your customers might include custom data (called extrinsic data) in their purchase orders that your order receiving system does not recognize. You must anticipate extrinsic data by looking at test orders from your customers and configuring your systems to recognize and process it.

For more information about extrinsic data, see “[Recognizing Extrinsic Data](#)” on page 31.

Check Your Customers' IDs

Your EDI system might not recognize the purchase order sender. It might incorrectly assume that the ISA element in purchase orders identifies your customer, but it actually identifies Ariba Network.

Confirm that your EDI system uses the GS02 (ASNI X12) or UNB0203 (EDIFACT) data elements in purchase orders to identify customers. For more information, see [“Identifying Your Customers”](#) on page 26.

Check Test/Production Mode

Your EDI system might not correctly differentiate test orders from production orders. One of the ways Ariba Network specifies the production mode of purchase orders is through the test indicator flag ISA15 (ANSI X12) or UNB11 (EDIFACT) segment. For more information, see [“Detecting Test/Production Mode”](#) on page 27.

FA Does Not Update Order Status

If you send a functional acknowledgment within the allotted time, but order status on Ariba Network does not change, investigate the areas described below.

Check Test/Production Mode

The test/production mode of your functional acknowledgments must match the mode of the corresponding purchase orders.

For example, the ISA15 segment in ANSI X12 850 purchase orders specifies the production mode with a one-character flag: T (test) or P (production). The ISA15 segment in the ANSI X12 997 functional acknowledgment documents you send must match the ISA15 segment in the purchase order.

For more information about test/production modes, see [“Detecting Test/Production Mode”](#) on page 27.

Check Buying Organizations' ID

Your functional acknowledgments must specify the ID of your customer, not Ariba Network's ID.

For example, the GS03 segment in ANSI X12 997 functional acknowledgments must contain your customer's Network ID (ANID). It must not be empty or contain the wrong ID.

For test accounts, append “-T” to the Network ID in ANSI X12 documents (not in EDIFACT documents).

Check Reference to Purchase Orders

You must generate transaction-level, not group-level functional acknowledgments. They must reference each purchase order being acknowledged. For more information, see [“Requirements for Functional Acknowledgments”](#) on page 20.

Obtaining Additional Help with FAs

If you require assistance from Ariba Network Technical Support to troubleshoot functional acknowledgements, include a complete copy of the 997 or CONTRL document that you sent.

Invoices Do Not Appear in Your Outbox

Immediately after you generate an invoice and send it to Ariba Network, if there are no errors, it should appear in your online Outbox and your customer's online Inbox.

Check for Translation Errors

When you send EDI invoices to Ariba Network, it first performs EDI-to-cXML translation.

If there are errors during translation, Ariba Network does not display invoices in your online Outbox. Instead, it sends a negative 997 or CONTRL document to you. It also emails an error report to your EDI Administrator (the email address entered on the EDI Configuration page).

Check for cXML Validation Errors

At this point, the invoice is equivalent to you posting a cXML InvoiceDetailRequest document. Ariba Network validates it against the cXML DTDs. If it passes, it appears in your online Outbox.

Check Your Customers' Invoice Rules

Ariba Network then processes the invoice against the buying organization's invoicing rules. If it fails, it remains in your online Outbox and is marked "failed." If it succeeds, it travels to the buying organization's online Inbox for downloading into Ariba Buyer.

Check References to Purchase Orders

The data in invoices must match the data in corresponding purchase orders, otherwise Ariba Network marks them as "failed" in your Outbox. Ariba Network also fails them if they do not contain a unique invoice number. Each invoice number must be unique and cannot be changed.

For more information on testing Inbound X12 documents, see "[Testing Inbound X12 Documents](#)" on page 29.

For more information, see [Hot Issues and Technical FAQ](#) for links to currently open Ariba Network issues and frequently asked questions. The URL for this site is connect.ariba.com/anfaq.htm.

Appendix A Example Documents

- “About the Examples” on page 43
- “cXML OrderRequest” on page 43
- “X12 850” on page 47
- “X12 997” on page 49
- “EDIFACT ORDERS” on page 50
- “EDIFACT CONTRL” on page 51

About the Examples

This appendix lists example cXML and EDI documents that you can use as templates when configuring your EDI system. Many EDI implementers prefer to work from example documents to construct their EDI mappings.

Note: The separators and terminators in these examples make them easier to read. Ariba Network does not use these characters in production data.

For more ANSI X12 and EDIFACT examples, see the EDI implementation guides available on the Help@Ariba website.

cXML OrderRequest

The example EDI purchase orders in this appendix are derived from the cXML purchase order listed below.

cXML has no maximum field sizes, so assume that the full ANSI X12 or EDIFACT bounds apply for each element.

Ariba Buyer does not allow a ShipTo element at both header level and line-item level. If all ShipTo elements on the line-item level are identical, or if only one line item exists, Ariba Buyer removes line-item ShipTo elements and replaces them with a single header level ShipTo element. However, both levels are present in this example for demonstration purposes and map testing.

