QAD

QAD Enterprise Applications
Standard & Enterprise Editions

Training Guide
EDI eCommerce

Contents

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About This Course

Course Description

QAD designed this course to give implementers and operators of EDI eCommerce an understanding of the product.

This course includes:

- Import/export set up, processing logic, and test principles for implementers
- Import/export set up, execution, and analysis for operators

Activities and exercises throughout the course allow students to practice key concepts and processes.

Course Objectives

By the end of this class, students will understand:

- Mapping input data fields to QAD Enterprise Applications data fields
- Handling record sets (header/detail combinations)
- Handling trading partner and record control data
- Processing control records
- Configuring trading partners
- Handling the same transaction from multiple partners
- Saving non QAD Enterprise Applications data needed in export transactions
- Using the Trading Partner Library

Audience

Implementers and operators who have a need to set up and use EDI eCommerce

Prerequisites

- General familiarity of Electronic Data Interchange (EDI) concepts
- Knowledge of QAD Enterprise Applications is helpful

Course Credit and Scheduling

This course is designed to be taught in 4 days.

QAD Web Resources

From QAD's main site, you can access QAD's Learning or Support sites.

http://www.qad.com/

Introduction to EDI eCommerce

Course Overview

Course Overview

- Introduction to EDI eCommerce
- Business Considerations
- Set up EDI eCommerce
- Process EDI eCommerce

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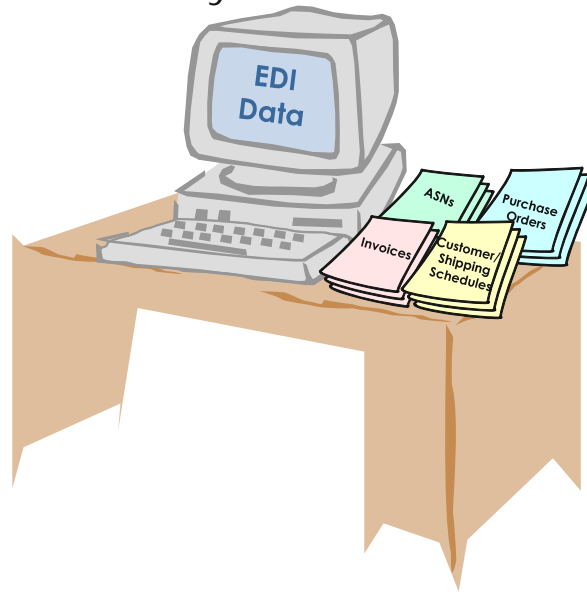
EDI eCommerce

EDI eCommerce is a table-driven, global EDI message conversion system that allows a common software solution to seamlessly support a wide range of trading partners, translator products (communication subsystems) and document types, across a variety of industries and geographies.

In fact, QAD believes that EDI eCommerce is functionally superior to any other ERP-based EDI solution available on the market today.

As an alternative to the traditional hard-coded EDI solutions, the EDI eCommerce architecture places the processing logic, EDI document specifications, and trading partner specifications into database tables that can be modified at the user interface level with a set of maintenance programs.

This table-driven design translates into a dramatically lower total cost of ownership. Although actual cost savings will depend on a variety of factors, many of which are unique to each installation, QAD expects that implementation and/or maintenance costs can be50% or greater when compared to other hard-coded, integration solutions.

Electronic Data Interchange (EDI)
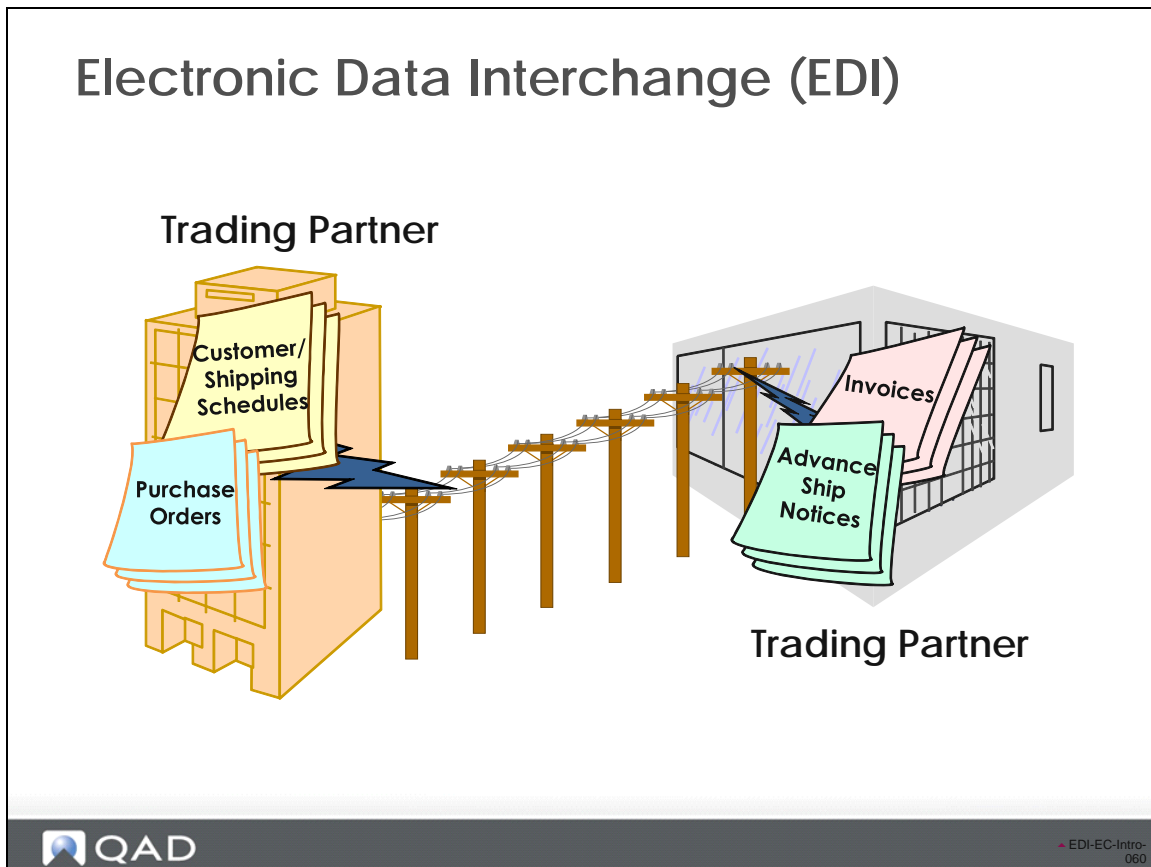
EDI is the hands-off exchange of computer readable, standardized documents between business trading partners. There exists in the EDI world many varying protocols and standards which users must be able to accommodate.

The most commonly used EDI standards follow.

EDI Standards Supported

EDI Standards Supported

- ## ANSI (ASC X12)
    - American National Standards Institute
- ## EDIFACT
    - Electronic Data Interchange for Administration, Commerce, and Transport
- ## ODETTE
    - Organization for Data Exchange Through Teletransmission in Europe
- ## VDA
    - Verband der Automobilindustrie e.V.

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These are the current standards supported by EDI eCommerce. The product is flexible enough to support other global standards. Future development activity will likely involve enabling of these other standards.

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Available Gateways

Available Gateways

- Purchase Orders (in and out)
  - Grocery (UCS) enabled
- PO Acknowledgment (in and out)
- PO Change (in)
- Schedules (in and out)
  - Planning, Shipping, and Sequenced
- Advance Shipping Notice (in and out)
- Invoice (out)
  - Grocery (UCS) enabled
- Remittance Advice (in)
- Inventory Advice (in)

- Distributed Order Receipt (in)
- Sales Order Shipment (in)
- Consignment Usage (in and out)
- Self-Billing (in and out)
- Generic Gateway (in and out)

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Product Commentary

A Single Worldwide EDI Interface

- Supportable by QAD, Partners, and Expert Users
- Fully Configurable
  - A powerful tool set
- Standing Team
  - Provides ongoing development
- Good customer/partner reaction and interaction

"Better than Oracle, equivalent or better than SAP"
Quote from a top global EDI engine supplier

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Product Value Elements

Product Value Elements

- Customer EDI control
- Reduced implementation and maintenance costs
- Flexibility in EDI translators and service partners
- Continually added Gateways
- Global deployment
- Forward migration compatibility with QAD Enterprise Applications
- A standing EDI Team
  - Delivering continual enhancements
- Support migrating customers

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Terminology

EDI eCommerce Terminology

- Standards Neutral Format (SNF)
- Document Type
- Inbound and Outbound
- Records and Fields
- EC Subsystem (Translator)
- Data Repositories
- Data Definitions
- Exchange-Side
- QAD Enterprise Applications-Side

- Gateways
- Turnaround Data
- Transformation Mapping
- Tokens
- Trading Partner

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EDI eCommerce Basic Architecture
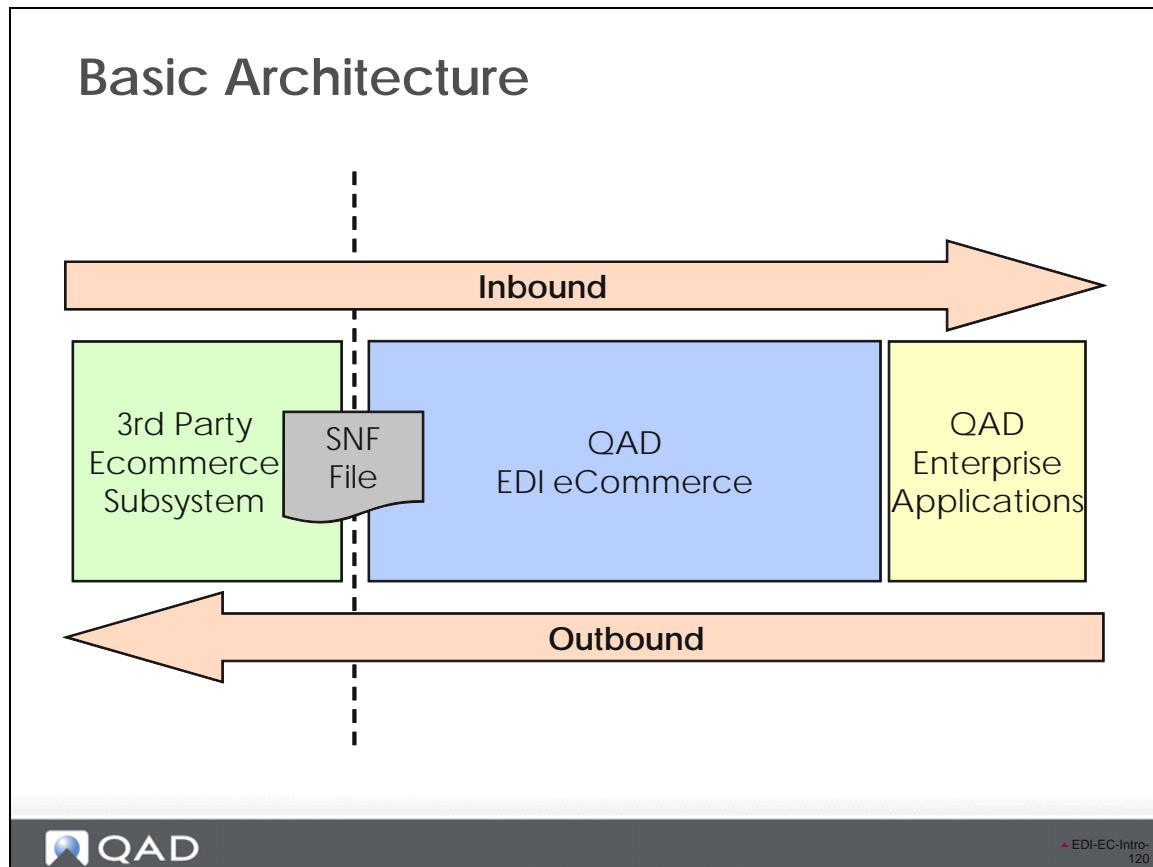
Basic Overview of Product Plus EC Subsystem

There are three major EDI processing operations:

1   The inbound process loads EDI data from the sub-system (communication) layer into an EDI eCommerce database. The outbound process unloads data into the sub-system (communication) layer.

2   The Transformation process converts and modifies data between an EDI-centric format into the QAD Enterprise Applications format.

3   For inbound documents, a transfer process then extracts the EDI transformed documents, calls the appropriate gateway program that then updates into the system databases. The reverse process is followed for outbound data.

EC Subsystem: What is it?

EC subsystems send and receive EDI data files containing documents used by QAD Enterprise Applications. Among other functions, they act as a "post office" to pick up and deliver EDI data between trading partners.

They translate EDI data to and from Standards Neutral Format (SNF), designed by QAD to create subsystem and EDI standard independence.

EC subsystems are sometimes called third-party EDI translator communications packages.

EC Subsystem: What does it do?

EC subsystems send and receive EDI data files containing documents used by QAD Enterprise Applications.

Work Flow Overview
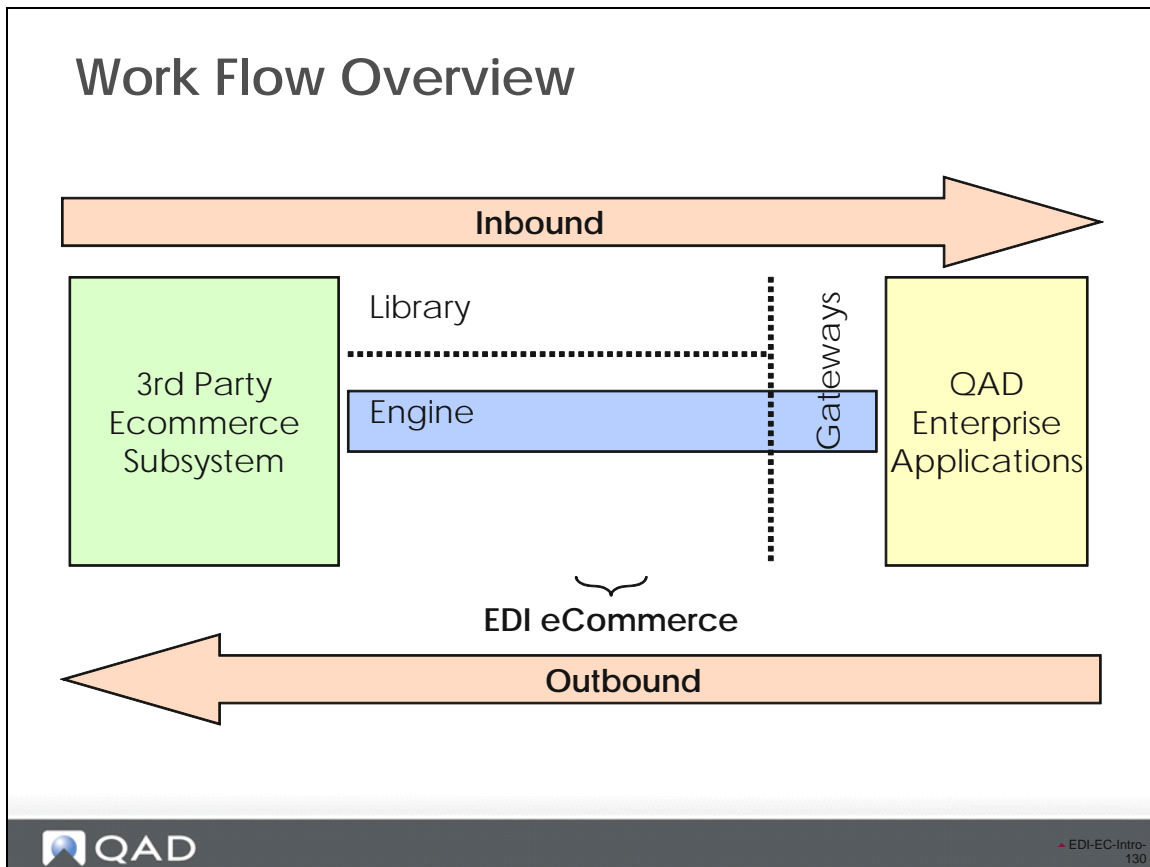
The 3 major components of the EDI eCommerce product are the Library, Engine, and Gateways.

Receipt of Raw File
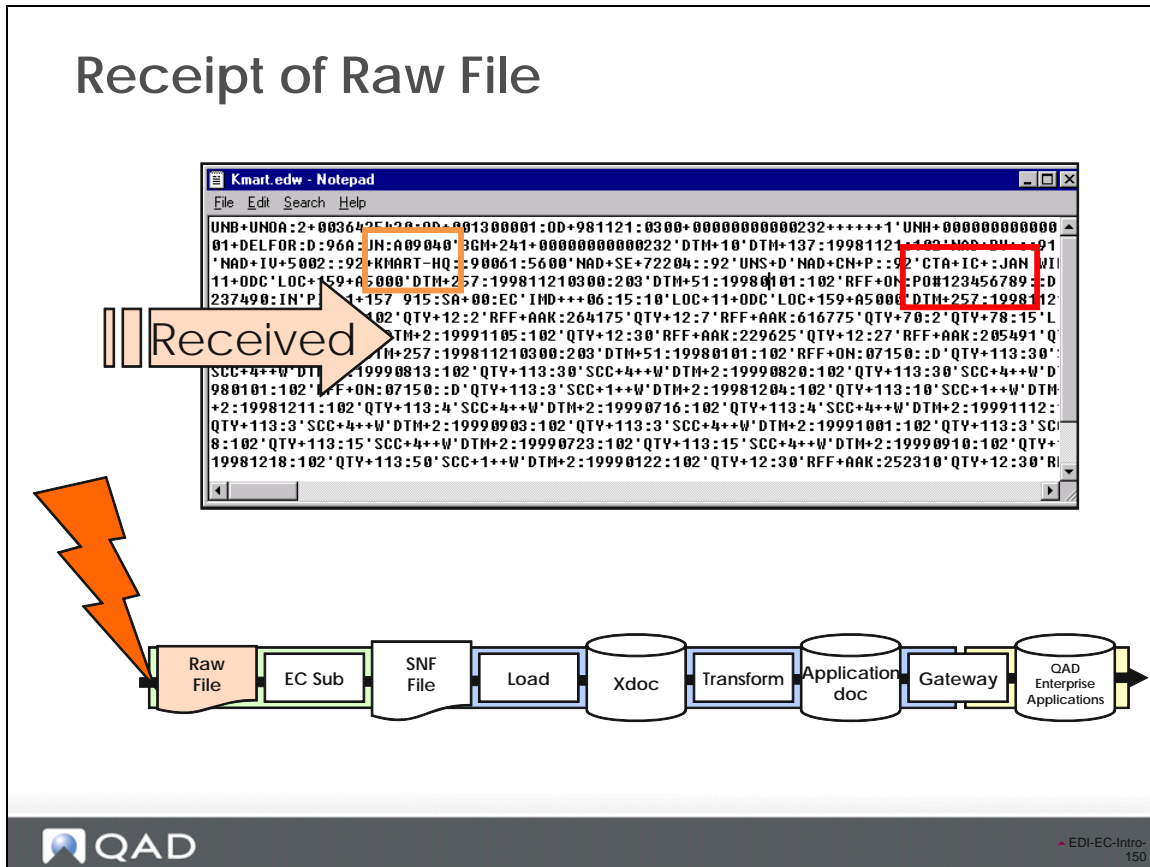
This is an example of a raw EDI formatted file with 2 of the data elements highlighted for tracking purposes through subsequent processing steps.

Mapping to SNF
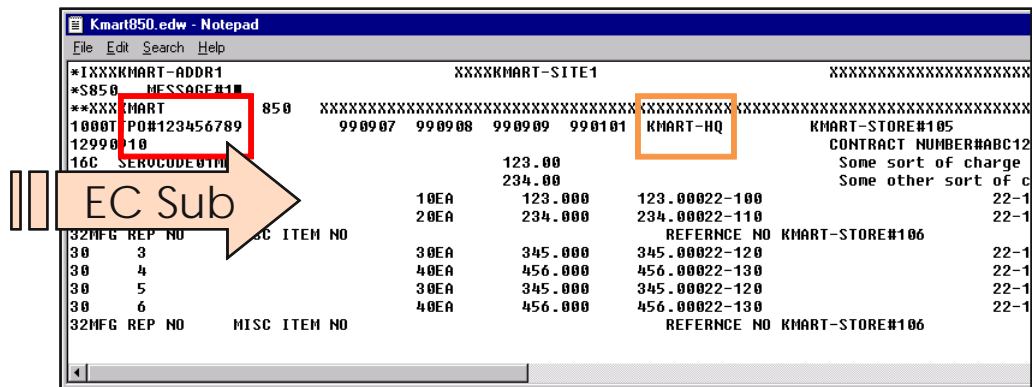
Load/Unload

- Loads EDI SNF files from the EC subsystem into the Exchange File Repository (inbound)
- Unloads data from the Exchange File Repository into the EC susbsystem (outbound)

Load to Exchange File

Transform to QAD Enterprise Applications

Transform

- Applies trading partner-specific logic to map fields appropriately
- Other key product features include:
  - Callable functions for transforming data
  - A cross-reference capability when a customer calls something by a different name
  - A validation process to insure compliance with business rules
  - Session process reporting / error reporting
  - A Turnaround data repository for trading partner data not stored in QAD Enterprise Applications

Other key product features include the following:

- Callable functions for transforming data, displaying error and warning messages, lookups, etc.
- A data naming cross-reference capability
- A validation process to ensure compliance with business rules
- Session process reporting and error reporting
- A Turnaround data repository for trading partner data not stored in QAD Enterprise Applications

Inbound

- Transforms documents from standards neutral exchange file format into QAD Enterprise Applications format

Outbound

- Transforms documents from QAD Enterprise Applications format into standards neutral exchange file format

Gateway Transfer to QAD Enterprise Applications

Gateway Transfer

Definition: A gateway is a Progress application program that moves data from QAD Enterprise Applications (outbound) or into QAD Enterprise Applications (inbound), obeying application, business and database integrity rules.

Inbound

- Extracts transformed documents from Application Repository
  - Calls appropriate gateway program to update QAD Enterprise Applications database
  - Saves turnaround data

Outbound

- Selects a gateway program
  - QAD Enterprise Applications data placed into Application Repository
  - Pulls turnaround data

Warning Though possible, do not run multiple concurrent EDI eCommerce sessions because there are no safeguards against document double processing.

Course Overview

Course Overview

✓ Introduction to EDI eCommerce

• Business Considerations

• Set up EDI eCommerce

• Process EDI eCommerce

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Chapter 2

Business Considerations

Business Considerations

In this section you learn how to:

- **Identify key business considerations before setting up EDI eCommerce**
- Set up EDI eCommerce in QAD Enterprise Applications
- Process EDI eCommerce in QAD Enterprise Applications

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Business Considerations

Business Considerations

- EC Subsystem
- Standards
- Electronic Documents
- Trading Partners
- Value Added Networks (VANs)
- Installation Checklist
- Multi-Database
- Distributed Operations
- Training

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This chapter is intended to locate in one place the most common business considerations relevant to the implementation of EDI eCommerce. By reviewing and discussing these issues as a class, students will gain a better appreciation for the complexities of implementing and managing EDI transactions. EDI is not simple, but EDI eCommerce provides a flexible tool set for the future.

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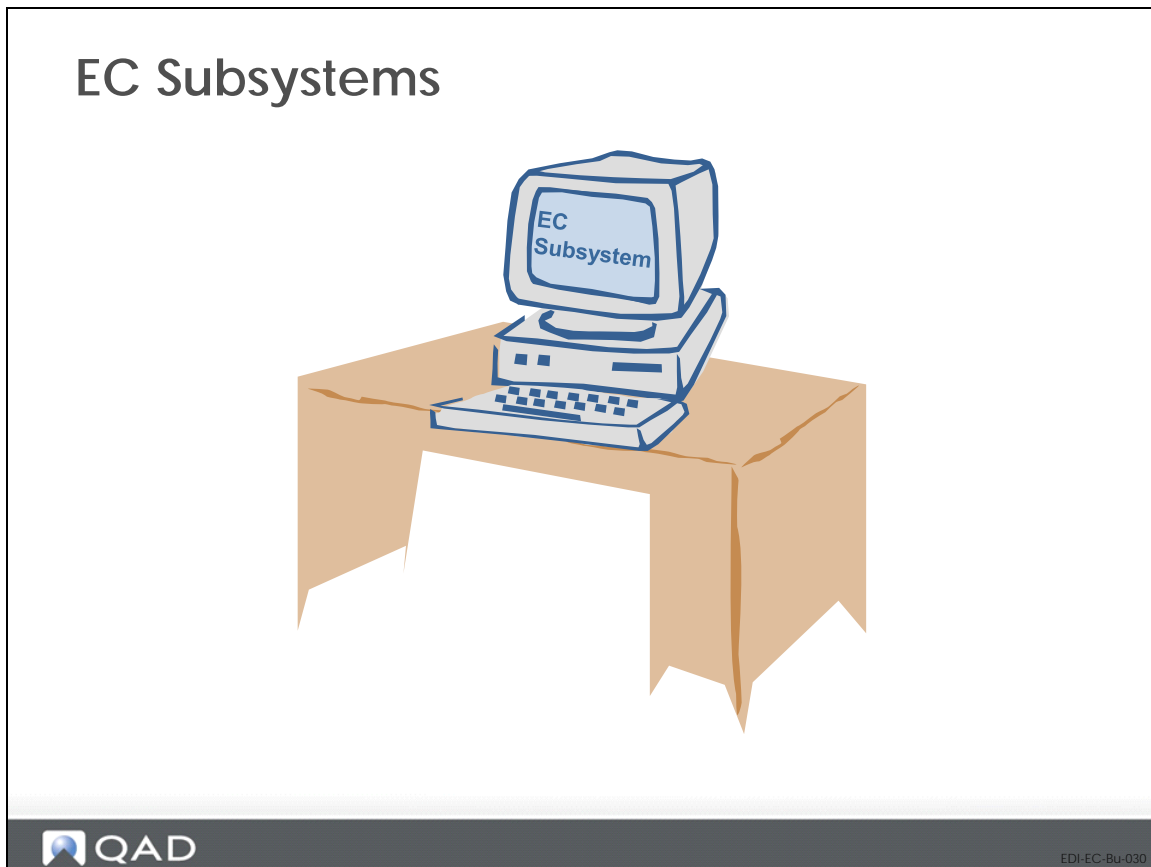
EC Subsystem

EC Subsystems allow seasoned users to develop communications between their trading partners and themselves.

Standards

Standards

- ANSI (ASC X12)
- EDIFACT
- ODETTE
- VDA

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Standards allow you to communicate using a standard method and protocol.

Electronic Documents
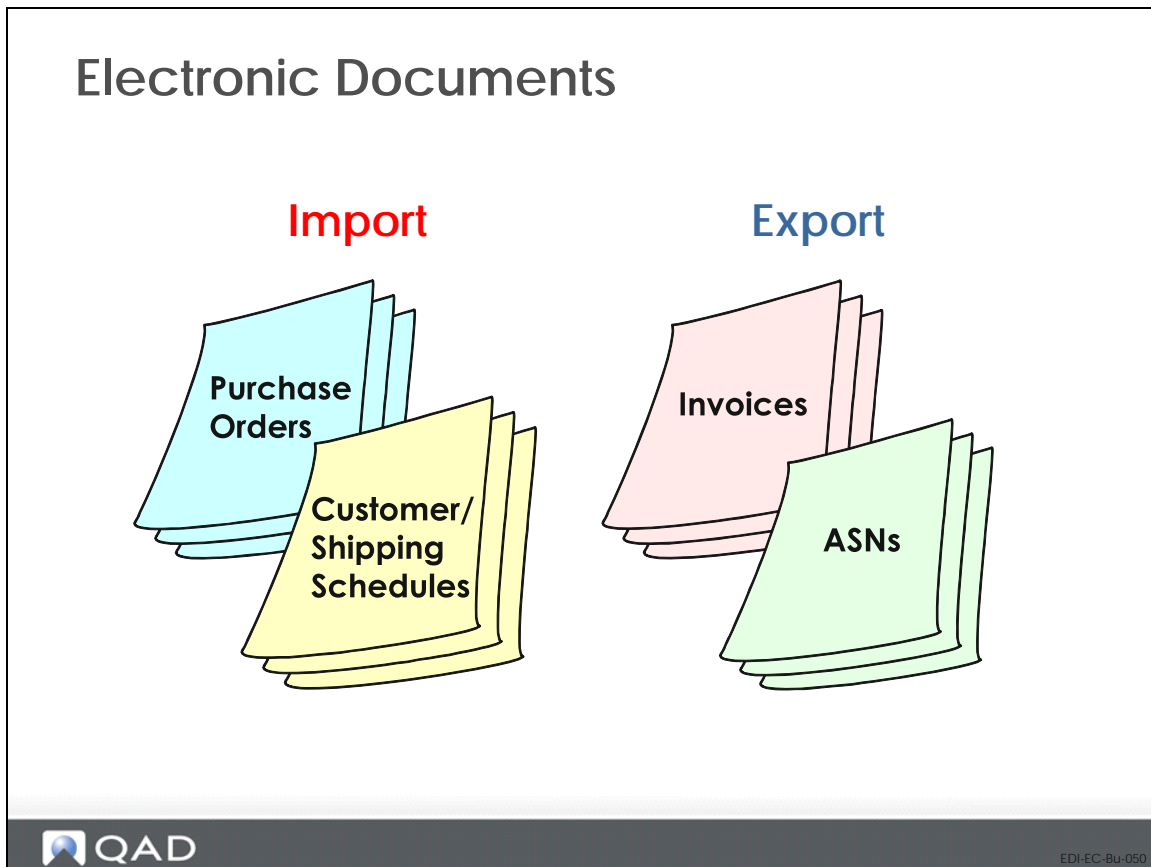
Electronic documents allow you to eliminate wasted time filing and verifying paper trails as well as data entry errors.

Trading Partners
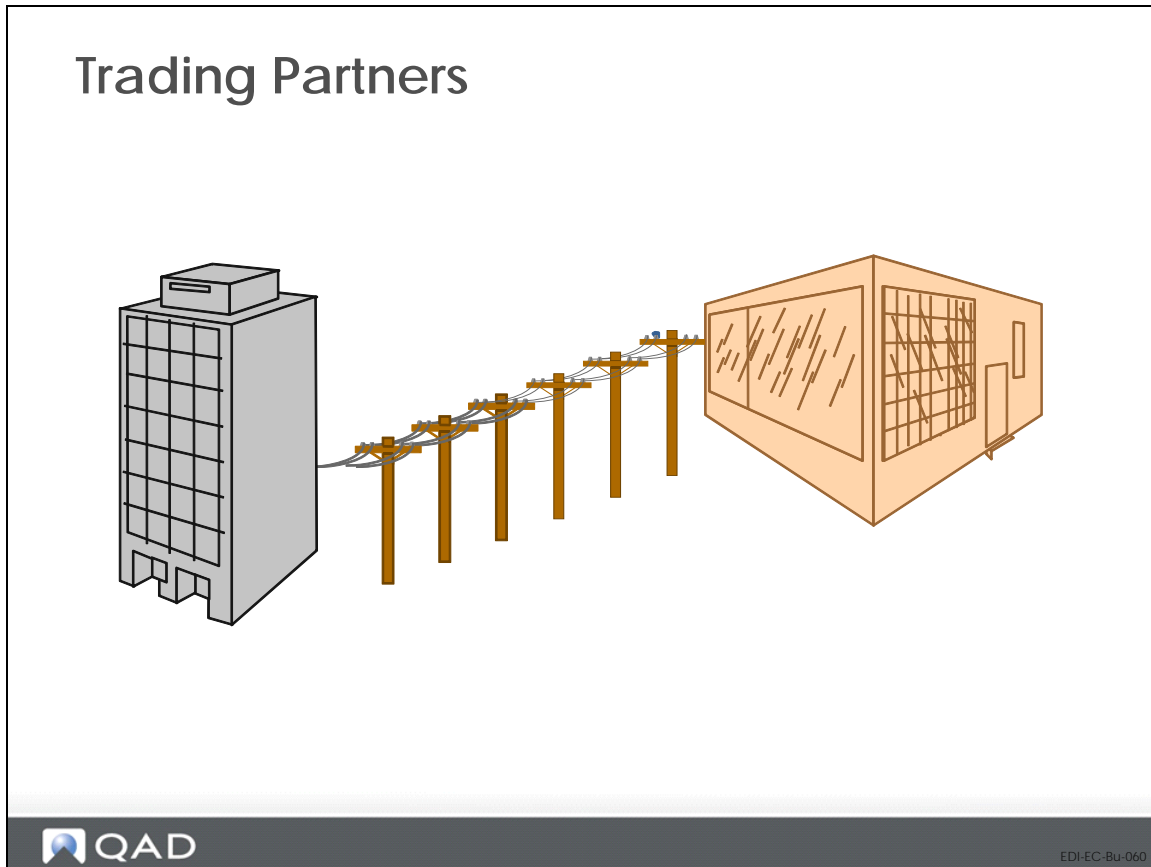
Trading partners allow you to communicate business transactions for specific customers.

Value Added Networks (VANs)
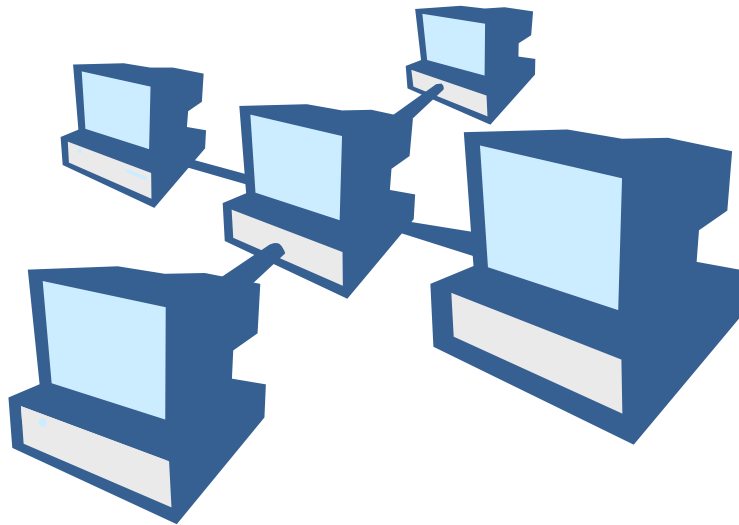
VANs allow you to communicate with trading partners without incurring the cost of large storage space.