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE cXML SYSTEM "http://xml.cxml.org/schemas/cXML/1.2.011/cXML.dtd">
<cXML payloadID="12345-67890@ariba.com"
      timestamp="2004-04-15T13:14:05-08:00">
  <Header>
    <From>
      <Credential domain="AribaNetworkUserId">
        <Identity>buy_test@thebuyer.org</Identity>
      </Credential>
    </From>
    <To>
      <Credential domain="DUNS">
        <Identity>284010872</Identity>
      </Credential>
    </To>
```

```

<Sender>
  <Credential domain="AribaNetworkUserId">
    <Identity>buy_test@thebuyer.org</Identity>
    <SharedSecret>abracadabra</SharedSecret>
  </Credential>
  <UserAgent>Ariba Buyer 8.2</UserAgent>
</Sender>
</Header>
<Request>
  <OrderRequest>
    <OrderRequestHeader orderID="D064"orderDate=" 2003-04-15T13:13:52-08:00"
      type="new" requisitionID="R1492" shipComplete="yes">
      <Total>
        <Money currency="USD">321.68</Money>
      </Total>
      <ShipTo>
        <Address isoCountryCode="US" addressID="152">
          <Name xml:lang="en">San Jose Office</Name>
          <PostalAddress name="default">
            <DeliverTo>Maria Valenzuela</DeliverTo>
            <DeliverTo>B1-2462</DeliverTo>
            <DeliverTo>The Buyer, Inc.</DeliverTo>
            <Street>1500 Buyer Way</Street>
            <City>San Jose</City>
            <State>CA</State>
            <PostalCode>94110</PostalCode>
            <Country isoCountryCode="US">United States</Country>
          </PostalAddress>
          <Email name="Maria- Primary">Maria.Valenzuela@thebuyer.org</Email>
          <Phone name="Maria- Primary">
            <TelephoneNumber>
              <CountryCode isoCountryCode="US">1</CountryCode>
              <AreaOrCityCode>408</AreaOrCityCode>
              <Number>5551414</Number>
            </TelephoneNumber>
          </Phone>
          <Fax name="Maria - Primary">
            <TelephoneNumber>
              <CountryCode isoCountryCode="US">1</CountryCode>
              <AreaOrCityCode>408</AreaOrCityCode>
              <Number>5551616</Number>
            </TelephoneNumber>
          </Fax>
        </Address>
      </ShipTo>
      <BillTo>
        <Address isoCountryCode="US" addressID="001">
          <Name xml:lang="en">Corporate Office</Name>
          <PostalAddress name="default">
            <DeliverTo>Roxanne Barber</DeliverTo>
            <DeliverTo>Accounts Payable</DeliverTo>
            <DeliverTo>The Buyer, Inc.</DeliverTo>
            <Street>1 Buyer Parkway</Street>
            <City>Chicago</City>
            <State>IL</State>
            <PostalCode>35101</PostalCode>
            <Country isoCountryCode="US">United States</Country>
          </PostalAddress>
          <Email name="AP Purchases(Roxanne)">Roxanne.Barber@thebuyer.org
          </Email>
          <Phone name="AP Purchases (Roxanne)">
            <TelephoneNumber>
              <CountryCode isoCountryCode="US">1</CountryCode>
              <AreaOrCityCode>312</AreaOrCityCode>

```

```

        <Number>5551111</Number>
      </TelephoneNumber>
    </Phone>
    <Fax name="AP Purchases (Roxanne)">
      <TelephoneNumber>
        <CountryCode isoCountryCode="US">1</CountryCode>
        <AreaOrCityCode>312</AreaOrCityCode>
        <Number>5552222</Number>
      </TelephoneNumber>
    </Fax>
  </Address>
</BillTo>
<Shipping trackingDomain="FedEx" trackingId="21428339882">
  <Money currency="USD">46.80</Money>
  <Description xml:lang="en">Fed-Ex 2 day</Description>
</Shipping>
<Tax>
  <Money currency="USD">27.18</Money>
  <Description xml:lang="en">Total combined taxes</Description>
</Tax>
<Payment>
  <PCard number="4510294818443233" expiration="2003-03-12"
    name="Visa - Purchases"></PCard>
</Payment>
<Contact role="administrator">
  <Name xml:lang="en">Administration</Name>
  <PostalAddress name="default">
    <DeliverTo>Elmira Gulch</DeliverTo>
    <DeliverTo>2nd floor</DeliverTo>
    <Street>The Buyer, Inc.</Street>
    <Street>1 Buyer Parkway</Street>
    <City>Chicago</City>
    <State>IL</State>
    <PostalCode>34592</PostalCode>
    <Country isoCountryCode="US">United States</Country>
  </PostalAddress>
  <Email name="Elmira - Admin">Elmira.Gulch@thebuyer.org</Email>
  <Phone name="Elmira - Admin">
    <TelephoneNumber>
      <CountryCode isoCountryCode="US">1</CountryCode>
      <AreaOrCityCode>800</AreaOrCityCode>
      <Number>5551515</Number>
    </TelephoneNumber>
  </Phone>
  <Phone>
    <TelephoneNumber>
      <CountryCode isoCountryCode="US">1</CountryCode>
      <AreaOrCityCode>800</AreaOrCityCode>
      <Number>5552727</Number>
    </TelephoneNumber>
  </Phone>
  <URL>http://admin.thebuyer.org</URL>
</Contact>
<Comments xml:lang="en">Be sure printer ink cartridges are properly
  sealed to avoid spillage.</Comments>
  <Extrinsic name="Packing Instructions">512 units per
    carton</Extrinsic>
</OrderRequestHeader>
<ItemOut quantity="25" requisitionID="4592782"
  requestedDeliveryDate="2003-04-15T00:00:00-08:00">
  <ItemID>
    <SupplierPartID>26409</SupplierPartID>
  </ItemID>
</ItemDetail>

```

```

<UnitPrice>
  <Money currency="USD">0.64</Money>
</UnitPrice>
<Description xml:lang="en">
  <ShortName>3M Brand Scotch Tape</ShortName>A cellophane strip
    bearing an adhesive coating on one side and wound tightly onto a
    roll. A frame surrounds the roll with a tearing edge protruding
    about one inch from the center of the roll's rotational axis.
</Description>
<UnitOfMeasure>D65</UnitOfMeasure>
<Classification domain="UN/SPSC">31201512</Classification>
<ManufacturerPartID>YZ323</ManufacturerPartID>
<ManufacturerName>3M</ManufacturerName>
<URL name="Catalog Entry">
  http://www.thesupplier.org/catalog.cgi?itemid=26409</URL>
<Extrinsic name="Size Information">Height: 14, Width: 23</Extrinsic>
</ItemDetail>
<SupplierID domain="DUNS">352948107</SupplierID>
<ShipTo>
  <Address isoCountryCode="US" addressID="152">
    <Name xml:lang="en">San Jose Office</Name>
    <PostalAddress name="default">
      <DeliverTo>Maria Valenzuela</DeliverTo>
      <DeliverTo>B1-2462</DeliverTo>
      <DeliverTo>The Buyer, Inc.</DeliverTo>
      <Street>1500 Buyer Way</Street>
      <City>San Jose</City>
      <State>CA</State>
      <PostalCode>94110</PostalCode>
      <Country isoCountryCode="US">United States</Country>
    </PostalAddress>
    <Email name="Maria- Primary">Maria.Valenzuela@thebuyer.org</Email>
    <Phone name="Maria- Primary">
      <TelephoneNumber>
        <CountryCode isoCountryCode="US">1</CountryCode>
        <AreaOrCityCode>408</AreaOrCityCode>
        <Number>5551824</Number>
      </TelephoneNumber>
    </Phone>
    <Fax name="Maria - Primary">
      <TelephoneNumber>
        <CountryCode isoCountryCode="US">1</CountryCode>
        <AreaOrCityCode>408</AreaOrCityCode>
        <Number>5552001</Number>
      </TelephoneNumber>
    </Fax>
  </Address>
</ShipTo>
<Shipping trackingDomain="FedEx" trackingId="4812489789">
  <Money currency="USD">46.80</Money>
  <Description xml:lang="en">2 day express</Description>
</Shipping>
<Tax>
  <Money currency="USD">27.18</Money>
  <Description xml:lang="en">Total taxes for line item</Description>
</Tax>
<Distribution>
  <Accounting name="DistributionCharge">
    <Segment type="Function" id="07" description="1:Function"/>
    <Segment type="CostCenter" id="D84" description="2:Cost Center"/>
    <Segment type="SubCostCenter" id="422"
      description="3:Sub-Cost Center"/>
    <Segment type="Object" id="E11" description="4:Object"/>
  </Accounting name="DistributionCharge">

```