Installation Checklists

- Multi-Database
  - Multi-Database functionality is available… load 850's into central database and orders will appear at respective databases depending upon the database identified in site maintenance.
- Business issues
- Trading partner specifics
- Distributed operations
  - EMT functionality in multi-database scenario… DRP functionality
- Training

Review

Review

- Processes and Procedures
- Reporting Requirements
- Customer Expectations
- Product Configuration

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Chapter 3

Set Up EDI eCommerce

Setup EDI eCommerce

In this section you learn how to:

- Identify key business considerations before setting up EDI eCommerce
- **Set up EDI eCommerce in QAD Enterprise Applications**
- Process EDI eCommerce in QAD Enterprise Applications

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EDI eCommerce: A Data Integration Tool Set

EDI eCommerce: A Data Integration Tool Set
- Document Repositories
  - Exchange Documents
  - Application Documents
  - Turnaround Data
- Table-Driven Tool Set
  - Table Definitions
  - Exchange File Document Definitions
  - Transformation Definitions
  - Trading Partner Specifications
  - Implementation-Specific Document Definitions
  - Functions
- Import/Export Process Control Functions

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Repositories

- Store data during processing
  - Exchange file data repository
  - Application data repository
  - Turnaround data repository

EC Subsystem

EC Subsystem

- Data communications
- Trading partner documents
  - Mapped to/from exchange file formats
- Document acknowledgement, reconciliation, archiving

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- Translates EDI data to and from standards neutral format (SNF)
- Third-party EDI translator communications package
  - Flat file transfer

EDI eCommerce Architecture Concepts
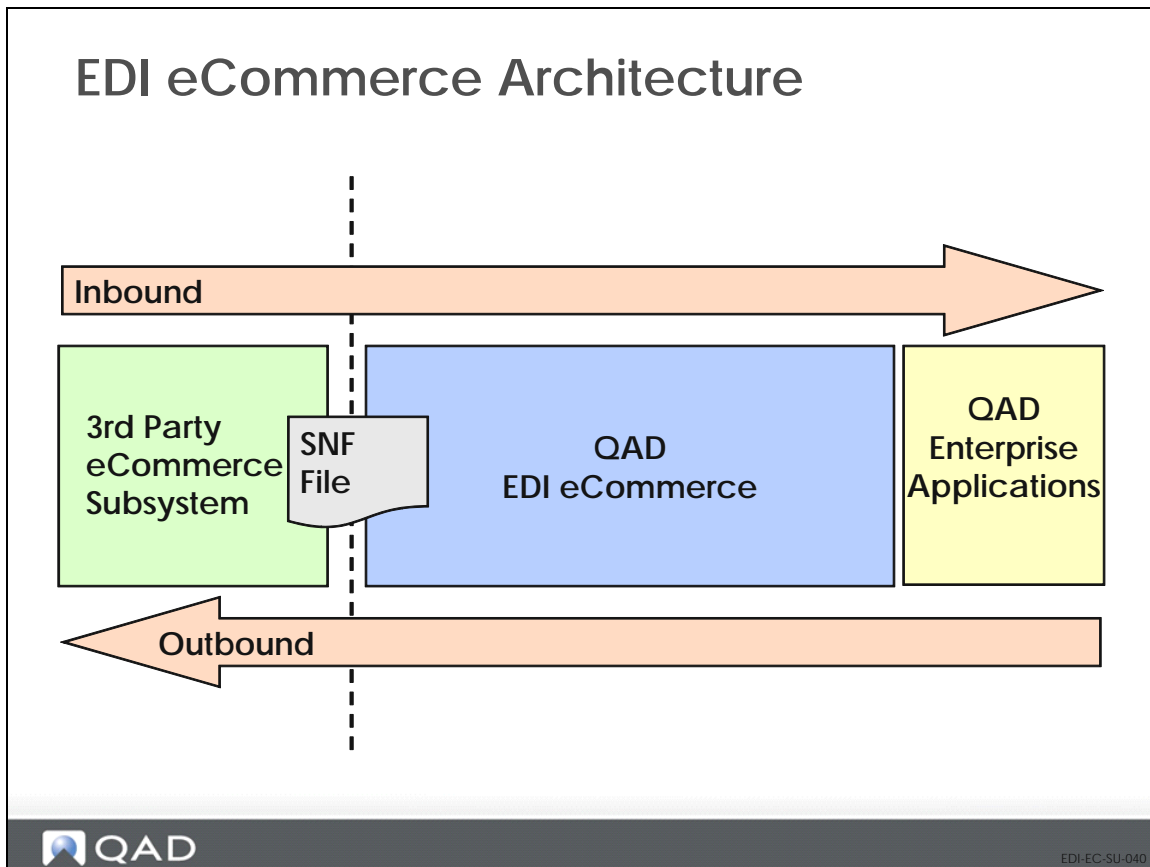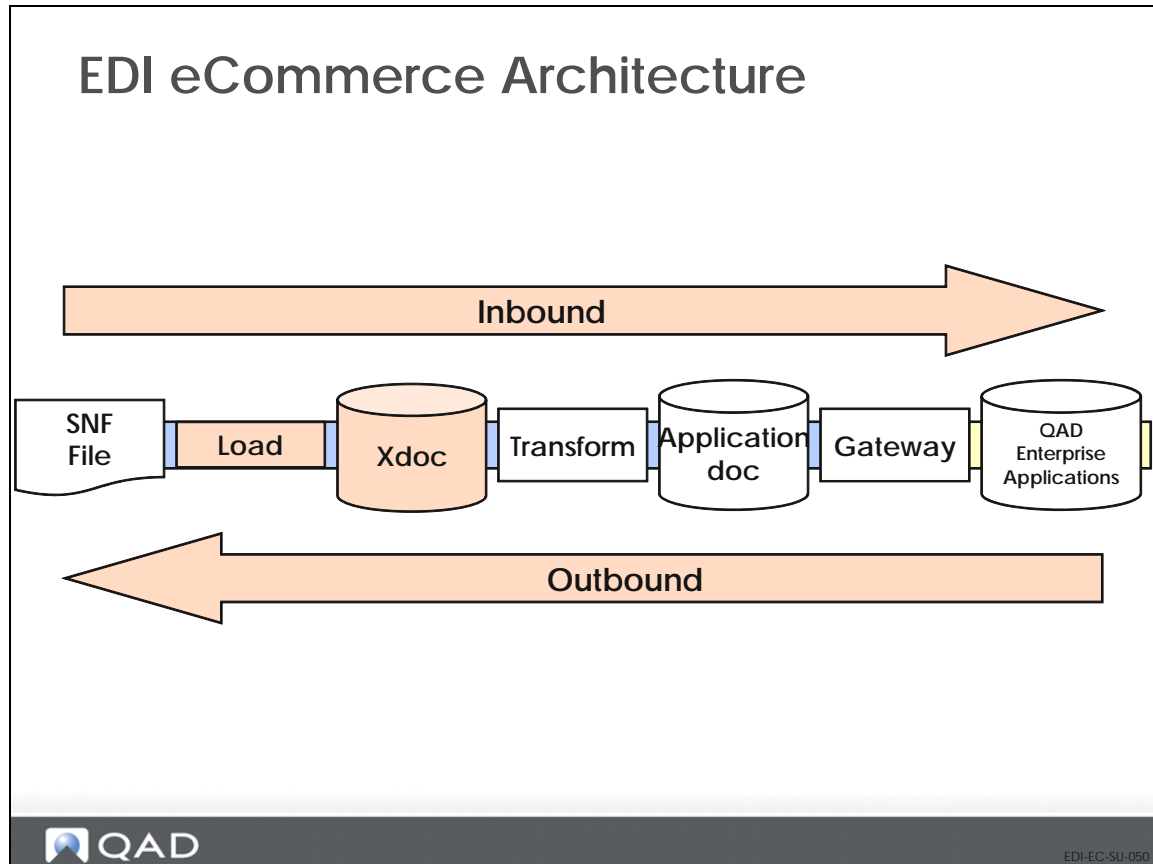
The EDI eCommerce Module converts EDI messages into QAD Enterprise Applications records, or vice versa. This conversion can be simple or very complex:

- It can be as simple as copying data from one field to another
- It can be as complex as mapping multiple input records and fields to a different set of records and fields

However, whether simple or complex, EDI eCommerce accomplishes the conversion in 3 steps. Thus, EDI eCommerce handles all conversions within the same simple architecture.

Inbound Process

In the Inbound process, the 3 steps are:

1 Load from a flat file.

2 Convert the data from EDI-centric to QAD Enterprise Applications-centric format.

3 Write to the QAD Enterprise Applications database.

Outbound Process

In the Outbound process, the steps are reversed:

1   Read from the QAD Enterprise Applications database.

2   Convert the data from QAD Enterprise Applications-centric to the required EDI-centric formats.

3   Unload the data to a flat file.

Read/Write Flat Files

- The EDI record input or output step is called "Load/Unload"

Data Conversion

- The conversion step is called "Transformation Processing"

Database Access

- QAD Enterprise Applications database access is called "Gateway Processing"

Inbound Process in Detail

Let's look at the Inbound process.

Load

Load prepares for Transformation by loading the EDI-centric records into a table called the "Exchange Repository".

This load, from a flat file to the Repository, processes the file control records and saves control data (such as trading partner ID and destination site code) for use in the Transformation process.

No conversion occurs in Load processing, but all control information is captured so that it is readily available wherever needed in the Transformation.

Load processing thus prepares for Transformation simplifying the actual Transformation logic.

Transformation

The heart of EDI eCommerce processing is Transformation. All the data and record structure conversions occur in the Transformation step. Processing control records and storage of non-QAD Enterprise Applications data for later use occur outside of Transformation. The focus of Transformation is the actual format conversions of the individual data fields and record structures.

Gateway Processing

Gateway Processing writes the "transformed" data to the QAD Enterprise Applications database. Transformed data is stored in a table called the "Application Repository" by the Transformation process.

Gateway Processing reads the data from the Application Repository and creates records in the QAD Enterprise Applications database. Again, no conversion occurs in Gateway Processing.

Outbound Process in Detail

The Outbound process is the reverse of the Inbound process.

The Gateway reads data from the QAD Enterprise Applications database, Transformation writes the Exchange File Repository, and the Unload process writes the outbound data into a transmission group.

Summary

In summary, EDI eCommerce has a simple architecture, which uses 3 modular processes to accomplish any data interchange from simple to very complex:

1 Load/Unload

2 Transformation

3 Gateway Processing

Execution

Import or Export of a set of documents is a one-step task.

- Importing is done in Document Import (35.1)
- Exporting is done by type of document:
  - Shipment ASN Export (35.4.1)
  - Consignment Usage Export (35.4.2)
  - Invoice Export (35.4.3)
  - Purchase Order Acknowledgment (35.4.5)
  - Supplier Shipping Schedule (35.4.8)
  - Purchase Order Export (35.4.9)
  - Supplier Self Billing Export (35.4.11)
  - Inventory Cycle Count Export (35.4.13)
  - Packing List Export (35.4.15)
  - Distribution Order Packing List Export (35.4.16)
  - Price Catalog Export (35.4.17)
  - Warehouse Shipment Advise (35.4.18)
  - Generic Gateway Export (35.4.20)
- Status and Error Reporting
  - Exchange Doc Status Report (35.9.2)
  - Application Doc Status Report (35.9.9)
  - Exchange-Application Xref Report (35.9.14)

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Setup

The 3 modular processes that combine to Import or Export EDI documents are independent of each other. Each process is set up separately:

Exchange File Processing

1 EC Subsystem Definition Maintenance (35.3.1)

2 EC Subsystem/Exchange Maintenance (35.13.3)

3 Trading Partner Maintenance (35.13.7)

4 Trading Partner Parameter Maintenance (35.13.10)

5 Transmission Group Maintenance (35.13.13)

6 Exchange Definition Maintenance (35.15.6)

Transformation

1 Transformation Definition Maintenance (35.15.17)

2 eCommerce Function Maintenance (35.15.21)

Gateway Processing

1 Implementation Definition Maintenance (35.15.13)

2 Application Definition Maintenance (35.15.10)

Modular Character of Processes

The modular character of the processes enables any "setup" to be reused. A new trading partner relationship is typically implemented by using "copy" functions to create the basic implementation from existing processes. The unique requirements of the relationship are implemented by making minor modifications to the "copied" setups.

- The copy functions are:
    - Exchange Definition Copy (35.15.1)
    - Application Definition Copy (35.15.2)
    - Implementation Definition Copy (35.15.3)
    - Transformation Definition Copy (35.17.1)
    - eCommerce Function Copy (35.17.2)

Note You can also create document definitions using Create eCommerce Doc Definitions (35.15.4) from a different type of document definition; a temp-table definition in Progress syntax from either Progress source code (.p or .i file) or a .txt file; an XML document (.xml file); or an XSD document (.xsd file).

EDI eCommerce Table-Based Design

Setting Up EDI eCommerce

EDI eCommerce Setup

- EC Subsystem Definition Maintenance
- EC Number Range Management
- eCommerce Control
- Exchange Definition Maintenance
- EC Subsystem/Exchange Maintenance
- Application Definition Maintenance
- Implementation Definition Maintenance
- Transformation Definition Maintenance
- Trading Partner Maintenance
- Transmission Group Maintenance

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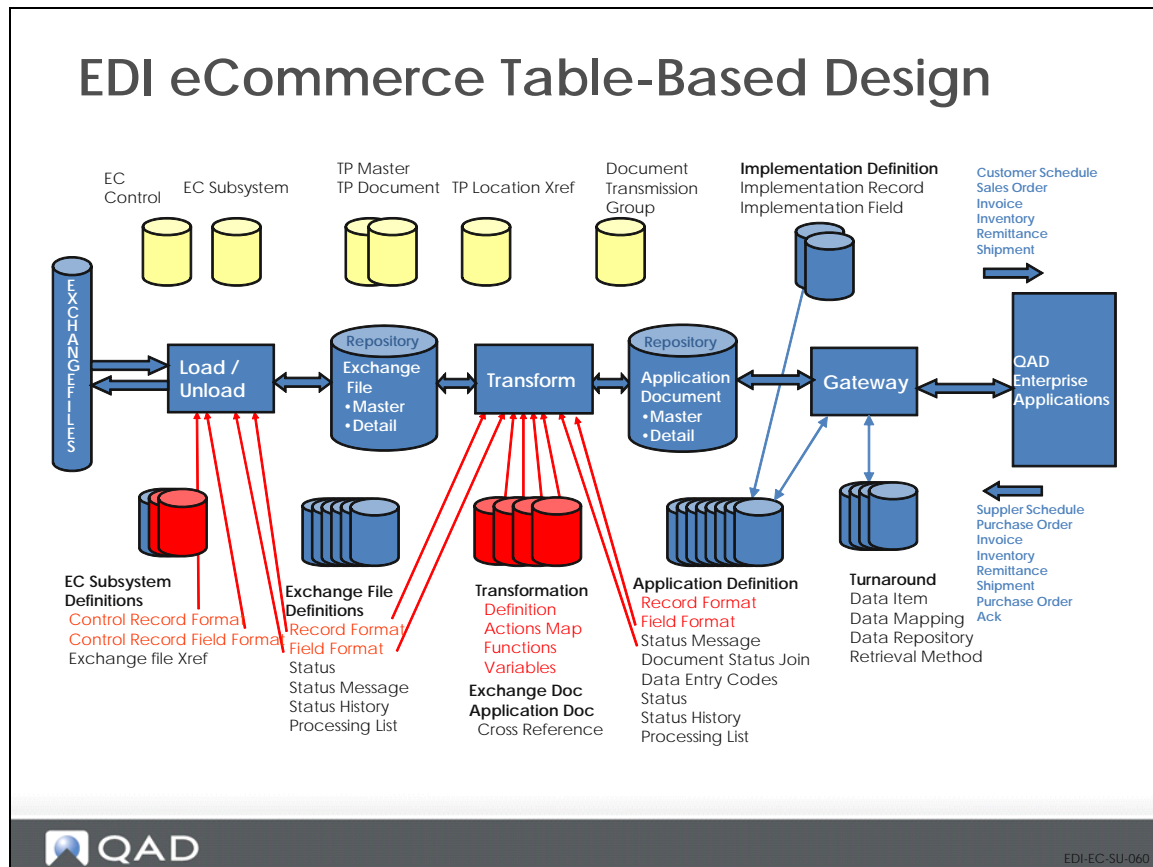
This chapter is for system implementers and EDI specialists who set up EDI eCommerce.

The setup procedures assume that you have already done a standard implementation and have defined common data, such as items, customers, and sites in the QAD Enterprise Applications database.

The complexity of setting up and implementing EDI eCommerce depends on a company's specific needs. If a company usually exchanges standard types of EDI documents with trading partners, then the QAD-developed transformation mappings available with the Trading Partner Library will probably meet that company's needs with a minimum of customization.

Keep in mind, however, that the powerful implementation tools of EDI eCommerce enable companies to perform setup tasks of much greater complexity.

The illustration above is a suggested sequence for setting up master files for EDI eCommerce. It is based on the information that flows from one master file to another and the prerequisites that need to be completed before setting up a file.

Document Exchange Requirements

A significant step in the implementation process is defining to QAD Enterprise Applications the document exchange requirements of an external EC subsystem. During setup, you do this in terms of several elements:

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Control Record Structures and Formats

- Used by the EC subsystem

Data Structure Definitions of SNF Exchange Files

- Communicated between the EC subsystem and QAD Enterprise Applications

Transformation Mappings

- Describe to QAD Enterprise Applications the actions needed to transform data from one system's specifications to the other's
  - If these actions require functions not provided with EDI eCommerce, implementers can define their own functions using the appropriate menu-level program

Defining EC Subsystems

EDI eCommerce Setup

- **EC Subsystem Definition Maintenance**
- EC Number Range Management
- eCommerce Control
- Exchange Definition Maintenance
- EC Subsystem/Exchange Maintenance
- Application Definition Maintenance
- Implementation Definition Maintenance
- Transformation Definition Maintenance
- Trading Partner Maintenance
- Transmission Group Maintenance

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EC Subsystems

EC Subsystems

- Actis
- GE Exchange
- Peregrine STX (Trusted Link)
- Perwill
- Radley's Redi
- Seeburger
- Sterling's Gentran
- Tie-Commerce (formerly St. Paul's Software)
- Trinary Edi-windows
- Others

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Schematic of an EDI Transmission

Schematic of an EDI Transmission
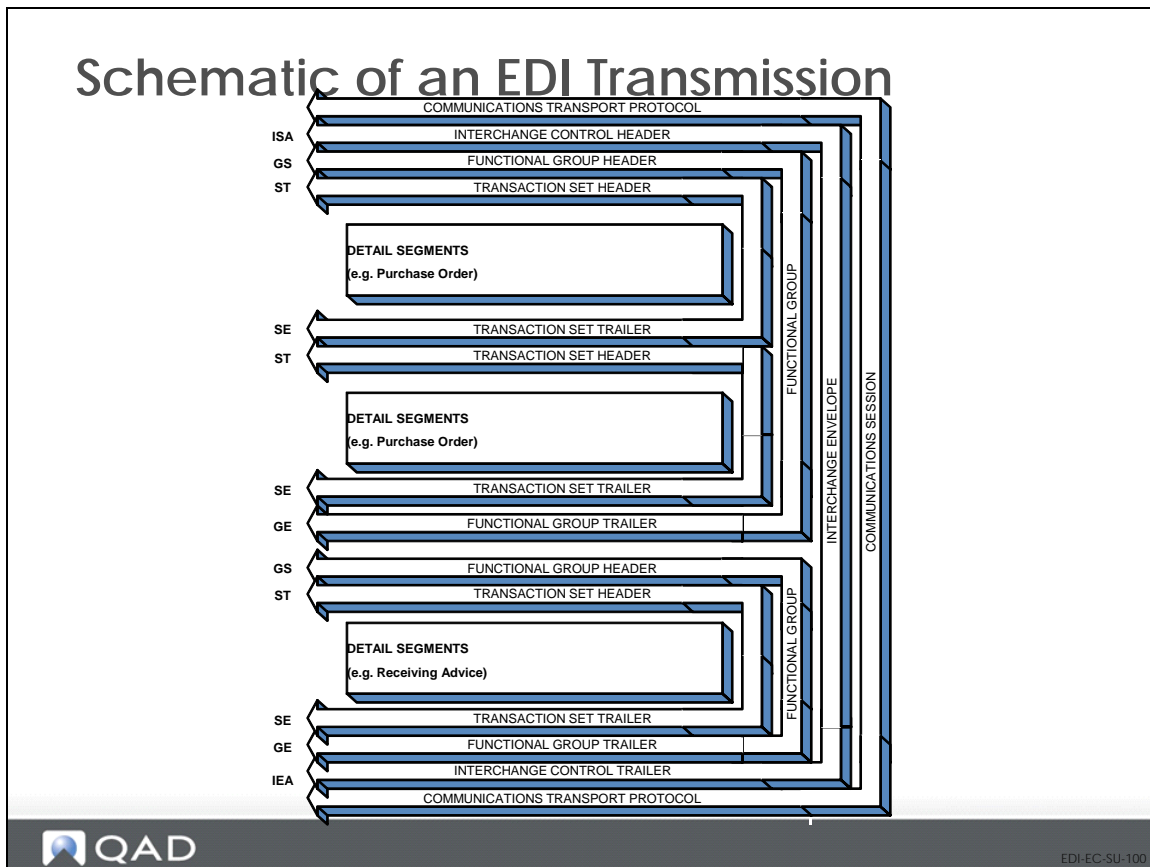
EC Subsystem Definition Maintenance (35.13.1): Basic Information and Control Records

Use EC Subsystem Definition Maintenance to define the format and content of the control records exchanged between an EC subsystem and QAD Enterprise Applications. The values you enter must correspond to those used in the SNF file by the EC subsystem you are defining.