```

    <Charge>
      <Money currency="USD">98.00</Money>
    </Charge>
  </Distribution>
</Distribution>
<Accounting>
  <Segment type="Function" id="07" description="Function"/>
  <Segment type="CostCenter" id="G18" description="Cost Center"/>
  <Segment type="SubCostCenter" id="422"
    description="Sub-Cost Center"/>
  <Segment type="Object" id="E11" description="Object"/>
</Accounting>
<Charge>
  <Money currency="USD">27.00</Money>
</Charge>
</Distribution>
<Contact role="customerService">
  <Name xml:lang="en">Devereux</Name>
  <PostalAddress>
    <DeliverTo>Stefanie Devereux</DeliverTo>
    <Street>The Buyer, Inc.</Street>
    <Street>1 Buyer Parkway</Street>
    <City>Chicago</City>
    <State>IL</State>
    <PostalCode>34592</PostalCode>
    <Country isoCountryCode="US">United States</Country>
  </PostalAddress>
  <Email name="Stefanie- Sales">Stefanie.Devereux@thebuyer.org</Email>
  <Phone name="Stefanie- Sales">
    <TelephoneNumber>
      <CountryCode isoCountryCode="US">1</CountryCode>
      <AreaOrCityCode>800</AreaOrCityCode>
      <Number>5552429</Number>
    </TelephoneNumber>
  </Phone>
</Contact>
  <Comments xml:lang="en">Do not wrap with adhesive tape;
    It leaves a sticky residue.</Comments>
</ItemOut>
</OrderRequest>
</Request>
</cXML>

```

X12 850

```

ISA*00*          *00*          *ZZ*ARIBAEDI      *ZZ*284010872
*030415*1314*U*00401*000601828*0*T*>~
GS*PO*AN01000000001*AN01000000002*20030415*1314*000341217*X*004010~
ST*850*0001~
BEG*00*NE*D0364**20030415~
CUR*BY*USD~
REF*RQ*R1492~
CSH*SC~
SAC*C*G830***4680*****FedEx:21428339882**Fed-Ex 2 day*EN~
CUR*BY*USD~
TXI*TX*27.18~
N9*PSM*4510294818443233*Visa - Purchases~
DTM*036****UN*0432~
N9*L1*Comment*en~
MSG*Be sure printer ink cartridges are properly sealed to avoid spillage.~
N9*ZZ**Packing Instructions~

```

MSG*512 units per carton~
 N1*BT*Corporate Office*92*001~
 N2*Roxanne Barber*Accounts Payable~
 N2*The Buyer, Inc.~
 N3*1 Buyer Parkway~
 N4*Chicago*IL*35101*US~
 PER*AP*AP Purchases (Roxanne)*TE*13125551111*FX*13125552222*EM*Roxanne.Barber@thebuyer.org~
 N1*ST*San Jose Office*92*152~
 N2*Maria Valenzuela*B1-2462~
 N2*The Buyer, Inc.~
 N3*1500 Buyer Way~
 N4*San Jose*CA*94110*US~
 PER*RE*Maria - Primary*TE*14085551414*FX*14085551616*EM*Maria.Valenzuela@thebuyer.org~
 N1*NG*Administration~
 N2*Elmira Gulch*2nd floor~
 N3*The Buyer, Inc.*1 Buyer Parkway~
 N4*Chicago*IL*34592*US~
 PER*AM*Elmira - Admin*TE*18005551515*EM*Elmira.Gulch@thebuyer.org~
 PER*AM*TE*18005552727*UR*http://admin.thebuyer.org~
 PO1*1*25*RO*.64**VP*26409*MG*YZ323*MF*3M*C3*31201512~
 CUR*BY*USD~
 PID*F*GEN***3M Brand Scotch Tape****EN~
 PID*F****A cellophane strip bearing an adhesive coating on one side and wound tightly****EN~
 PID*F****onto a roll. A frame surrounds the roll with a tearing edge protruding about one****EN~
 PID*F****inch from the center of the roll's rotational axis.****EN~
 PID*S*MAC*UN*31201512***SPSC~
 REF*RQ*4592782~
 REF*ZA*352948107*DUNS~
 SAC*C*G830***4680*****FedEx:4812489789**2 day express*en~
 CUR*BY*USD~
 SAC*N*B840***9800*****07-D84-422-E11*1*Project: 07, Cost Center: D84, Department: 422, Account: E11~
 CUR*BY*USD~
 SAC*N*B840***2700*****07-G18-422-E11*2*Project: 07, Cost Center: G18, Department: 422, Account: E11~
 CUR*BY*USD~
 DTM*002*20030415~
 TXI*TX*27.18~
 N9*URL*URL*Catalog Entry~
 MSG*http://www.thesupplier.org/catalog.cgi?itemid=26409~
 N9*L1*Comment*en~
 MSG*Do not wrap with adhesive tape;~
 MSG*It leaves a sticky residue.~
 N9*ZZ**Size Information~
 MSG*Height: 14, Width: 23~
 N1*ST*San Jose Office*92*152~
 N2*Maria Valenzuela*B1-2462~
 N2*The Buyer, Inc.~
 N3*1500 Buyer Way~
 N4*San Jose*CA*95110*US~
 PER*RE*Maria - Primary*TE*14085551824*FX*14085552001*EM*Maria.Valenzuela@thebuyer.org~
 N1*A9*Devereux~
 N2*Stefanie Devereux*Executive Sales Manager~
 N3*The Buyer, Inc.*1 Buyer Parkway~
 N4*Chicago*IL*34592*US~
 PER*CR*Stefanie - Sales*TE*18005552429*EM*Stefanie.Devereux@thebuyer.org~
 CTT*1*25~
 AMT*TT*321.68~
 SE*70*0001~
 GE*1*000341217~
 IEA*1*000601828~

X12 997

The following example is a positive 997 sent by a supplier to acknowledge a purchase order. The 997 you send depends on the GS and ST segments in the 850. For example, if you received the following 850:

```
ISA*00*          *00*          *ZZ*ARIBAEDI    *ZZ*284010872
*030415*1314*U*00401*000601828*0*T*>~
GS*PO*AN01000000001*AN01000000002*20030415*1314*000341217*X*004010~
ST*850*0001~
```

You would send the following 997:

```
ST*997*0001~
AK1*PO*000341217~
AK2*850*0001~
AK5*A~
AK9*A*1*1*1~
SE*6*0001~
```

AK1 represents the functional group (GS) and AK2 represents the transaction set (ST). There is only one AK1 and AK9 in each 997.

AK2-AK5 represents one transaction set and it can repeat. There is one AK2-AK5 pair for each ST-SE pair in the source functional group. An AK5 with “A” means “Accepted” and with “E” means “Error.”

The following table lists the AK9 fields:

Field	Description
AK901	Functional Group status: (A)ccepted, (P)artial, (E)rror, (R)eject).
AK902	Number of included transaction sets. That is, the number specified by the original document.
AK903	Number of transaction sets received. That is, how many were actually found and processed.
AK904	Number of transactions sets accepted.

Ariba Network does not use additional fields in AK5 and AK9, nor in the AK3 or AK4 groups, which provide failure details.

EDIFACT ORDERS

```

UNA:+. ?*'
UNB+UNOC:3+ARIBAEDI:ZZZ:AN01765432133+284010872:ZZZ:AN123456789+000626:1356+601828++++1++1'
UNH+1+ORDERS:D:98A:UN'
BGM+105::Purchase Order+PC16:1.1:010+9+AB'
DTM+4:20000626:102'
FTX+ADU+3++Note the extra ink required with fountain pens.:Check paper bond ordered.+en'
FTX+ZZZ+2+MaxWeight:ZZZ:ZZZ+<PackageWeight max="35" uom="lb"/>'
RFF+AGI:2498573'
RFF+AIU:4217481433331111'
DTM+36:1005'
NAD+BY+AN01765432133:ZZZ'
NAD+SU+AN123456789:ZZZ'
NAD+BT+001::92+Corporate Office+Roxanne Barber:Accounts Payable+1 Buyer
Parkway+Chicago+IL+35101+US'
CTA+AP+:AP Purchases (Roxanne)'
COM+312-555-1111:TE'
NAD+ST+152::92+San Jose Office+Maria Valenzuela:B1-2462:The Buyer, Inc.+1500 Buyer Way+San
Jose+CA+951103472+US'
CTA+GR+:Maria - Primary'
COM+Maria.Valenzuela@thebuyer.com:EM'
NAD+AB++Purchasing Dept.'
CTA+PD+:Tina Bass'
COM+http://www.thebuyer.com/purchasing/default.htm:AH'
TAX+7'
MOA+161:45.19:USD:9'
SCC+1+SC'
ALC+C++++SAA:::Fed-Ex 2 day:21428339882'
MOA+23:7.18:USD:9'
LIN+5++26409:SA'
PIA+1+YZ323:MF'
IMD+E+:::3M Brand Scotch Tape::en'
IMD+F+:::A cellophane strip bearing an:adhesive coating on one side and:en'
IMD+F+:::wound tightly onto a roll. A frame:surrounds the roll with a tearing:en'
IMD+F+:::edge protruding about one inch from:the center of the rolls rotational:en'
IMD+F+:::axis::en'
QTY+21:25:EA'
DTM+2:20000415:102'
MOA+146:.64:USD:9'
FTX+ADU+3++Do not wrap with adhesive tape;;It leaves a sticky residue.+en'
FTX+ZZZ+2+Size Information:ZZZ:ZZZ+<Size UnitOfMeasure="cm">: <Height>14</Height>:
<Width>23</Width>: <Depth>12.4</Depth>:</Size>'
RFF+AGI:4592782'
TAX+7'
MOA+161:4.18:USD:9'
NAD+SU+123456789ABCD:46:16'
NAD+ST+152::92+San Jose Office+Maria Valenzuela:B1-2462:The Buyer, Inc.+1500 Buyer Way+San
Jose+CA+951103412+US'
CTA+GR+:Maria - Primary'
COM+4085551111:TE'
NAD+SB++Devereux+Stefanie Devereux:Executive Sales Manager+The Buyer, Inc.:1 Buyer
Parkway+Chicago+IL+34592+US'
CTA+SR+:Stefanie - Sales'
COM+18005552429:TE'
COM+Stefanie.Devereux@thebuyer.org:EM'
COM+http://www.thebuyer.com/Sales/:AH'
ALC+C++++SAA:::2 day express:4812489789'
MOA+23:46.80:USD:9'
ALC+N++++AEC:175:92:07-D84-422-E11:LISA'
MOA+23:98.00:USD:9'
ALC+N++++AEC:175:92:07-G18-422-E11:LISA'
MOA+23:27.00:USD:9'

```