The program consists of three frames. Use the first frame to define basic EC subsystem data.

EC Subsystem Data Frame

Create a separate EC Subsystem Definition Maintenance record for each direction—inbound and outbound. The combination of subsystem and direction is a unique identifier, so you can use the same subsystem name for both.

Subsystem. Enter up to 20 characters to identify an EC subsystem that exchanges data with your system. Use any name that makes the subsystem easy to identify. For example, if you use the same subsystem for both imports and exports, you might add the suffix "In" or "Out" to the end of the subsystem name.

Format. Specify whether the fields in the records used by the EC subsystem are fixed or variable lengths. Enter a question mark (?) to indicate XML format.

Field Delimiter. If you specify variable-length fields for this EC subsystem, enter the ASCII code for the character the EC subsystem uses to separate fields.

Record Code Length. Enter the number of characters the EC subsystem uses to indicate the type of record it is sending. This value must be between 1 and 20.

Record Code Position. Enter the number of the character position where the record code begins.

Enter zero to indicate that the record code is in the last position in the document.

Quote Character. Enter the ASCII code for the quote character used by the EC subsystem. If no quote character is required, enter zero.

File Extension. Enter the three-character file extension that the EC subsystem uses to identify its inbound files. For outbound files exported by your system, the system appends this extension to identify the files to the EC subsystem. The name of the file is based on data you define in Transmission Group Maint.

Additionally, the load function uses this extension to determine which EC subsystem definition to use for interpreting control records.

Remote Host Name. If this EC subsystem runs automated activities on a host computer, enter the name of that host computer. For example, you might run an e-mail program on this system to process messages containing exported files.

To specify the program to be run on the remote host, use the Processing Program field in the Transmission Group record for the transmission group that accesses this host.

Logfile Extension. If the computer specified in Remote Host Name creates a log file related to its processing activities, enter its file extension.

Logfile Directory. If the computer specified in Remote Host Name creates a log file related to its processing activities, enter the directory that contains the log file.

Process Log Directory. Enter the complete path to the directory where the system creates log files when processing documents using this subsystem. The system verifies that this is a valid directory. This defaults from eCommerce Control, if a value is specified.

Process log files can be used for two purposes:

- As a record of what took place during a processing session, including warning and error messages.
- As source information for system-generated e-mail messages. When processing errors occur, the system automatically notifies the user by adding the process log file to an e-mail message, provided that e-mail system and address information is defined in User Maintenance. Additionally, it sends status information from the log to other e-mail addresses specified for individual location cross-reference records in Trading Partner Maintenance.

Unless it is blank, the subsystem definition value overrides the eCommerce Control value. If both are blank, logging is disabled, and process control functions do not create permanent log files. Instead, the system creates temporary log files in the user's startup directory. After sending process status e-mail messages, the system deletes the temporary logs.

Direction. Specify whether this EC subsystem definition is for inbound or outbound records. In eCommerce, direction is always relative to your system—inbound for imports and outbound for exports.

Each EC subsystem must have separate definitions for inbound and outbound records.

Application. Enter a code representing the application to which this subsystem definition applies. The default is EDI.

Source Code Page. Optionally, specify the code page required by inbound files. This field defaults from eCommerce Control.

During import processing, the system converts the data to the system code page using the specified code page.

This field is not validated. Be sure that the value you enter is included in the Progress file `DLC/convmap.cp`. Otherwise, the conversion program returns an error.

Parsing Program. For an inbound subsystem definition, optionally specify the Progress program name of a procedure that runs before the system attempts to load the imported document.

A primary use of this field is to specify a program that sets default token values in situations where the inbound document does not provide such values.

Example When you import bank statements for use by QAD Financials, the inbound document does not provide values required for the control record to set the tokens. Parsing Program can reference a program that rewrites the incoming document to an SNF file that provides a record code on each line. When it reads this file, the system can use these record identifiers to correctly interpret the document so that it loads without errors.

Control Records

Use the second frame to define the control records for this EC subsystem.

Seq. Seq. Enter a sequence number identifying the order in which control records are received from or sent to the EC subsystem.

Record Name. Enter the name of this control record.

Requirement. Specify whether this control record is mandatory or optional for the receiving system—your system for inbound documents or the EC subsystem for outbound documents. When mandatory records are not included in a document being processed, the system generates an error.

Record Code. Enter the alphanumeric code the EC subsystem uses to define this type of record.

Token. A token is a critical variable used to populate the exchange file master record during the load process. It provides such information as the trading partner identifier or the document type. Tokens determine the specific way data is transformed between the EC subsystem and your system.

If applicable, enter the name of the token associated with this record. Valid tokens are:

- tp-id (mandatory for transformation processing)
- tp-document-id (mandatory for transformation processing)
- tp-document-nbr
- tp-message-nbr
- tp-func-grp-nbr
- tp-interchange-nbr

- tp-address
- tp-site
- app-table
- app-table-index
- app-table-value
- app-document-id
- app-document-vers
- app-address
- app-site

To assign multiple tokens to one field, separate them with commas.

The system treats any other values in this field as reference information.

Omit Record. Enter Yes to prevent the system from writing this record to the output file.

Omit Record Code. Enter Yes to prevent the system from writing the record code to the output file. To prevent the record itself from being added to the file, set Omit Record to Yes.

Note   The Omit Record and Omit Record Code fields apply to exported files only. You cannot edit them in subsystem records for imported documents.

Fields. Enter Yes to display an additional frame that lets you enter or edit the fields contained in this record.

EC Subsystem Definition Maintenance, Control Fields

Control Record Fields

Use the last frame to define the fields included in a control record.

Note   This frame displays only when Fields is Yes in the previous frame.

Seq. Enter the numerical sequence in which this field occurs in the record.

Field Name. Enter a descriptive name for this field.

Token. If applicable, enter the token that applies to this record.

Req. Specify whether this field is mandatory (Man) or optional (Opt) for the receiving system—your system for inbound documents or the EC subsystem for outbound documents.

Min. Enter the minimum length of this field. The system validates that data included in the field is greater than or equal to the minimum required number of characters.

Max. Enter the maximum length of this field.

- If the field lengths are variable and separated by the specified delimiter, the system validates that the field length is between the Min and Max values.
- If the field lengths are fixed, the system uses this value as the actual length to calculate where each field starts and ends.

Default Value. Optionally enter a default value for the system to place in this field if no other value is specified. For example, this field could be used on an outbound transaction when the receiving EC subsystem requires a value in a field that generally is blank.

Example of Flat File in Standards Neutral Format (SNF)

Flat File Information In Standards Neutral Format (SNF)

```
##peicomputer    order       017405036       006026793
1000NE010D451371     960126                          0E9        0E9
12                                    rel123
13                Pei Computers Ltd.              37 Atlantic Road
16
3001005 50.0                     EA  1250.00     CT
3002005 30.0                     EA  399.00      CT
3003005 50.0                     EA  99.99       CT
3004005 100.0                    EA  29.99       CT
3005005 100.0                    EA  15.99       CT
```

QAD

EDI-EC-SU-120

830 Inbound Document

This example shows a flat file that will result in a customer planning schedule when it is imported into QAD Enterprise Applications.

Defining eCommerce Sequence Number Ranges

eCommerce Number Range Maintenance (35.21.1)

EDI eCommerce uses its own user-defined sequence definitions to assign numbers to repository documents. The functionality is identical to the standard Number Range Management features (36.2.21 menu) used elsewhere in the system. However, sequences defined here are specific to the eCommerce processing domain.

Define one or more sequences in EC Number Range Maintenance (35.21.1). Then, use eCommerce Control to associate default sequences with system processing actions.

You can change the defaults for trading partners or trading partner documents using Trading Partner Maintenance (35.13.7). When assigning a new sequence number, the system looks for a sequence definition in the following order:

1 Trading partner document record

2 Trading partner record

3 Application control record

4 Control record

The system maintains a history of numbers generated that can be displayed using EC Sequence Number History Report. When this history is no longer needed online, remove it using EC Sequence Delete/Archive.

Setting Up eCommerce Control

EDI eCommerce Setup

- EC Subsystem Definition Maintenance
- **EC Number Range Management**
- eCommerce Control
- Exchange Definition Maintenance
- EC Subsystem/Exchange Maintenance
- Application Definition Maintenance
- Implementation Definition Maintenance
- Transformation Definition Maintenance
- Trading Partner Maintenance
- Transmission Group Maintenance

QAD

EDI-EC-SU-140

Before setting up EDI eCommerce, the system administrator should set up a data directory for EDI eCommerce data files. Below that directory, there must be several sub-directories for the following types of data:

- Error files
- Inbound files for import into QAD Enterprise Applications
- Archive files, which are inbound flat files that have completed processing
- Function definition files (including user-defined functions used for transformation processing)

All but the outbound directories are specified in the eCommerce Control. Outbound directories are used in Transmission Group Maintenance (35.13.13) to specify where exported document files should be stored for a trading partner.

QAD

eCommerce Control (35.13.24), Initial Frame

eCommerce Control sets the default values for EDI eCommerce processing. The program includes three frames.

Initial Frame

Use the initial frame to set domain-level control values, such as directories used during document import and export.

Default Subsystem. Enter the name of the EC subsystem to be used when documents being processed do not identify the originating subsystem. This subsystem must be defined in EC Subsystem Definition Maint (35.13.1) before you can enter it in this field.

Input Directory (Import). Enter the directory where the EC subsystem places files for import. When you run Document Import (35.1) with Direction set to Outbound, the system uses this as the source directory for selecting files.

Note   Destination directories for exported files are specified in the Destination field in Transmission Group Maintenance (35.13.13).

Note   The system prompts you to create directories if they do not already exist.

Archive Directory (Import). Enter the directory where the system places the original SNF files when processing begins.

Error Directory (Import). Enter the directory where files from the Input Directory that fail during load or unload are stored. Reporting and reprocessing functions use this directory for input.

Input Directory (Export). Enter the directory where the system looks for files to load directly into the document repository and process for export without creating business documents.

When you run Document Import with Direction set to Outbound, the system uses this as the source directory for selecting files.

Archive Directory (Export). Specify the directory where files from the Input Directory are moved after export processing.

Error Directory (Export). Enter the directory where files from the Import Directory that fail during export processing are stored. Reporting and reprocessing functions use this directory for input.

Function Directory. Enter the directory where the user-defined functions used during transformation processing are stored.

Process Log Directory. Specify the default directory where the system creates log files when it is processing documents. If the directory does not exist, the system attempts to create it.

You can leave this field blank. If you enter a value, it defaults to the same field for new records in EC Subsystem Definition Maintenance (35.13.1).

Process log files can be used for two purposes:

- As a record of what took place during a processing session, including warning and error messages.
- As source information for system-generated e-mail messages. When processing errors occur, the system automatically notifies the user by adding the process log file to an e-mail message, provided that e-mail system and address information is defined in User Maintenance. Additionally, it sends status information from the log to other e-mail addresses specified for individual location cross-reference records in Trading Partner Maintenance (35.13.7).

Unless it is blank, the subsystem definition value overrides the eCommerce Control value. If both are blank, logging is disabled, and process control functions do not create permanent log files. Instead, the system creates temporary log files in the user's startup directory. After sending process status e-mail messages, the system deletes the temporary logs.

Three fields set values for output reports produced when processing is initiated from outside the EDI eCommerce user interface. For example, some Financials applications can be used to process bank transactions directly from a related menu item.

Print Fail/Pass/Both. Specify the level of information included in the output report.

Failed (default): Only files that failed to load are included in the report.

Passed: Only files that loaded successfully are included.

Both: All processed files are included.

Print Details. Set this field to Yes to include detailed error and warning messages in the output report.

When it is No, the report includes only a summary of process events.

Report Output. Enter the output device or file name the system uses to display the report.

If you leave this field blank and click Next, the system sets it to the file name eComOut.

Note   When you use an EDI eCommerce menu program to select documents for import or export, these fields have no effect. You can set the corresponding values directly in the user interface.

eCommerce Control (35.13.24): Transaction Control Frame

Transaction Control Frame

The second frame sets default values for error handling, as well as the default sequence IDs used to generate repository document numbers.

Suppress Warnings. Enter Yes to prevent the system from generating status messages that result from warning conditions during transformation or gateway processing.

When this field is No (the default), the system always generates warnings in the status message table.

This field defaults to new records in Trading Partner Maintenance. You can override it at the trading partner, trading partner document, and trading partner location cross-reference level.

Stop on Error. Enter Yes to have the system stop processing a document during transformation when the first error is encountered. The system skips the rest of the document and moves to the next sequence number.

When this field is No (the default), processing continues regardless of the number of errors that occur.

This field defaults to new records in Trading Partner Maintenance. You can override it at the trading partner, trading partner document, and trading partner location cross-reference level.

Suppress Session Report. Enter Yes to prevent the system from generating a session report following document load or unload.

When this field is No (the default), the system always generates session reports.

This field defaults to new records in Trading Partner Maintenance. You can override it at the trading partner, trading partner document, and trading partner location cross-reference level.

Send E-mail on Error Only. Enter Yes to have the system send e-mail only when the document does not process successfully. Otherwise, e-mail is sent regardless of document status.

This field defaults to new trading partner location cross-reference records defined in Trading Partner Maintenance. You can override the control program value as needed.

E-mail Address. Enter the e-mail address of the person who receives a message when an error occurs during an import or export session.

Note This is not related to the Send E-mail on Error Only field.

These must be complete email addresses; for example, jsmith@company1.com.

Use Email Definition Maintenance to set up your system to manage automated email messages.

Source Code Page. Optionally, specify the default code page used to create files imported to your system. During import processing, the system converts the data to the system code page.

This field is not validated. Be sure that the value you enter is included in the Progress file `DLC/convmap.cp`. Otherwise, the conversion program returns an error.

If you enter a value, it defaults to EC Subsystem Definition Maintenance. You can update it as needed for individual subsystems.

Counters: Inbound Exchange, Outbound Exchange, Inbound Application, Outbound Application, Error. Specify the default sequence IDs used to assign numbers to documents during processing. You can override these values in Trading Partner Maintenance.

The fields cannot be blank. They must contain values defined in EC Number Range Maintenance.

You can use the next frame to override one or more settings for individual applications.

eCommerce Control (35.13.24), Application Frame

Application Frame

The third optional frame lets you set application-specific values that apply only to such functions as Financials, EMT, and so on.

Use this frame to override system-level sequence ID defaults defined in the previous frame for a specific application. You can save your changes only if you enter a valid sequence ID in one or more fields. For blank fields, the system continues to use the sequence IDs from the Transaction Control frame.

Using Exchange Definition Maintenance

EDI eCommerce Setup

- EC Subsystem Definition Maintenance
- EC Number Range Management
- eCommerce Control
- **Exchange Definition Maintenance**
- EC Subsystem/Exchange Maintenance
- Application Definition Maintenance
- Implementation Definition Maintenance
- Transformation Definition Maintenance
- Trading Partner Maintenance
- Transmission Group Maintenance

QAD

EDI-EC-SU-200

An exchange file defines the documents communicated between QAD Enterprise Applications and the EC subsystem. It includes data record structures that match the definition of the SNF communicated with the EC subsystem.

Use this program to modify an exchange file definition you have created yourself, or one based on a copy of a QAD-developed template definition.

Note The system does not allow you to modify a QAD-developed definition. Use Exchange Definition Copy (35.21.15.1) to copy a definition before modifying it.

QAD

Exchange Definition Maintenance (35.15.6), Initial Frame

Use Exchange Definition Maintenance to define layout and content of exchange file documents. You must create a different exchange file definition for each type of document.

File. Enter a name for the exchange file definition.

Version. Enter a version number.

- Use the same name for more than one definition, then use a different version number to differentiate among multiple definitions with the same name
- Use Direction to distinguish between multiple definitions with the same name and version

Direction. Enter the direction of the file transfer that will use this exchange file definition

- Specify the direction relative to QAD Enterprise Applications
  - Documents imported into QAD Enterprise Applications are inbound
  - Documents exported from QAD Enterprise Applications are outbound

Desc. Optionally enter a text description of this exchange file definition (for reference only).

Advanced. Select this option only if you are setting up an XML document. When it is No, the system immediately advances to the Exchange File Records frame.

Exchange Definition Maintenance, Top-Level XML Setup

Note   You need to complete these fields only when you are setting up an XML document.

Document Type. Enter the document-level XML identifier for the document to be created using this definition. The resulting XML document includes this identifier in the first line.

Document Entity. Enter the URL containing the namespace definition that controls the XML structure associated with documents created using this definition; for example, http://www.w3.org/2000/xmlns/.

An XML namespace is a collection of names, identified by a specific uniform reference locator (URL), which are used in XML documents as element types and attribute names.

System Literal. Specify whether the document type definition (DTD) used to validate the content of exported XML files is on a public server or within a system domain. Valid values are:

PUBLIC: The value specified in System Location is outside the local system domain.

SYSTEM: The specified system location is within the local system domain.

System Location. Enter the path to the location where the document type definition (DTD) used to validate the content of XML files is stored.

In the following frame, for outbound exchange definitions only, select a record and set the XML field to Yes to specify a namespace associated with the record.

Note   The XML field is disabled for inbound definitions.

Exchange Definition Maintenance, Exchange File Records Frame

Seq. The sequence number of this record. Choose Insert to add a new record. The system automatically assigns the next number, but you can change this to any number. You should set up a logical numerical hierarchy for record sequence numbers.

Important   In all cases, the first record in a document added to the repository must be sequence number 1. Other records can be numbered as you choose. The following examples show valid and invalid record sequences.

Valid	Invalid
1, 2, 3, 4, 5	2, 3, 4, 5
1, 10, 20, 22, 30	10, 20, 22, 30

After you have used an exchange definition in a transformation definition, you cannot change record sequences in the exchange definition without deleting and reentering the entire transformation definition.

Record Name. Enter a name for this record. Each record name must be unique in an exchange file definition.

This record name is used as a variable during the transformation process, without the sequence number.

Requirement. Enter Mandatory to indicate that this record is required during the load or unload process or Optional to indicate that it is not. When the system cannot find a mandatory record to load or unload, it generates an error message and does not process the associated document.

Loop Occurs. Enter the number of times the processing logic should loop through the records during transformation.

Loop Ends Seq. Enter a defined record sequence number to indicate where the loop ends. For example, enter a Loop Ends Seq value of 2 on sequence number 2 to indicate that the entire loop sequence takes place on a single record. Or, enter an end sequence of 4 on sequence number 3 to indicate a loop that starts at 3 and ends at 4.

 To specify a loop structure that includes all records, enter zero or a number higher than the last record sequence defined.

Fields. Enter Yes to display an additional frame that lets you enter or edit the fields contained in this record.

Exchange Definition Maintenance, Record-Level XML Setup

In XML, a namespace is a unique identifier for a collection of element type and attribute names. This lets you use identical type and attribute names for multiple purposes based on the namespace identifier. The value entered here will be prefixed to the field name followed by a colon.

The final XML setup fields display when you select a field in the Exchange File Field Record frame and set Adv to Yes.

Exchange Definition Maintenance, Exchange File Field Record Frame

Note This frame displays only if Fields = Yes in the previous frame for the selected record.

Seq. The sequence number of this field in the record.

Press Insert to add a new field. The system automatically assigns the next available number. You can modify the number as needed or navigate to the blank fields at the bottom of the frame and assign numbers.

It is recommended that you number the fields sequentially, beginning with 1. When you do this, a total of 99 fields are available for each record. Although the system accepts non-sequential numbers, their use is not recommended.

Name. Enter the name of the field. The name must be unique in the record.

Reqd. Enter Mandatory to indicate that this field is required during the load process or Optional to indicate that it is not. When the system cannot find mandatory fields to load, it generates an error message and does not process the associated record.

Type. Enter a code representing the type of data stored in this field. Valid entries are:

- AN: Alphanumeric
- D: Date
- I: Integer
- L: Logical
- R: Real number

Min. Enter the minimum number of characters to be included in this field. The system validates that required or optional data is greater than or equal to the minimum required value for the field.

Max. Enter the maximum number of characters to be included in this field.

- If the field lengths are variable and separated by the delimiter specified in EC Subsystem Definition Maintenance, the system validates that the field length is between the Min and Max values.

- If the field lengths are fixed, the system uses this value to calculate where each field starts and ends.

Token. If applicable, enter the name of the token associated with this field.

Adv. Set this field to Yes to display an additional frame that lets you complete XML setup at the field level.

Exchange Definition Maintenance, Field-Level XML Setup

XML Tag. Optionally enter an alternate XML tag name associated with this field. If you do not enter a value, the system uses the field name as the tag.

XML Tag Type. Indicate the type of the specified XML tag. Valid values are Attribute and Element. The default is Element.

Namespace. Optionally enter the XML namespace associated with this field.

In XML, a namespace is a unique identifier for a collection of element type and attribute names. This lets you use identical type and attribute names for multiple purposes based on the namespace identifier. The value entered here will be prefixed to the field name followed by a colon.

Using EC Subsystem/Exchange Maintenance

EDI eCommerce Setup

- EC Subsystem Definition Maintenance
- EC Number Range Management
- eCommerce Control
- Exchange Definition Maintenance
- **EC Subsystem/Exchange Maintenance**
- Application Definition Maintenance
- Implementation Definition Maintenance
- Transformation Definition Maintenance
- Trading Partner Maintenance
- Transmission Group Maintenance

QAD

EDI-EC-SU-280

EC Subsystem/Exchange Maint (35.13.3)

Use EC Subsystem/Exchange Maintenance to correlate:

- Structure of the data records in the standards neutral format (SNF) file received from the EC subsystem
- Exchange file definition

This lets the system place data properly in the data repository before beginning transformation processing.

This program consists of two frames. In the first, you define a unique combination of EC subsystem, document type, and exchange file name:

Subsystem. Enter the name of an EC subsystem defined in EC Subsystem Definition Maint.

Document. Enter the type of document to be exchanged between your system and this EC subsystem. For example, 810 could be used to identify an ANSI X12 standard 810 document, which is used to export an invoice. This is ordinarily the value represented by the tp-doc-id token.

Direction. Enter the direction for this document type—inbound or outbound. Documents imported into your system are inbound, while those exported to an EC subsystem are outbound.

Trading Partner. Enter an identifier for the trading partner to which this exchange/subsystem cross-reference applies. Leave blank if it applies to all trading partners.

By setting up trading partner-specific cross-reference records, you can apply different SNF definitions for different trading partners.

Exchange File Name. Enter the name of the exchange file to be associated with this document type. If you have set up multiple exchange files with the same file name in Exchange Definition Maintenance, scroll through the unique name, version, and direction combinations and select the appropriate one.

Ver. Enter the version of the exchange file to be associated with this document type. Multiple exchange files can have the same name. Be sure to use the correct version for the specific exchange file.

Use the next frame to establish a link between the document type and the record sequences, data control codes, and data record names in the exchange file.

Exchange Sequence. Enter a number to represent the sequence in which this record appears in the exchange file document.

Data Control Code. Enter the code or XML tag the EC subsystem uses to identify this type of data record in this document type.

Break Level. Enter the break level associated with this record.

Break level lets you define documents in which the same record name can be used more than once. For example, you can use Comment in both the header and in the detail. When the system processes data during transformation and encounters a duplicate record name, it looks for the record with a higher Break value than the previous instance.

Omit Record Code. Enter Yes to prevent the system from writing the record code to the output file. This field applies to exported files only.

Start New Trans. Enter Yes if you want the data in this record to be treated as a separate transaction line. This lets you process multiple transactions separately even when they are not separated by control data records.

Exchange Record Name. The system displays the name of the record from the exchange file definition.

Flat File Information in Standards Neutral Format (SNF)

Flat File Information In Standards Neutral Format (SNF)

```
##peicomputer    order      017405036       006026793
1000NE010D451371     960126                              0E9              0E9
12                                    rel123
13               Pei Computers Ltd.              37 Atlantic Road
16
3001005 50.0                      EA  1250.00    CT
3002005 30.0                      EA  399.00     CT
3003005 50.0                      EA  99.99      CT
3004005 100.0                     EA  29.99      CT
3005005 100.0                     EA  15.99      CT
```

EDI-EC-SU-300

Setting Up Application Definitions

EDI eCommerce Setup

- EC Subsystem Definition Maintenance
- EC Number Range Management
- eCommerce Control
- Exchange Definition Maintenance
- EC Subsystem/Exchange Maintenance
- **Application Definition Maintenance**
- Implementation Definition Maintenance
- Transformation Definition Maintenance
- Trading Partner Maintenance
- Transmission Group Maintenance

QAD

EDI-EC-SU-310

Application Definition Maint (35.15.10), Initial Frame

QAD provides a number of standard definitions for the layout and contents of application documents to be used as templates for defining specific implementations. To set up individual application definition templates, use Application Definition Maintenance. You can define formats at both the record and field levels.

You can use this program to create new application definitions or to modify any definitions you have created yourself. However, you cannot modify the QAD-developed application definitions that were provided with EDI eCommerce. Instead, copy an existing definition with Application Definition Copy (35.21.15.2) and then modify the copy.

The program consists of three frames. Use the first to define basic information about the application document.

Name. Enter a name for the document definition or use the arrow keys to scroll through the list of existing documents.

Note   You cannot modify the QAD-developed template document definitions that were provided with eCommerce.

Version. Enter a version number. You can use the same name for more than one document definition, then use a different version number to differentiate among multiple document definitions with the same name.

Additionally, you can use Direction—inbound or outbound—to distinguish between multiple documents with the same name.

Direction. Enter the direction of the file transfer that uses this document definition. Always specify the direction relative to your system—documents imported into your system are inbound, while those exported from your system are outbound.

Gateway Program. Enter the name of the Progress gateway program used to transfer this document. If this definition is based on a QAD-developed definition, the value defaults. If you are creating your own, this is the name of a custom-developed Progress program.

Gateway Report Program. Enter the name of the Progress program used to generate reports related to document transfers.

Gtwy Process Priority. Enter the process priority value (0-99999) to set the gateway processing priority for this document. The default is 0, which is the lowest (normal) processing priority.

This value controls the sequence in which different document types are processed at the gateway level. For example, eCommerce Manager (35.22.13) uses the priority to determine the sequence in which the business unit processes multiple EMT documents.

DS Program. Optionally, enter the name of the Progress program that is run persistently and contains the dataset definition and methods.

Procedure. If you enter a value in DS Program, enter the name of the procedure or method that is run to process the dataset.

Application Definition Maint, Application File Records Frame

Use the second frame to define records associated with the application document.

Seq. The sequence number of this record. Choose Insert to add a new record. The system automatically assigns the next number, but you can change it to any number. Organize the records in a logical numerical hierarchy.

Important In all cases, the first record created must be sequence number 1. For example, you cannot use a sequence of 10, 20, 30, 40. Instead, use 1, 10, 20, 30, 40.

Record Name. Enter a name for this record. Each record name must be unique in an application document definition. Record names in application document definitions and implementation definitions must follow a set of naming conventions.

This record name is used as a record variable by the transformation process, independent of the sequence number.

Requirement. Enter Mandatory to indicate that this record is required during the transfer process, Optional to indicate that it is not. If the system cannot find mandatory records while transferring records, it generates an error message and does not process the associated document.

Loop Occurs. Enter the number of times the processing logic should loop through the records during transformation.

Loop Ends Seq. Enter a defined record sequence number to indicate where the loop ends. For example, enter a Loop Ends Seq value of 2 on sequence number 2 to indicate that the entire loop sequence takes place on a single record. Or, enter an end sequence of 4 on sequence number 3 to indicate a loop that starts at 3 and ends at 4.

To specify a loop structure that includes all records, enter zero or a number higher than the last record sequence defined.

Generic. Enter Yes if this record for generic mapping of one or more database tables within the application. The Table field is then enabled so you can enter table names.

Table. Enter the schema names of the tables this record applies to. Separate multiple table names with commas. You cannot leave this field blank when Generic is Yes. The system validates your entries and displays a warning if the tables do not exist.

Fields. Enter Yes to access an additional frame that lets you display, enter, or edit the fields contained in this record.

You cannot access the fields for a record if Fields is No.

Application Definition Maint, Application File Fields Frame

Application Definition Maint

Field Seq. The sequence number of this field in the record. Choose Insert to add a new field. The system automatically assigns the next available number. You can modify the number as needed or navigate to the blank fields at the bottom of the frame and assign numbers.

Note It is recommended that you number the fields sequentially, beginning with 1. If you do this, a total of 100 fields are available for each record. Although the system accepts non-sequential numbers, their use is not recommended.

Field Name. Enter the name of the field. This must be unique in the record.

Requirement. Enter Mandatory to indicate that this field is required during the load process, Optional to indicate that it is not. If the system cannot locate mandatory fields, it generates an error message and does not process the associated record.

Type. Enter the type of data that will be included in this field. Valid entries are:

- AN (Alphanumeric)
- D (Date)
- I (Integer)
- L (Logical)
- R (Real number)

Min. Enter the minimum number of characters required in this field. The system validates that required or optional data is greater than or equal to the minimum required value for the field.

Max. Enter the maximum number of characters allowed in this field.

- If the field lengths are variable and separated by the delimiter specified in EC Subsystem Definition Maint, the system validates that the field length is between the Min and Max values.
- If the field lengths are fixed, the system uses this value to calculate where each field starts and ends.

Gateway Variable. Enter the name of the gateway variable associated with this field. These variables determine the specific way data is transformed. If this document definition was copied from a QAD-provided template, the gateway variable is copied from that file. If not, the variable must be defined in the program specified in the Gateway Program field.

Default. Optionally enter a default value for this field.

Setting Up Implementation Definitions

EDI eCommerce Setup

- EC Subsystem Definition Maintenance
- EC Number Range Management
- eCommerce Control
- Exchange Definition Maintenance
- EC Subsystem/Exchange Maintenance
- Application Definition Maintenance
- **Implementation Definition Maintenance**
- Transformation Definition Maintenance
- Trading Partner Maintenance
- Transmission Group Maintenance

QAD

EDI-EC-SU-350

Implementation Definition Maintenance is very similar to Application Definition Maintenance (35.15.10). The major difference is that the implementation definition contains the variables, such as turnaround.

Use Implementation Definition Maintenance to define the data exchange requirements for a specific trading-partner implementation. The program includes three primary frames. Optional frames display when you are defining XML records, turnaround data, or fields to be edited during document export.

QAD

Implementation Definition Maint (35.15.13), Initial Frame

Implementation Name. Enter an alphanumeric name for this implementation.

Version. Enter a version number for this implementation. You can use the same name for more than one implementation, then use a different version number to distinguish between them.

Application Name. Enter the name of an application document definition to be copied to create this implementation definition. This can be one you created or one supplied by QAD.

Version. Enter the version number of the application document definition you are using as a template for this implementation document.

Direction. Enter the direction—inbound or outbound—of the application document definition you are using as a template for this implementation definition. Direction is relative to QAD Enterprise Applications—imported files are inbound and exported documents are outbound.

Multiple application document definitions can have the same name and version number and be distinguished only by direction. Be sure to use the right version.

Desc. Optionally enter a text description of this implementation. This description is for reference only.

Print Gateway Error Data. Enter Yes to print the data from the repository for each field defined in Implementation Definition Maintenance where Display is set to Yes.

Note More must be set to Yes to access the Display field.

When a gateway error occurs, this feature lets you view the data that may have caused the failure.

Implementation Definition Maint, Advanced (XML Setup) Frame

Document Type. Enter the document-level XML identifier for the document to be created using this definition. The resulting XML document includes this identifier in the first line.

Document Entity. Enter the URL containing the namespace definition that controls the XML structure associated with documents created using this definition; for example, http://www.w3.org/2000/xmlns/.

An XML namespace is a collection of names, identified by a specific uniform reference locator (URL), which are used in XML documents as element types and attribute names.

System Literal. Specify whether the document type definition (DTD) used to validate the content of exported XML files is on a public server or within a system domain. Valid values are:

PUBLIC: The value specified in System Location is outside the local system domain.

SYSTEM: The specified system location is within the local system domain.

System Location. Enter the path to the location where the document type definition (DTD) used to validate the content of XML files is stored.

Implementation Definition Maint, Implementation File Records Frame

Use the next frame to edit an existing record structure or add new records.

Seq. The sequence number of this record. Choose Insert to add a new record. The system automatically assigns the next number. You can modify sequence numbers as needed. Choose Go to modify an existing record.

Important   In all cases, the first record in a document added to the repository must be sequence number 1. Other records can be numbered as you choose. The following table shows examples of valid and invalid record sequences.

Valid	Invalid
1, 2, 3, 4, 5	2, 3, 4, 5
1, 10, 20, 22, 30	10, 20, 22, 30

After you have used an implementation definition in a transformation definition, you cannot change record sequences in the implementation definition without deleting and reentering the entire transformation definition.

Record Name. Enter a name for this record. Each record name must be unique in an implementation definition.

The transformation process uses this as the first part of the record variable, independent of the sequence number.

Note   Naming conventions apply to the record names used in application document definitions and implementation definitions. When you create new definitions, you must use these names. Table 3.1 lists the naming conventions.

Table 3.1
Record Naming Conventions

Document Type	Record Name	Description
Sales Order	HDR	Header
	HDR-EXT	Header Extended
	HDR-CMT	Header Comment
	DET	Detail
	DET-EXT	Detail Extended
	DET-CMT	Detail Comments
	DET-SOB	SO Configuration Bill
Customer Schedule	HDR	Header
	HDR-EXT	Header Extended
	DET	Detail
	DET-EXT	Detail Extended
	ATH	Authorizations
Invoice	HDR	Header
	HDR-EXT	Header Extended
	HDR-CMT	Header Comment
	DET	Detail
	DET-EXT	Detail Extended
	DET-CMT	Detail Comments
	ADDR	Address
ASN	HDR	Header
	HDR-EXT	Header Extended
	CTR-TARE-SUMM	Container Tare Summary
	TARE-HDR	Tare Header
	TARE-DET	Tare Detail
	CTR-TARE	Container Tare
	CTR-PRIM	Container Primary
	CTR-ITEM	Container Item
	ITM	Item
	ITM-EXT	Item Extended
	ITM-AUTH	Item Authorizations

Requirement. Enter Mandatory to indicate that this record is required during the load or unload process or Optional to indicate that it is not. If the system cannot load or unload mandatory records, it generates an error message and does not process the associated document.

Loop Occurs. Enter the number of times the processing logic should loop through the records during loading or unloading.

Loop Ends Seq. Enter a defined record sequence number to indicate where the loop ends. For example, enter a Loop Ends Seq value of 2 on sequence number 2 to indicate that the entire loop sequence takes place on a single record. Or, enter an end sequence of 4 on sequence number 3 to indicate a loop that starts at 3 and ends at 4.

To specify a loop structure that includes all records, enter zero or a number higher than the last record sequence defined.

Gen. Enter Yes if this record applies generically to one or more database tables within the application. The Table field is then enabled so you can enter table names.

Table. Enter the schema names of the tables this record applies to. Separate multiple table names with commas. You cannot leave this field blank when Generic is Yes. The system validates your entries and displays a warning if the tables do not exist.

Fields. Enter Yes to display an additional frame that lets you enter or edit the fields contained in this record.

XML. Enter Yes to display two additional fields:

- XML Tag
- Namespace

Those fields do not display when XML is No.

Implementation Definition Maint, Fields Frame

Use this frame to define or update field definitions in the selected record.

Seq. The sequence number of this field in the record. Press Insert to add a new field. The system automatically assigns the next number. You can modify the number as needed or navigate to the blank fields at the bottom of the frame and assign numbers.

It is recommended that you number the fields sequentially, beginning with 1. Provided you do this, a total of 99 fields are available for each record. Although the system will accept non-sequential numbers, their use is not recommended.

Press Tab or use the arrow keys to move from line to line.

Press Enter to edit an existing field record.

Field Name. Enter or modify the name of the field. This value is used with the record name, formatted as recordname.fieldname, during transformation.