```
UNS+S'  
MOA+128:322.18:USD:9'  
CNT+2:4'  
UNT+58+1'  
UNZ+1+601828'
```

EDIFACT CONTRL

The following example is a positive CONTRL sent by a supplier to confirm a purchase order. The control reference IDs in UCI and UCM (first element in each) come from the UNB and UNH segments within the ORDERS document.

```
UNA:+. ? '  
UNB+UNOC:3+ABCMUSICSUPPLY:ZZZ+ARIBAEDI:ZZZ:AN02000012345+030910:1059+1++CONTRL++1++1'  
UNH+sample+CONTRL:D:3:UN'  
UCI+1+ARIBAEDI:ZZZ:AN02000012345+ABCMUSICSUPPLY:ZZZ+7'  
UCM+LineItemWithTx+ORDERS:D:98A:UN+7'  
UNT+4+sample'  
UNZ+1+1'
```

Appendix B Support for X12 and EDIFACT Features

- “Purchase Order Contact Mapping” on page 53
- “Purchase Order REF Mapping” on page 54
- “Invoice REF/RFF Mapping” on page 55
- “Unsupported Segments” on page 57
- “Unsupported ANSI UOMs” on page 57

Purchase Order Contact Mapping

Ariba Network maps all contact information when it translates cXML purchase orders to ANSI X12 or EDIFACT purchase orders. Each cXML purchase order contact, including BillTo and ShipTo, can include an arbitrary number of Email, Phone, Fax, and URL elements.

Each cXML contact element contains a name and the actual contact string. For example, an Email element can contain:

```
<Email name="Sales">sales@soandso.org</Email>.
```

The name attribute is optional, but if it is present, it categorizes the contact. For example, a Phone element can also have name="Sales", which implies that the Email and the Phone are related. Ariba Network uses these names when grouping contacts within ANSI X12 PER segments or EDIFACT CTA/COM segments.

Ariba Network allows contact data to overflow EDI segment within their limits. For example, the PER segment can hold up to three contacts. If a purchase order contains four contacts with the same name, Ariba Network creates another PER or CTA/COM segment with the same name. If it reaches the PER segment limit, (three in some cases) it does not create more. Typically, up to five COMs are allowed. If Ariba Network needs six, it creates another CTA group.

Consider the following cXML source data example:

```
<Email name="Help Desk">helpdesk@soandso.org</Email>
<Email>whatever@soandso.org</Email>
<Phone>
  <TelephoneNumber>
    <CountryCode isoCountryCode="US">1</CountryCode>
    <AreaOrCityCode>512</AreaOrCityCode>
    <Number>5551212</Number>
  </TelephoneNumber>
</Phone>
<Phone name="Executive Office">
  <TelephoneNumber>
    <CountryCode isoCountryCode="US">1</CountryCode>
    <AreaOrCityCode>408</AreaOrCityCode>
    <Number>5551212</Number>
  </TelephoneNumber>
</Phone>
<Phone name="Help Desk">
  <TelephoneNumber>
    <CountryCode isoCountryCode="US">1</CountryCode>
    <AreaOrCityCode>800</AreaOrCityCode>
```

```

    <Number>5551212</Number>
  </TelephoneNumber>
</Phone>
<URL>http://www.soandso.org</URL>

```

When Ariba Network translates this example to EDI, it makes the following observations:

- a) The Fax element is not used.
- b) The Email, Phone, and URL elements do not have a name attribute.
- c) The Email and Phone elements both have a “Help Desk” entry.
- d) Only the Phone element has “Executive Office.”

ANSI X12

Ariba Network translates this example to the following X12 850 segment:

```

PER*CN**EM*whatever@soandso.org*TE*1-512-555-1212*UR*http://www.soandso.org~
PER*CN*Executive Office*TE*1-408-555-1212~
PER*CN*Help Desk*EM*helpdesk@soandso.org*TE*1-800-555-1212~

```

EDIFACT

Ariba Network translates this example to the following EDIFACT ORDERS segment:

```

CTA+OC'
COM+whatever@soandso.org:EM'
COM+1-512-555-1212:TE'
COM+http://www.soandso.org:AH'
CTA+OC+:Executive Office'
COM+1-408-555-1212:TE'
CTA+OC+:Help Desk'
COM+helpdesk@soandso.org:EM'
COM+1-800-555-1212:TE'

```

Purchase Order REF Mapping

By default, cXML Extrinsic in purchase orders appear in comment elements in EDI purchase orders. However, your customers can upload maps to their accounts and Ariba Network can translate cXML Extrinsic to ANSI X12 REF segments in 850 purchase orders. The **cXML/EDI Transformation** link in the Customer Relationships page allows you to turn on purchase order REF mapping. For more information, see the cXML Transformations chapter in the *Ariba cXML Solutions Guide*.

For the list of extrinsics, see *Ariba SN Standard Extrinsic* in the Ariba Network documentation.

Invoice REF/RFF Mapping

Ariba Network translates the full set of ANSI X12 and EDIFACT invoice REF and RFF segments to cXML invoices. It maps this information to cXML Extrinsic elements in InvoiceDetailRequest documents. Ask your customers for the qualifiers they expect.

The following section describe this mapping for ANSI X12 and EDIFACT invoices.

ANSI X12 REF Mapping

Ariba Network translates header level REF (1/050) qualifiers and line item REF (2/120) qualifiers in ANSI X12 invoices. Use qualifiers that are defined in X12 for the REF01 (0128) data element.

Example

For example, REF qualifier 2N is defined in ANSI X12 as “Federal Communications Commission (FCC) Trade/Brand Identifier.” Ariba Network translates REF*2N*1234567~ to the following cXML:

```
<Extrinsic name="FCC Trade/Brand Identifier">1234567</Extrinsic>
```

This Extrinsic data also appears in online invoices under “Additional Information” as:

FCC Trade/Brand Identifier:1234567

Reserved Codes

Do not use the following REF codes for extrinsic data, because there are reserved for use by Ariba Network.

Header level REF (1/050):

REF Code	Meaning	Comments
AH	Agreement Number	Master agreement ID
IL	Internal Order Number	Reserved, but currently unused
IV	Seller's Invoice Number	Can be used to extend invoice number from BIG02
MA	Ship Notice / Manifest Number	References a previously sent ship notice
PO	Purchase Order Number	Can be used to extend purchase order number from BIG04
VN	Vendor Order Number	Supplier sales order number
ZZ	Mutually Defined	Text extrinsic

Line item level REF (2/120):

REF Code	Meaning	Comments
AH	Agreement Number	Master agreement ID (header invoices)
IL	Internal Order Number	Reserved, but currently unused
FJ	Line Item Control Number	Required, for invoice line number
IL	Internal Order Number	Reserved, but currently unused
MA	Ship Notice / Manifest Number	References a previously sent ship notice (line item shipping)
SE	Serial Number	Used for serial numbers, combined with serial numbers from IT1
ZZ	Mutually Defined	Text extrinsic

EDIFACT RFF Mapping

Ariba Network translates data element 1153 in EDIFACT invoices. You can use the header level RFF @0120 (SG1, RFF) or the line item RFF @1360 (SG30, RFF-DTM). Ariba Network does not translate accompanying segments subordinate to the RFF group (DTM @1370 for line items).

Example

For example, RFF qualifier ERN is defined in EDIFACT D.98A as “Exporter's reference number.” Ariba Network translates RFF+ERN:1234567’ to the following cXML:

```
<Extrinsic name="Exporter's reference number">1234567</Extrinsic>
```

This Extrinsic data also appears in online invoices under “Additional Information” as:

Exporter's reference number:1234567

Reserved Codes

Do not use the following RFF codes, because they are reserved for use by Ariba Network.

Header level RFF @0120 (SG-1 @0110):

RFF Code	Meaning	Comments
AJS	Agreement number	References a master agreement
MA	Ship notice/manifest number	References a previous ship notice
ON	Order number (purchase)	Purchase order number
VN	Order number (vendor)	Vendor sales order number

Line item level RFF @1360 (SG-30 @1350):

RFF Code	Meaning	Comments
AJS	Agreement number	References a master agreement
ON	Order number (purchase)	Purchase order number
VN	Order number (vendor)	Vendor sales order number

Unsupported Segments

The ANSI X12 and EDIFACT standards both define segments that Ariba Network does not use. Suppliers can include segments that are not explicitly supported by the Ariba Network EDI Implementation Guides, however, Ariba Network does not translate those segments. Ariba Network does not include data from those segments in the resulting cXML documents.

If Ariba Network encounters unsupported segments, it ignores those segments without issuing any warnings or errors. Suppliers are encouraged to use only the segments declared in the EDI Implementation Guides so that no data is lost.

Unsupported ANSI UOMs

X12 uses American National Standards Institute (ANSI) units of measure (UOM) codes, but Ariba Network does not support the entire list of codes. Do not use unsupported codes in ANSI X12 documents you send to Ariba Network. Ariba Network does not use them in ANSI X12 documents it sends to you.

There are two reasons why Ariba Network might not support a particular ANSI UOM code:

- The code has no direct translation to the United Nations Units of Measure (UNUOM) code table used by cXML.

For example, ANSI code DO (Dollars, U.S.) has no corresponding UNUOM code. Instead, use ANSI code M4 (Monetary Value). UNUOM also has code M4 with the same meaning.

Another example is ANSI code DH (Miles), which has no corresponding UNUOM code. Instead, use ANSI code 02 (Statute Mile), which has an appropriate match in UNUOM.

- The code does not yield a bidirectional translation between UNUOM and ANSI code systems. Legacy codes superseded by newer codes for compatibility do not have a clear 1:1 translation. In such cases, multiple codes in the same system are synonymous. Where two different but synonymous codes in one system represent the same code in another system, the closer match (often a matching code) is supported and the other is desupported. Supported codes must have a distinct 1:1 translation with its counterpart.

For more information, see the *Units of Measure Mapping for ANSI X12* document in the **EDI Documentation** section on the Help@Ariba website.

Index

A

- Accepted status 28
- Acknowledged status 28
- acknowledgments 20, 28
- administrator EDI 24
- ANSI ASC X12 EDI v004010 17
- ANSI UOM codes 57
- Applicability Statement 2 (AS2) routing method 33
- Application Sender ID (GS02) 26
- ARIBAEDI ID 24
- AS2 (Applicability Statement 2) routing method 33

B

- bidirectional HTTPS communication 35
- bidirectional interconnect 24

C

- catalog tester 27
- catalogs 27
- certificates, digital 34
- configuring your account 21
- contact element 53
- customer contact EDI administrator 24
- cXML contact element 53

D

- digital certificates 34
- Distinguished Encoding Rules (DER) format 34
- Document failed because FA has not been received 39
- document size 17
- documents
 - cXML OrderRequest 43
 - EDIFACT CONTRL 18, 51
 - EDIFACT DESADV 19
 - EDIFACT INVOIC 19
 - EDIFACT ORDERS 18, 50
 - transmission time 27
 - X12 810 19
 - X12 820 19
 - X12 850 18, 47
 - X12 855 18
 - X12 856 19
 - X12 997 18

E

- EDI
 - administrator 24
 - configuration 21
 - versions 17
- EDI Tester 29
- EDIFACT CTA/COM segments 54
- EDIFACT documents
 - CONTRL functional acknowledgment 51
 - CONTRL Syntax and Service Report Message 18
 - DESADV despatch advice 19
 - INVOIC invoice 19
 - ORDERS purchase order 18, 50
- EDIFACT RFF segments 55
- EDIINT AS2 routing 33–36
 - EDIINT AS2 ID 34
 - retry 35
 - server 35
 - server URL 34
- Export cXML command 31
- extrinsic data 31, 32, 39
- Extrinsic elements in invoices 55
- Extrinsics, standard 54

F

- Failed status 28
- firewalls 35
- functional acknowledgments 18, 20, 28

H

- Help@Ariba website 13
- Hypertext Transfer Protocol Secure (HTTPS) 33

I

- Inovis VAN 11, 24
- interchange IDs 26
- interchange size 17
- interconnect request 25
- interconnect type 24
- International Telecommunications Union (ITU) 34
- invoices 19

M

- map purchase order tax details to EDI 23

maximum interchange size 17
Message Disposition Notification (MDN) 33

O

order-routing status 28

P

port 443 35
Privacy-Enhanced Mail (PEM) format 34
purchase orders
 acknowledgments 18
 status 28
 X12 and EDIFACT 18

Q

Queued status 28

R

REF and RFF segments 55
remittance advice 19
requesting an interconnect 25
Resend command 27
resending purchase orders 35
Reverse Routing ID (UNB0203) 26
routing status 28

S

Secure Hash Algorithm 1 (SHA-1) 33
Secure/Multipurpose Internet Mail Extensions (S/MIME) 33
sending, digital certificate to Ariba Network 34
Sent status 28
ship notice/manifest 19
size of interchanges 17
standard Ariba Network Extrinsic 54
Standard Exchange Format (SEF) files 13
standards for EDI 17
status of orders 28
STS. *See* Supplier Technical Support
Supplier Technical Support (STS) 14, 16
syntax version 17

T

TaxDetail element 23
TCP port 443 35
test 29
test account limitations 29
test accounts 21, 27
test catalogs 27
test/production indicators 27
time to transmit documents 27

transmission time 27
trusted Certificate Authority (CA) 34

U

UN EDIFACT version D98A 17
UNUOM codes 57
UOM codes 57

V

VAN Inovis 11, 24
versions of EDI 17

W

web server 35
web server certificate
 installing 35

X

X.509 V3 Class 3 signed digital certificate 34
X12 documents
 810 invoice 19
 820 remittance advice 19
 850 purchase order 18, 47
 855 purchase order acknowledgment 18
 856 ship notice/manifest 19
 997 functional acknowledgment 18, 49
X12 PER segments 54
X12 REF segments 55