Requirement. Enter Mandatory to indicate that this field is required during the load or unload process or Optional to indicate that it is not. If the system cannot find mandatory fields while loading records, it generates an error message and does not process the associated record.

Type. Enter the type of data stored in this field. Valid entries are:

- AN: Alphanumeric
- D: Date
- I: Integer

- L: Logical
- R: Real number

Min. Enter the minimum length of this field. The system validates that required or optional data is greater than or equal to the minimum required value for the field.

Max. Enter the maximum length of this field.

- If the field lengths are variable and separated by the delimiter specified in EC Subsystem Definition Maintenance, the system validates that the field length is between the Min and Max values
- If the field lengths are fixed, the system uses this value to calculate where each field starts and ends

Src/Dst. Enter the type of variable associated with this field. Valid choices include:

- G: Gateway. This variable type is used by the gateway during the transfer process
- T: Turnaround. This variable type represents imported data that is stored in the turnaround data table, indexed, and later associated with an exported document
- D: Data entry. The operator adds this data during processing. This function is not currently implemented

Variable. Enter the name of the variable associated with this field. The gateway program uses this variable to move data into the application. The default variable is copied from the associated application definition.

More. Leave this field set to No to skip the next frame. Enter Yes to display another frame that you can use to set up fields to be edited during document export.

Implementation Definition Maint, Additional Fields (More) Frame

Default. Enter the value to be included in the field when Display is No. When that is the case, the system does not prompt for a value during processing.

Edit Mask/Default. When you want to display custom fields on the report generated during import, use this field to specify the field length and label to display, separated by a slash (/). For example, if you enter 4/Max, the report displays the output defined in this implementation record in a four-character field, with a label of Max.

Note   Set Display to Yes for these values to have an effect.

Field Help. Enter text to be displayed at the bottom of the data entry screen when the cursor is in this field during editing. For example, you can describe the type of data or values that should be entered.

Validate. Enter Yes to activate the validation process for all documents using this implementation definition. The applies to both inbound and outbound documents. When set to Yes, the value of the field associated with this option is compared against the values defined in Data Validation Maintenance. If the value is not found, a transformation error occurs.

Field Prompt Conditions. This field is not currently used.

Display. This field is used under the following circumstances:

- When you are defining fields to be included in custom reports that are printed for inbound documents created based on this implementation definition. When you define a field length and column label for a custom report in the Edit Mask/Default Value field, you must set Display to Yes for the field to be included in the report.

- When Print Gateway Error Data is set to Yes in the initial frame. You must set Display to Yes so that field data displays when errors occur.

- When the implementation is for an exported document such as an invoice or ASN and you want the system to display a prompt to update a value during export. You must set this field to Yes for the data entered in the Edit Mask/Default Value field to display when the document is exported.

Edit. Enter Yes to have this field display for editing when you specify Update or Both in the Update/Export/Both field of Shipment ASN Export (35.4.1) or Invoice Export (35.4.3). See "Exporting Documents" on page 84.

Disp on Child Frame. This is used during the export update process. When set to Yes, this functions like the Display option but instead displays field on a child frame, retaining the information previously displayed.

XML Tag. Optionally enter an XML tag name associated with this field. If you do not enter a value, the system uses the field name as the tag.

XML Tag Type. Indicate the type of the specified XML tag. Valid values are Attribute and Element. The default is Element.

Namespace. Optionally enter the XML namespace associated with this field.

In XML, a namespace is a unique identifier for a collection of element type and attribute names. This lets you use identical type and attribute names for multiple purposes based on the namespace identifier.

Insert Prior To. When this implementation creates XML documents, specify the sequence number of the record before which you want to insert the value of this field. Use the up and down arrow keys to scroll through available record sequence numbers; the system displays the names of the associated records.

If Src/Dst is T, indicating a turnaround variable, another frame displays. Use it on inbound definitions to enter the table and field with which the turnaround data for this implementation should be associated. On implementations for outbound documents, enter the name of the function used to retrieve the turnaround data and attach it to the exported document.

Storing Turnaround Data From an Inbound Document

Select the Implementation Definition that is being used for the inbound document. The Turnaround data fields by convention are defined in the "ext" record definitions. Most Implementation Definitions will contain "ext" records at both the header and detail levels of the document.

Turnaround data may be stored at any level depending on what field value(s) are selected for the Turnaround data index or key. In the example above we use the Sales-Order Implementation Definition and the Hdr-Ext record. In our example above the DepartmentNo field data is to be stored as Turnaround data.

The first step is to set the "Src/Dst" position to "T" in the Implementation Definition data field. This indicates that the field is to be stored as Turnaround data.

Once the "Src/Dst" column has been set to "T" the below prompt will display at the end of the entry line. This is the Turnaround Data Storage Index prompt.

- Table Name
    - Any value (constant) may be entered here and it becomes part of the index. By convention a table name is used to make logical reference to the data.
- Index Name
    - A valid variable name must be entered here. This is the variable name that will contain the data that you wish to store (index) the DepartmentNo data on. Multiple data variables may be entered using a comma (without any spaces) as separators.

Implementation Definition Maint

Seq	Field Name					Gateway Variable	More
12	DepartmentNo					Department_No	☐
13	TaxableFlag					ed_so_taxable	☐
14	FOB	Optional	AN	1	20	G	ed_so_fob	☐
15	ShipVia	Optional	AN	1	20	G	ed_so_shipvia	☐
16	CreditTerms	Optional	AN	1	8	G	ed_so_cr_terms	☐
17	Remarks	Optional	AN	1	40	G	ed_so_rmks	☐
18	TrailerCode1	Optional	AN	1	2	G	ed_so_trl1_cd	☐
19	TrailerAmount1	Optional	R	1	14	G	ed_so_trl1_amt	☐
20	TrailerCode2	Optional	AN	1	2	G	ed_so_trl2_cd	☐

Implementation Name: Sales-Order   Version: 1
Application Name: Sales-Order   Version: 1
Direction: In   Desc: Sales Order
Advanced: ☑   Print Gateway Error Data: ☐

DepartmentNo
Table Name: so_mstr
Index Name: ED_SO_PO

EDI-EC-SU-420

In the example above, we are specifying that the DepartmentNo is to be stored using the ED_SO_PO variable as the index. This variable will contain the Purchase Order number.

Turnaround Data Maintenance (35.9.17)

Turnaround Data Maintenance

Turnaround Data Maintenance ✕

🔵 Go To ▾ 🔻 Actions ▾ | 📋 Copy ▾ | 🖨 Print 📄 Preview

Target Domain: train
Table Name: so_mstr
Index Field Name: ED_SO_PO
Index Field Value: PO1234567
Turnaround Data Item: DepartmentNo
Turnaround Data Item Value: 022

- **Definition**
  - Turnaround data is data that has no home within the QAD Enterprise Applications database but needs to be sent back to the trading partner
- **Storage & Retrieval**
  - Stored against any values the user decides
  - Retrieved by functions (User Defined or QAD defined)
- **Real Life Examples**
  - Dock Codes
  - Line Feeds
  - Engineering Changes
- **Benefits….**
  - Business Rules Determined by Customers
  - BarCoding Usage

[Delete] [Back] [Next]

🔲 QAD   EDI-EC-SU-430

- This is the result of our example. The data 022 has been stored using the index:
  - so_mstr, ED_SO_PO, PO#1234567, DepartmentNo

Notes:

- Careful thought and planning must be used to select the proper indexes for Turnaround data.
- Valid variable names must be used. Select from the variable names in the Implementation Definition being used. You must ensure that the variable(s) used for the index contain data (the record containing the data must precede the data item being stored). To further explain: you cannot use a data variable from a detail record as an index to store Turnaround data at the header level.
- It is important to select an index that the data for the index retrieval will be available.
- Another consideration is the uniqueness of the index. It must be insured that subsequent records do not overwrite data that you wish to retain. It you make the index too unique it makes it more difficult to retrieve.
- You may can use the value of a primary table index in QAD Enterprise Applications as the index value to store Turnaround data. For the SO-MSTR it would be so_nbr, etc. These are documented in the *QAD Enterprise Applications Database Definitions Technical Reference*.
- If the incoming Turnaround field value is blank a record will not be written.

Retrieving Turnaround Data During Document Export

Select the Implementation Definition that is being used for the outbound document. The Turnaround data fields by convention are defined in the "ext" record definitions. Most Implementation Definitions will contain "ext" records at both the header and detail levels of the document. Turnaround data is retrieved by first specifying on the Implementation Definition that the field source is Turnaround data and then specifying the index or key.

In the example above, we use the Invoice Implementation Definition and the HDR-EXT record. The DepartmentNo field data is to be retrieved from Turnaround data.

The first step is to set the "Src/Dst" position to "T" for the Implementation Definition data field to indicate that the field is to be retrieved from Turnaround data.

Next, the retrieval method must be specified.

- Retrieval Function
    - Enter the name of the function to use for retrieving the turnaround data

Get-tad-data is a generic function which will need any Turnaround data from the parameters given

The example above would be the setup to retrieve the DepartmentNo field from the Turnaround data table using the ih_po (the po number in the HDR record from invoice history). This data would then be placed in the QAD Enterprise Applications repository HDR-EXT record DepartmentNo field.

Setting Up Transformation Definitions

EDI eCommerce Setup
- EC Subsystem Definition Maintenance
- EC Number Range Management
- eCommerce Control
- Exchange Definition Maintenance
- EC Subsystem/Exchange Maintenance
- Application Definition Maintenance
- Implementation Definition Maintenance
- **Transformation Definition Maintenance**
- Trading Partner Maintenance
- Transmission Group Maintenance

QAD

EDI-EC-SU-460

The system uses a transformation map in combination with an exchange file definition and an implementation file definition to exchange data between QAD Enterprise Applications and an external EC subsystem. The resulting output meets the specific data structure and format requirements of both systems.

Note   To use a QAD-developed transformation definition as the basis for a new definition, use Transformation Definition Copy (35.13.1) to copy a definition before modifying it.

Use Transformation Definition Maintenance (35.15.17) to define a transformation map.

Transformation Definition Maintenance (35.25.17)

This program consists of four frames. Use the first frame to name the transformation map.

- Identify the existing combination of exchange file definition, application document definition, and specific implementation that uses this transformation map

- Set up two fields for testing the transformation map. Can Run and Debug Level provide options that can be especially valuable when you are testing a new implementation for a new trading partner or document

Transformation. Enter a name for this transformation definition.

Direction. Specify the direction—inbound or outbound—of the documents to be transformed using this definition. Documents imported into QAD Enterprise Applications are inbound, while those exported from QAD Enterprise Applications are outbound.

Two transformation definitions can have the same name and be distinguished only by direction.

Exchange File and Version. Enter the name and version of the exchange file definition used in this transformation.

QAD Enterprise Applications and Version. Enter the name and version of the application document definition used in this transformation. This can be a QAD-supplied definition or one you created.

Implementation and Version. Enter the implementation definition and version used in this transformation.

Can Run. Set to Yes to make this transformation map completely operational.

During testing, you can set this field to No. The system then runs the entire transformation process, but backs the data out of the application document repository instead of storing it. You can identify transformation mapping problems and correct them before changing the field to Yes, letting the data be saved in the application document repository.

Debug Level. Specify a value between 0 and 9 to indicate the level of detail reported in the activity file created when this transformation is run. Lower levels provide less detail. For example, you can set this to 9 during testing to get a complete record of what happens during transformation processing.

Leaving this field set to a high value can produce very large files and can lead to disk space problems.

The system names these activity files using the convention MMDDYYYY.DBG, where MMDDYYYY is the date the transformation map is used. A new file is created when the first session is run each day. A record of each transformation operation that occurs during that day is appended to this file.

Many to Many. Set to Yes to combine multiple input documents and treat them as one document. This lets the system back out multiple files or create a single output from several inputs.

If No, the system always maps one input document to one or many output documents, depending on how many times the transformation definition indicates a new header should be written.

Before displaying the second frame, the system creates variables from the exchange file and the implementation associated with this transformation definition. Only these and user-defined variables can be used during transformation, along with the following automatically assigned variables:

- tp-id
- tp-document-id
- tp-message-nbr
- tp-func-grp-nbr
- tp-interchange-nbr
- tp-document-nbr
- tp-doc-dir
- tp-site
- tp-address
- MFGPRO-site
- MFGPRO-address

The trading partner variables correspond to tokens. The system uses MFGPRO-site and MFGPRO-address to determine the customer address and the QAD Enterprise Applications site code automatically, based on the cross-reference defined in Trading Partner Maintenance (35.13.7). You can also assign these values as an event that takes place during transformation.

QAD

EDI eCommerce Engine

Transformation Engine

- Transformation Definition
    - Events
        - Loop-Exit, Loop-Entry, Record-Entry, Record Exit
    - Actions
        - Record Level
            - Read, Write, Clear, New, Repeat-EndRepeat, Loop-Loopend (with "sort" capability)
        - Field Level
            - If-else-endif, equate
    - Solves customization at the gateway level
        - *Many to Many capabilities*
        - *Functions - User and QAD designed*

QAD

EDI-EC-SU-480

QAD

Defining Trading Partners

EDI eCommerce Setup

- EC Subsystem Definition Maintenance
- EC Number Range Management
- eCommerce Control
- Exchange Definition Maintenance
- EC Subsystem/Exchange Maintenance
- Application Definition Maintenance
- Implementation Definition Maintenance
- Transformation Definition Maintenance
- **Trading Partner Maintenance**
- Transmission Group Maintenance

QAD

EDI-EC-SU-490

Trading Partner Maintenance (35.13.7), Initial Frames

Use Trading Partner Maintenance to:

- Identify the document types that are exchanged with each trading partner
- Set up cross-references between trading partner documents and QAD Enterprise Applications
- Cross-reference the trading partner's site and address codes to the codes used in QAD Enterprise Applications
- Set control values used during document processing.

Use the initial frame to specify basic information about the trading partner.

TP ID. Alphanumeric identification code for this trading partner.

- Must be the same as the code used in the EC subsystem control record for the tp-id token

Name. Identifier for this trading partner (for reference only).

In the second frame, enter control information used during document processing for this trading partner. Several of the fields serve as defaults for trading partner documents defined in the subsequent frame, such as the sequence IDs used to generate document sequence numbers in the repositories.

Group. Optionally, enter the name of a trading partner group. You can use this group name to associate multiple trading partners for reporting purposes.

Counters: Inbound Exchange, Outbound Exchange, Inbound Application, Outbound

Application. Specify the sequence IDs that are used to assign numbers to repository documents during processing for this trading partner.

These fields are optional. If you enter a value, it must be a valid sequence ID defined in EC Number Range Maintenance.

Use Primary Reference ID. Enter Yes to have the system use a reference ID number provided in the document being processed, rather than using a sequence ID defined in EC Number Range Maintenance to generate an ID number. This field defaults to the Trading Partner Document Records frame for new records.

When you use this feature, assign the token PRIMARY-REF-ID to a field in the exchange file, application, and implementation definitions to represent the reference ID.

Note If this field is Yes and the token is not assigned in a required definition, the system uses the appropriate sequence ID specified in the eCommerce Transaction Control frame of eCommerce Control to generate a number.

Application. Enter a code representing the application to which this record applies.

The field in the initial frame defaults to EDI. You can change it as required. That value defaults to new records created in the Trading Partner Document Records frame; that value in turn defaults to new TP location cross-reference records.

Suppress Warnings. Enter Yes to prevent the system from generating status messages that result from warning conditions during transformation or gateway processing.

When this field is No, the system always generates warnings in the status message table.

This field defaults from eCommerce Control. It defaults to the Trading Partner Document Records frame for new document records.

Stop on Error. Enter Yes to have the system stop processing a document during transformation when the first error is encountered. The system skips the rest of the document and moves to the next sequence number.

When this field is No, processing continues regardless of the number of errors that occur.

This field defaults from eCommerce Control. It defaults to the Trading Partner Document Records frame when you set up a new document record.

Suppress Session Report. Enter Yes to prevent the system from generating a session report following document load or unload.

When this field is No, the system always generates session reports.

This field defaults from eCommerce Control. It defaults to the Trading Partner Document Records frame when you set up a new document record.

Trading Partner Maintenance, Document Records Frame

TP Doc ID. Enter the identifier for the document type exchanged with this trading partner. For example, this might be 810 to indicate an invoice exported in the ANSI X12 810 format. This must be the same as the code used in the SNF file control record for the tp-document-id token.

Dir. Specify whether this record applies to inbound or outbound records. This field lets you distinguish between two trading partner records with the same document type by making one inbound and the other outbound.

Document Map. Enter the name of the transformation map to be used in converting the data in this record for this combination of trading partner, document type, and direction. This transformation map must be defined in Transformation Definition Maint.

Transmission Group. Enter the name of the transmission group associated with this trading partner for this document type. This group must be defined in Transmission Group Maintenance. The field is mandatory for outbound documents.

Token List. Optionally enter a comma-separated list of valid tokens for the system to use to differentiate between multiple trading partner cross-references to the same combination of site and ship-to address. These values are used to determine the source of imported documents.

When Fields is Yes, you can then associate corresponding comma-separated values for each combination of trading partner site and address.

Enter enough tokens and values to create a unique combination of trading partner site, trading partner address, and tokens for each instance where trading partner site and trading partner address are the same.

Trading Partner Maintenance, Additional Document Records Frame

This frame displays additional fields for the selected record.

Track. Indicate whether the system should automatically generate tracking records when exporting documents of this type to this trading partner. The system can then import acknowledgment and status messages from the EC subsystem and update the tracking records as required.

When this field is No, tracking records are not created and imported acknowledgments are disregarded.

Note   Documents are tracked only when the Primary Reference field in the exchange repository master record contains a value. For example, this can be a purchase order, invoice, or ASN number.

Acks. Indicate whether the system typically receives acknowledgment messages from the EC subsystem after the subsystem processes exported documents of this type for this trading partner.

When Track is set to Yes, the system creates a tracking record each time it exports this type of document to this trading partner. When Ack to Yes, the system leaves the Ack Status field in the tracking record blank until importing an acknowledgment message from the EC subsystem. When Ack is No, the system automatically sets Ack Status to None Expected. The system can still update the Ack Status field by importing a status message.

Fields. Enter Yes to display an additional frame that lets you enter or edit trading partner cross-reference information.

Note When Fields is No, the remaining frames in Trading Partner Maintenance do not display for the selected document record.

Save Repository. Specify whether the system retains data in the document repositories after processing.

Yes (default): Any records created in the repositories when processing this document are saved.

No: The system deletes repository records related to this document after processing is completed.

Document Group. Optionally, enter the name of a trading partner document group. You can use this group name to associate multiple trading partners for reporting purposes.

Application. Enter a code representing the application to which this record applies.

This field defaults from the initial trading partner data frame. It defaults to the TP Location Cross-Reference frame when you set up a new cross-reference record.

Exchange, Application Counter. Specify the sequence IDs that are used to assign numbers to repository documents for this trading partner.

These fields are optional. If you enter a value, it must be a valid sequence ID defined in EC Number Range Maintenance.

Use Primary Reference ID. Enter Yes to have the system use a reference ID number provided in the document being processed, rather than using a sequence ID defined in EC Number Range Maintenance to generate an ID number. This field defaults from the initial trading partner setup frame.

When you use this feature, assign the token PRIMARY-REF-ID to a field in the exchange file, application, and implementation definitions to represent the reference ID.

Note If this field is Yes and the token is not assigned in a required definition, the system uses the appropriate sequence ID specified in the eCommerce Transaction Control frame of eCommerce Control to generate a number.

Suppress Warnings. Enter Yes to prevent the system from generating status messages that result from warning conditions during transformation or gateway processing.

When this field is No, the system always generates warnings in the status message table.

This field defaults from the initial trading partner data frame. It defaults to the TP Location Cross-Reference frame when you set up a new cross-reference record.

Stop on Error. Enter Yes to have the system stop processing a document during transformation when the first error is encountered. The system skips the rest of the document and moves to the next sequence number.

When this field is No, processing continues regardless of the number of errors that occur.

This field defaults from the initial trading partner data frame. It defaults to the TP Location Cross-Reference frame when you set up a new cross-reference record.

Suppress Session Report. Enter Yes to prevent the system from generating a session report following document load or unload.

When this field is No, the system always generates session reports.

This field defaults from the initial trading partner data frame. It defaults to the TP Location Cross-Reference frame when you set up a new cross-reference record.

Trading Partner Maintenance, TP Location Cross-Reference Frame

When Fields is Yes in the previous frame, the next frame lets you set up cross-references between the trading partner's site and address codes and those used by your system. The system uses these cross-references during the transformation process to automatically identify such information as the customer's site and address. Without the cross-references, you must use Transformation Definition Maintenance (35.15.17) to assign the MFG/PRO-SITE and MFG/PRO-ADDRESS variables before the output header record is written. Otherwise, the system generates a transformation error message.

TP Site and TP Address Reference. Enter the site and address codes used by the trading partner. Several different site and address combinations can exist at this level. For example, one cross-reference may be for the trading partner (sold-to) and the others for the ship-to addresses.

For inbound documents, the combination of trading partner site and address provides a cross-reference to the site and address. For outbound documents, the transformation process determines the trading partner site and address codes using the following three elements:

• Application document definition name and version

• Implementation name and version

• Site and address codes from your system

Token List Values. Enter a comma-separated list of values associated with the tokens entered in Token List in the previous frame. Be sure that there is one-to-one correspondence between tokens and values.

On imported documents only, the system uses these values to differentiate between multiple trading partner cross-references to the same combination of site and address.

Site and MFG Addr. Enter cross-references from the trading partner site and address to the site and address codes in your system.

Note   Site and Address are not validated against master records defined in your system.

Export. Specify whether the system exports this document type to this combination of site and address for this trading partner.

In an environment where you have mapped more than one trading partner cross-reference to the same combination of site and address, this field lets you limit the trading partner addresses that are selected to receive exported documents. For example, you can send an ASN both to a ship-to customer and to the central ordering point that placed the order by having a cross-reference record for each and setting Export to Yes for both.

This field can be updated only when the Direction field for a trading partner document ID is Out.

Trading Partner Maintenance, Additional TP Location Fields

When Fields is Yes for the selected trading partner document record, this frame lets you specify additional information for the trading partner cross-reference.

Transmission Group Override. Set this field to Yes to display an additional frame that lets you override the document-level transmission group value in the Trading Partner Document Records frame for a specific trading partner/site reference.

You can use this feature to define different HTTP parameters for posting XML documents for specific trading partner locations; this is useful, for example, when you are using QXtend to communicate documents created by EDI eCommerce.

Email. Enter Yes to display an additional frame that lets you enter one or more e-mail addresses of individuals who receive process status notifications regarding documents that use this trading partner location cross-reference.

You also can specify whether the system sends e-mail to the address only when a processing error occurs.

These must be complete email addresses; for example, jsmith@company1.com.

Use Email Definition Maintenance (36.4.20) to set up your system to manage email.

Additional fields let you override document-level defaults for a specific address cross-reference:

- Suppress Warnings
- Stop on Error
- Suppress Session Report

Trading Partner Parameter Maint (35.13.10)

Use Trading Partner Parameter Maintenance to assign parameters and values to a variety of trading-partner-specific processing actions.

The system creates a parameter record for each unique combination of trading partner address and site specified in Trading Partner Maintenance (35.13.7). If you delete an address and site combination in Trading Partner Maintenance, the parameter record for that combination is also deleted.

System-generated default values for some standard parameters are created at the same time the record is generated. Several of these are used to specify values required by the import and export gateway programs. For example:

- Logical flags for a trading partner determine which types of documents you exchange with that partner

- Another logical flag specifies whether purchase orders imported from this trading partner should be entered as confirmed sales orders

- Character and integer parameters provide the gateway programs with the names and version numbers of the QAD Enterprise Applications definition documents used in processing

The program consists of five frames. In the first you select the combination of trading partner address and site for which you want to define or modify parameters. In the bottom part of the frame, you can define up to 40 logical parameters. The first frame displays 10 lines. Choose Go to access 10 more.

Note The system only displays frames that already include parameters. Frames with no entries are skipped.

> *App Addr and App Site.* Enter the address and site codes from your system that represent the trading partner whose parameters are defined in this record.
>
> The system displays the corresponding trading partner address and site cross-references, defined in Trading Partner Maintenance, in the TP Addr and TP Site fields.
>
> *Logical Param Desc.* Enter an alphanumeric description of the logical parameter defined in Logical Param Value.
>
> *Logical Param Value.* Enter Yes or No to define the logical value of this parameter.

Continue to click Next to display input screens where you can enter up to 40 descriptions and values for the following types of parameters:

- Character parameters. These consist of up to 40 alphanumeric characters.
- Date parameters. Enter a date in MM/DD/YYYY format. The system validates this entry.
- Integer parameters. These are positive or negative whole numbers of up to 9 digits.
- Decimal parameters. These are positive or negative decimal numbers. The system accepts up to eight characters to the left of the decimal point and two characters to the right.

Defining Transmission Groups

EDI eCommerce Setup

- EC Subsystem Definition Maintenance
- EC Number Range Management
- eCommerce Control
- Exchange Definition Maintenance
- EC Subsystem/Exchange Maintenance
- Application Definition Maintenance
- Implementation Definition Maintenance
- Transformation Definition Maintenance
- Trading Partner Maintenance
- **Transmission Group Maintenance**

QAD

EDI-EC-SU-560

Transmission groups consolidate multiple trading partners by network location so that outbound documents can be batched appropriately. For example, you can create a transmission group for all the trading partners on one value-added network (VAN).

When you set up trading partners who will receive documents exported from QAD Enterprise Applications, you assign them to a transmission group. This relationship indicates such information as where the system should place outbound files for the trading partner.

QAD

Transmission Group Maintenance (35.13.13)

Transmission Name. Enter a name for the transmission group or use Next/Previous to scroll through the existing records and choose Go to select one.

Description. Enter a description of the transmission group, such as a company name.

Destination. Enter the directory where exported SNF files associated with this group will be written.

Processing Script. Optionally enter the file name of a custom script to be run after a group of documents is created. For example, this could be a script that invokes an e-mail program to transmit the exported files to the trading partner.

Processing Program. Enter the path name to an executable program file to be run when a file is exported to this transmission group. For example, this might be an e-mail program that transmits the file to a trading partner.

To specify a processing program on a different computer, use the Remote Host Name field in the EC Subsystem Definition Maintenance record for the EC subsystem associated with this transmission group.

HTTP ID. Enter the code representing the set of parameters used to post XML data to a server for trading partners in this transmission group. If specified, this must be a valid code defined in HTTP Adapter Maintenance (35.13.19).

By default, the Progress program `edimhtad.p` is used to post this data. If you use a custom-written processing program for this task, it should be set up to receive the following parameters:

- INPUT: The table storing parameter values (in matching pairs).
- INPUT: The XML pointer. This can be blank. In the case of `edimhtad.p`, the program is using the memory pointer from the XML document that was created in memory.
- INPUT-OUTPUT: The message table used to capture messages and pass messages back to the calling procedure.
- OUTPUT: The success flag used to determine if the process was successful.

HTTP Timeout. Enter the number of minutes that the system waits for a response from the HTTP posting process before displaying a timeout message. Leave the field set to the default (0) to have the system wait indefinitely.

Subsystem. Enter the EC subsystem associated with this transmission group. This subsystem must be defined in EC Subsystem Definition Maint.

This field determines the file extension used for the SNF files sent to trading partners assigned to this transmission group.

File Name Counter. Specify the sequence ID that is used to assign file names to files exported to this transmission group. This must be a valid sequence ID defined in EC Number Range Maintenance.

Capitalize Outbound Data. Enter Yes to convert the data in exported files for this transmission group into all capital letters.

Target Code Page. Specify the code page required by the receiving application for files sent to this transmission group. When creating the export file, the system converts the data as needed to match the specified code page.

This field is not validated. Be sure that the value you enter is included in the Progress file `DLC/convmap.cp`. Otherwise, the conversion program returns an error.

EDI eCommerce Setup – Review

EDI eCommerce Setup - Review

- EC Subsystem Definition Maintenance
- EC Number Range Management
- eCommerce Control
- Exchange Definition Maintenance
- EC Subsystem/Exchange Maintenance
- Application Definition Maintenance
- Implementation Definition Maintenance
- Transformation Definition Maintenance
- Trading Partner Maintenance
- Transmission Group Maintenance

QAD

EDI-EC-SU-580

Chapter 4

EDI eCommerce Processing

Process EDI eCommerce

In this section you learn how to:

- Identify key business considerations before setting up EDI eCommerce in QAD Enterprise Applications

- Set up EDI eCommerce in QAD Enterprise Applications

- **Process EDI eCommerce in QAD Enterprise Applications**

EDI-EC-Pro-010

Importing and Exporting Documents

Importing and Exporting Documents

- Follow Four Steps:

  - Use import/export program to select documents

  - Review reports to determine if errors exist

  - Correct conditions that created errors

  - Reprocess documents

QAD

EDI-EC-Pro-020

QAD

Importing Documents

Importing Documents

- **Document Import**
- Session Report
- Exchange Doc Status Inquiry/Report
- Exchange Data Repository Inquiry/Report
- Application Doc Status Inquiry/Report
- Application Data Repository Inquiry/Report
- Exchange/Application Xref Browse/Report
- Maintain eCommerce Repository Data

QAD

EDI-EC-Pro-040

Importing Documents

- Document Import
- Session Report
- Exchange Doc Status Inquiry/Report
- Exchange Data Repository Inquiry/Report
- Application Doc Status Inquiry/Report
- Application Data Repository Inquiry/Report
- Exchange/Application Xref Browse/Report
- Maintain eCommerce Repository Data

QAD

EDI-EC-Pro-030

This illustration is a suggested processing sequence for importing documents with EDI eCommerce.

Document Import (35.1)

Document Import

Document Import ✕

Go To ▾ Actions ▾ | Copy ▾ | Print | Preview

File Type (New/Error): New ⌄   Direction: Inbound ⌄
Print Details: ☐   Pre-Select All: ☐
Print Fail/Pass/Both: F   Failed

File Mask: *.*
Files:
Sessions:

Output:

New = Displays list of unprocessed files
Error = Displays only files containing documents
that encountered errors during previous import

Back   Next

QAD

EDI-EC-Pro-050

Use Document Import to start the process of loading SNF files from the EC subsystem, transforming them into formats usable by QAD Enterprise Applications, and transferring them into the QAD Enterprise Applications database using a gateway program.

The system generates a report on imported files to the device specified in Output. You can choose to run this process later using the Batch ID field.

File Type (New/Error). Specify the type of files to be listed in the Select File(s) frame.

- Enter New to display a list of unprocessed files located in either the Inbound Directory or the Outbound Scan Directory specified in eCommerce Control (35.13.24), depending on the setting of Direction.

- Enter Error to display only files containing documents that encountered errors during previous imports. These files are located in either the Error File Directory or the Outbound Error Directory specified in eCommerce Control, depending on the setting of Direction.

Direction. Specify the source of the files the system will select for import:

Inbound: The program selects files from the directory specified in the Inbound Directory field in eCommerce Control. It then imports EDI documents to the exchange repository based on a standards-neutral format (SNF) by transforming them using specified maps, placing them in the application document repository, and loading them into the database.

Outbound: The system selects files from the directory specified in the Outbound Scan Directory field in eCommerce Control. Instead of using exchange records based on an SNF, the system imports these files directly into the application document repository for processing.

For example, you would specify this directory as the source of files that are provided by an external system and are to be transformed and exported using EDI eCommerce without creating business documents.

Print Details. Enter Yes to include detailed error and warning messages on the report generated when this program executes. If you enter No, the report is limited to higher-level summary information.

Pre-Select All. Enter Yes to have all files selected—that is, marked with an asterisk (*)—when displayed on the Select File(s) list. If this field is No, the files still display, but none are initially selected.

Print Fail/Pass/Both. Specify the status of documents to be included in the output report of this program.

Failed (the default): The report is limited to documents that failed to process.

Passed: The report is limited to documents that processed correctly.

Both: The report includes all documents regardless of status.

Input Directory. Enter the directory path to the location of the files to be processed. This must be a valid directory.

Initially, the field defaults from eCommerce Control. If you change it, the system associates the value you enter with your user ID. Next time you run this program, the field defaults to the same value you entered previously.

File Mask. Specify one or more patterns, including wildcards (*), for the system to use in selecting files for processing. For example, if you enter *.GEN, the system selects all files with an extension of GEN. Separate multiple entries with commas.

Files. Enter the names of the files to be processed, including extensions. Separate multiple file names with commas. The system validates your input.

Do not enter the full path to these files. The system automatically looks in either the Inbound Directory or the Outbound Scan Directory specified in eCommerce Control, depending on the setting of Direction.

You can also leave Files blank and choose Go to display a list of files—either new files or previously imported files that encountered errors during load processing, depending on how File Type (New/Error) is set. Select or deselect files from the list as required. Selected files are marked with an asterisk (*).

After selecting files from the list, choose Go. Selected files display in the Files field.

Sessions. These system-assigned numbers group all the files imported during a particular session. Use them to track the status of the documents you have imported and to identify any errors that occurred during processing.

Additionally, the system assigns a sequence number to each file selected. This number is used to group the documents within the file. If any documents cannot be loaded, the system writes them to an error file that uses the process session number as a file name.

Session Report (35.7)

Importing Documents

- Document Import
- **Session Report**
- Exchange Doc Status Inquiry/Report
- Exchange Data Repository Inquiry/Report
- Application Doc Status Inquiry/Report
- Application Data Repository Inquiry/Report
- Exchange/Application Xref Browse/Report
- Maintain eCommerce Repository Data

QAD

EDI-EC-Pro-060

QAD

Session Report

Session Report ✕

Go To ▾ | Actions ▾ | Copy ▾ | Print | Preview

Direction: In	Print Details: ✓	Pre-Select All: ☐
	Print Failed/Passed/Both: P Passed	Summary Only: ☐
		Summary Details: ✓
Date:	To:	
Session:		
		Output:
		Batch ID:

Select Process Session Numbers

Session	Date	Time
3734	5/14/2009	6:48:AM
3732	5/14/2009	6:43:AM
3723	5/12/2009	5:41:AM
3721	5/12/2009	5:35:AM
3717	5/11/2009	3:27:AM
3715	5/11/2009	3:23:AM
3713	5/11/2009	2:52:AM

Back   Next

QAD

EDI-EC-Pro-070

- The Session Report shows the status of document imports or exports at each processing step
- Use the report to analyze where problems occurred, then resolve the problems either at the source or in the data repository

Direction. Direction of the document transfers to be included in this report.

Print Details. Yes = include error messages on the report. No = report includes only the status code for each document processed during the session

Pre-Select All. Yes = all sessions selected when displayed in the selection list

No = sessions still display, but none are initially selected

Session. Session numbers of the process sessions to be included in this report.
  - Separate multiple entries with commas
  - Selected sessions are marked with an asterisk (*)

Pass/Failed/Both. Optionally limit the selection as specified.

Sample Session Report

Document Processing Status Codes - Inbound

Document Processing Status Codes - Inbound

Code	Direction	Status
11	Inbound	Load process failed. Could indicate problem in SNF file or with trading partner or document definition.
12	Inbound	Exchange file load successful.
13	Inbound	Exchange file transformation errors.
14	Inbound	Exchange file transformation successful.
21	Inbound	Application document created but has not moved to transfer process. May indicate a problem with gateway processing.
22	Inbound	Application document transfer errors.
23	Inbound	Application document transfer successful.

QAD

EDI-EC-Pro-090

The system assigns a status code to each document at each step of the process:

Once you know the status of the document, which tells you where in the process any errors occurred, you can use one of the document repository inquiry or report programs to display the error messages and identify the causes of specific problems.

QAD

Document Processing Status Codes - Outbound

Document Processing Status Codes - Outbound

Code	Direction	Status
31	Outbound	Application document transfer errors. Correct in QAD Enterprise Applications, then treat as new export.
32	Outbound	Application document transfer successful.
33	Outbound	Application document transformation errors.
34	Outbound	Application document transformation successful.
41	Outbound	Exchange file created, but has not moved to unload process. May indicate a problem with gateway processing.
42	Outbound	Exchange file unload errors.
43	Outbound	Exchange file unload successful.

QAD

EDI-EC-Pro-100

QAD
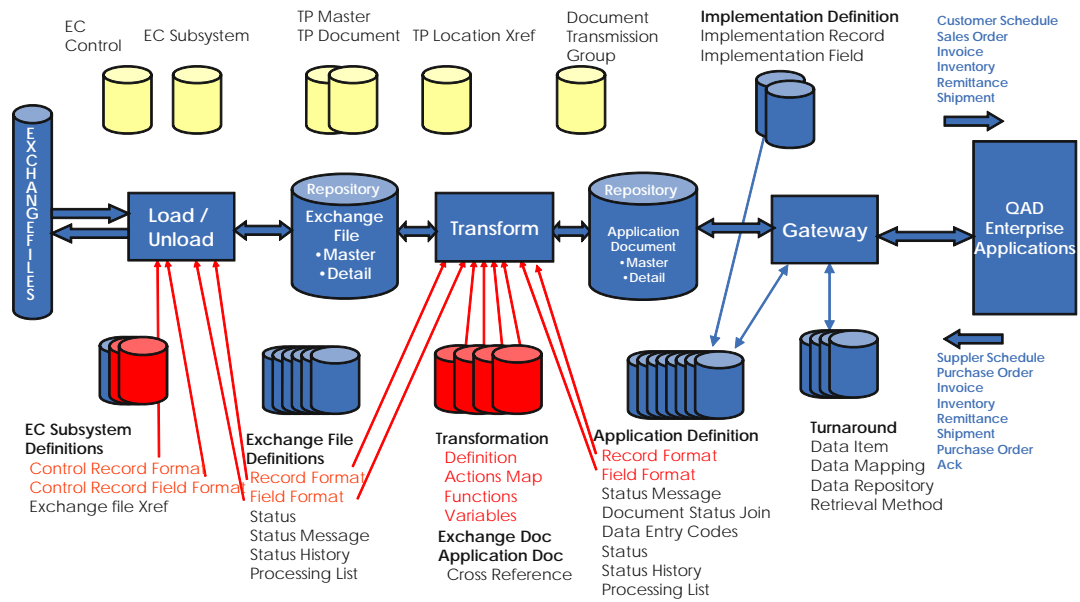
Exchange Doc Status Inquiry (35.9.1)

Importing Documents

- Document Import
- Session Report
- **Exchange Doc Status Inquiry/Report**
- Exchange Data Repository Inquiry/Report
- Application Doc Status Inquiry/Report
- Application Data Repository Inquiry/Report
- Exchange/Application Xref Browse/Report
- Maintain eCommerce Repository Data

QAD

EDI-EC-Pro-120

QAD

Exchange Doc Status Inquiry

Exchange Doc Status Inquiry ✕

Go To ▾ | Actions ▾ | Copy ▾ | Print | Preview

Ref ID: edi000002562		
Ref Origin: TP Document ID	Modified: 5/14/2009	EDI
TP ID: CA720055	Status: 14 Passed	
TP Pri Ref: P14632	TP Doc ID: 850	
Trans Grp:	Dir: In	
File Name: EC000000057.edi	Seq Nbr: 3557	

Session No	Status	Process Seq	Date	Process Time
3734	12	1	5/14/2009	6:48 AM
3734	14	2	5/14/2009	6:48 AM

Back   Next

QAD

EDI-EC-Pro-130

Once you know the status of the document, which tells you where in the process any errors occurred, use one of the document repository inquiry or report programs to:

- Display the error messages
- Identify causes of specific problems

Enter the sequence number of a document.

- The first frame displays reference information
- Display list of sessions associated with that sequence number

Note QAD .NET UI users can view similar data using Maintain eCommerce Repository Data. That program also provides additional viewing, maintenance, and reprocessing functions.

Exchange Doc Status Inquiry

Exchange Doc Status Inquiry ✕

Go To ▾ | Actions ▾ | Copy ▾ | Print | Preview

Ref ID: edi000002562
Ref Origin: TP Document ID
TP ID: CA720055
TP Pri Ref: P14632
Trans Grp:
File Name: EC000000057.edi

Modified: 5/14/2009   EDI
Status: 14 Passed
TP Doc ID: 850
Dir: In
Seq Nbr: 3557

Session No	Status	Process Seq	Date	Process Time
3734	12	1	5/14/2009	6:48 AM
3734	14	2	5/14/2009	6:48 AM

Error Level 3 and 4 are hard errors.
Level 1 and 2 are warning messages.

Back   Next

EDI-EC-Pro-140

Exchange Doc Status Inquiry

Exchange Doc Status Inquiry ✕

🔵 Go To ▾ 💡 Actions ▾ 📄 Copy ▾ 🖨 Print 📄 Preview

Ref ID:
Ref Origin: Application Control   Modified: 7/16/2008   EDI
    TP ID: DHK_12345   Status: 11   Failed
TP Pri Ref: 683   TP Doc ID: 862
Trans Grp: Dir: In
File Name: dhk830.1034.edw   Seq Nbr: 1605

Session No	Status	Process Seq	Date	Process Time
1588	11	1	7/16/2008	5:09 PM

Back   Next

🔺 QAD

EDI-EC-Pro-150

Exchange Doc Status Report (35.9.2)

Importing Documents

- Document Import
- Session Report
- Exchange Doc Status Inquiry/Report
- **Exchange Data Repository Inquiry/Report**
- Application Doc Status Inquiry/Report
- Application Data Repository Inquiry/Report
- Exchange/Application Xref Browse/Report
- Maintain eCommerce Repository Data

QAD

EDI-EC-Pro-170

QAD

Exchange Data Repository Inquiry (35.9.4)

Includes two types of data

• Inbound exchange files that have been loaded from the EC subsystem SNF files

    • Have not been transformed for transfer into QAD Enterprise Applications

• Outbound exchange files consisting of transformed QAD Enterprise Applications data

    • Has not been unloaded to the EC subsystem

Note   QAD .NET UI users can view similar data using Maintain eCommerce Repository Data. That program also provides additional viewing, maintenance, and reprocessing functions.

Application Doc Status Inquiry/Report

Importing Documents

- Document Import
- Session Report
- Exchange Doc Status Inquiry/Report
- Exchange Data Repository Inquiry/Report
- **Application Doc Status Inquiry/Report**
- Application Data Repository Inquiry/Report
- Exchange/Application Xref Browse/Report
- Maintain eCommerce Repository Data

QAD

EDI-EC-Pro-190

QAD

Application Doc Status Inquiry (35.9.8)

Displays error/warning messages that identify causes of specific problems. An Err Lvl of 2 or lower is identified as a warning message and can pass to the next stage. An Err Lvl of 3 or higher will not let the document pass to the next stage and an Error message appears.

Note   QAD .NET UI users can view similar data using Maintain eCommerce Repository Data. That program also provides additional viewing, maintenance, and reprocessing functions.

Application Data Repository Inquiry/Report

Importing Documents

- Document Import
- Session Report
- Exchange Doc Status Inquiry/Report
- Exchange Data Repository Inquiry/Report
- Application Doc Status Inquiry/Report
- **Application Data Repository Inquiry/Report**
- Exchange/Application Xref Browse/Report
- Maintain eCommerce Repository Data

QAD

EDI-EC-Pro-210

Application Data Repos Inquiry (35.9.11)

This repository includes two types of data.

- Outbound QAD Enterprise Applications documents that have been transferred from the QAD Enterprise Applications database with an export gateway
  - Have not been transformed into an exchange file format
- Inbound QAD Enterprise Applications documents consisting of transformed QAD Enterprise Applications data
  - Has not been transferred by a gateway program to the QAD Enterprise Applications database

Note QAD .NET UI users can view similar data using Maintain eCommerce Repository Data. That program also provides additional viewing, maintenance, and reprocessing functions.

Exchange/ Application Xre Browse/Report

Importing Documents

- Document Import
- Session Report
- Exchange Doc Status Inquiry/Report
- Exchange Data Repository Inquiry/Report
- Application Doc Status Inquiry/Report
- Application Data Repository Inquiry/Report
- **Exchange/Application Xref Browse/Report**
- Maintain eCommerce Repository Data

QAD

EDI-EC-Pro-230

Exchange/Application Xref Browse (35.9.13)

Use Exchange/Application Xref Browse to view exchange file sequence numbers and their corresponding application document sequence numbers.

Note   QAD .NET UI users can view similar data using Maintain eCommerce Repository Data. That program also provides additional viewing, maintenance, and reprocessing functions.

Exchange/Application Xref Report (35.9.14)

Maintaining Repository Data

Importing Documents

- Document Import
- Session Report
- Exchange Doc Status Inquiry/Report
- Exchange Data Repository Inquiry/Report
- Application Doc Status Inquiry/Report
- Application Data Repository Inquiry/Report
- Exchange/Application Xref Browse/Report
- **Maintain eCommerce Repository Data**

QAD

EDI-EC-Pro-260

If a problem occurs during import because the system cannot create a QAD Enterprise Applications business document based on the imported data, you can modify inbound data directly in the repository and then reprocess it.

- Individual programs are available to maintain exchange and application repository records and to reprocess corrected documents.

- For QAD .NET UI users, a single workbench-style program lets you view documents based on cross-references, update both repositories directly, and reprocess corrected repository documents.

QAD

Repository Maintenance Programs

Use Exchange Data Repository Maint (35.9.3) or Application Repository Maintenance (36.9.10) to modify or add data in the associated portion of the data repository. For example, you might use this program to add a value to a missing mandatory field that is preventing the transformation process from completing. (The illustration shows the application data program; both programs operate the same way.)

Important   Use caution when modifying repository data. For example, changing data in a repository record that includes invoice data exported from QAD Enterprise Applications does not update the invoice itself. This can lead to database synchronization problems.

The reprocessing programs include three frames. When you select a repository document to maintain in the first frame, the system displays trading partner data and reference information about the document. Use the second and third frames to select the specific record and field that contains the data you want to maintain.

Note   A .NET UI menu collection—discussed in a later topic—lets you select a document through a browse and view or update associated records in both repositories, as well as reprocess them after correcting problems, through a single UI. Its repository maintenance functionality is similar to this program.

Document Reprocessing Programs

Separate programs for imported and exported documents:

- Import Reprocessing (35.9.21)
- Export Reprocessing (35.9.22)

UIs are identical.

Pre-Select All. Enter Yes to have all documents selected—that is, marked with an asterisk (*)—when displayed on the selection list. When this field is No, the documents still display, but none are initially selected.

When the list displays, you can select or deselect documents as needed.

Print Details. Enter Yes to include detailed information on the report that is output when this program is executed. If you enter No, the report includes only summary information.

Application. Enter a code representing the application that will have documents processed. The default is EDI.

Exchange, Application Sequence Mask. Specify one or more patterns, including wildcards (*), for the system to use in selecting records from the exchange or application repository for processing.

The system associates the values you enter with your user ID. Next time you run this program, the field defaults to the same values you entered previously.

Repository Maintenance Workbench Program
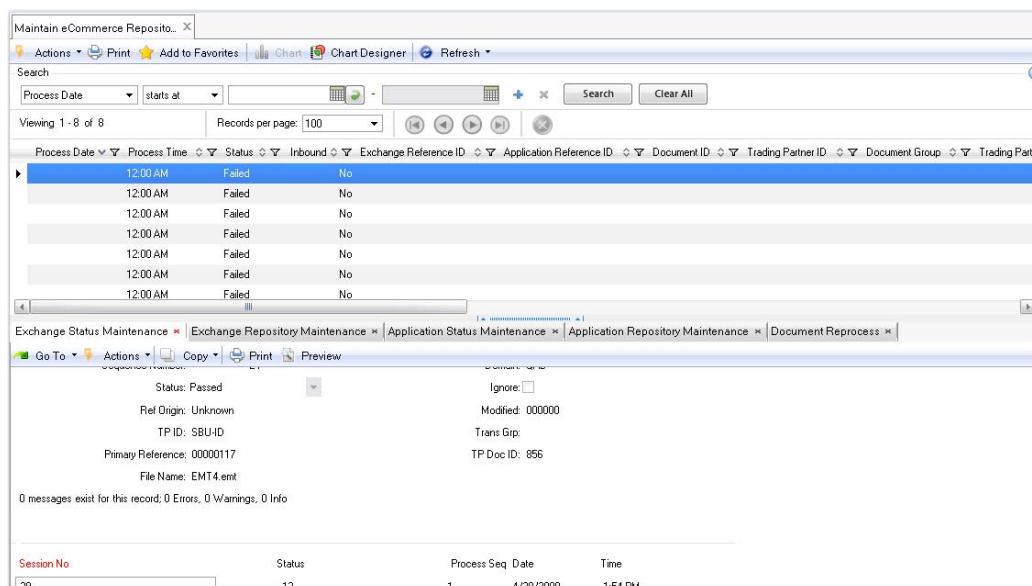
In the QAD .NET UI, Maintain eCommerce Repository Data allows you to view and update EDI eCommerce repository and status records from a single workbench-style access point.

In the initial browse window, you can use standard .NET UI filtering functions to limit the selection of documents displayed by process date, status, document direction, trading partner ID, and several other criteria. Next, select a record from the main browse window. The system populates the Sequence ID field in each of the five associated programs (shown as tabs below the browse window) based on the selected record. You can then:

• View status and processing messages in either the exchange or application repository. This is similar to the standard Exchange Doc Status Inquiry and Application Doc Status Inquiry programs, with some added functionality: You also can update the Passed/Failed status in either repository. Select Ignore to make the document unavailable for reprocessing.

• Modify information in the associated exchange or application repository document. The two workbench repository maintenance programs are very similar to the menu-level Exchange Data Repository Maint and Application Data Repository Maint functions. The main difference is that the workbench programs display less read-only data.

• Reprocess the updated records in both repositories using values that you have updated in the other programs. This is similar to the menu-level Import Reprocessing and Export Reprocessing functions. Note that reprocessing only takes place on the repository level. To re-import or re-export a file, use Document Import or the appropriate program—based on the document type—from the Document Export menu.

Importing Documents - Review

Importing Documents - Review

- Document Import
- Session Report
- Exchange Doc Status Inquiry/Report
- Exchange Data Repository Inquiry/Report
- Application Doc Status Inquiry/Report
- Application Data Repository Inquiry/Report
- Exchange/Application Xref Browse/Report
- Maintain eCommerce Repository Data

QAD

EDI-EC-Pro-300

QAD

Exporting Documents

Exporting Documents

- Export Menu
- Session Report
- Application Doc Status Inquiry/Report
- Application Data Repository Inquiry/Report
- Exchange Doc Status Inquiry/Report
- Exchange Data Repository Inquiry/Report
- Exchange/Application Xref Browse/Report

QAD

EDI-EC-Pro-310

QAD

Export Menu

Exporting Documents

- **Export Menu**
- Session Report
- Application Doc Status Inquiry/Report
- Application Data Repository Inquiry/Report
- Exchange Doc Status Inquiry/Report
- Exchange Data Repository Inquiry/Report
- Exchange/Application Xref Browse/Report

QAD   EDI-EC-Pro-320
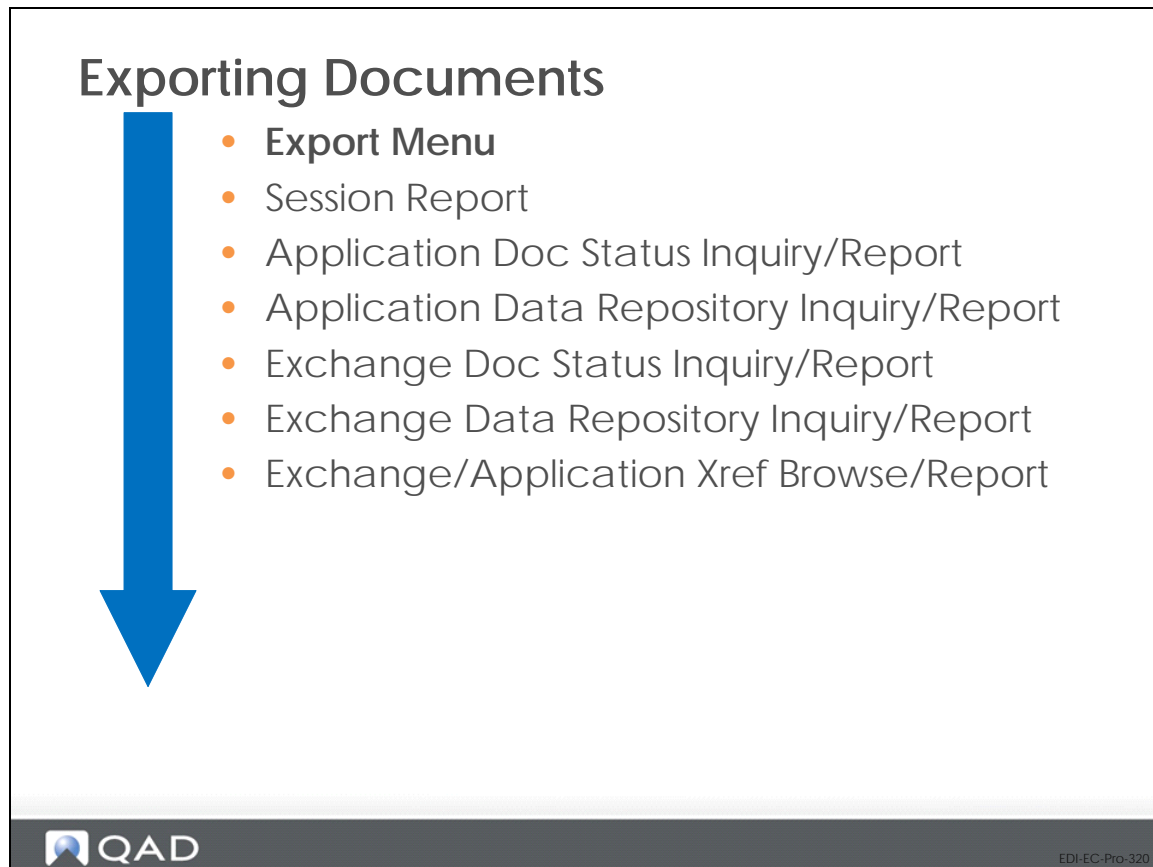
This illustration is a suggested processing sequence for exporting documents with EDI eCommerce.

Shipment ASN Export (35.4.1)

In Shipment ASN Export, enter selection criteria to indicate which shipments should have ASNs sent. The system uses these criteria to execute the appropriate gateway program, select the appropriate trading partner information, and t ransform outbound QAD Enterprise Applications data to the format required by receiving party's EC subsystem

Shipper, Ship-From, Ship-To/Dock, Inventory Movement Code, Ship Date. Specify ranges of selection criteria for the system to use in selecting ASNs for export.

Include Confirmed Shippers Only. Enter Yes to include only confirmed shippers in the selection.

Print Details. Specify whether error and warning message details are included on the output report, or if it is limited to higher-level summary information.

Update/Export. When this option is set to Export, then the normal export procedure is processed.

When this option is set to Update, the implementation definition is retrieved for the trading partner and any field definitions that have specified Edit = Yes will be displayed and prompted for operator input. The data entered will be stored and retrieved during export. This allows for data to be entered or modified for the electronic shipment notice before export.

EDI Batch No. To re-export a group of documents, enter the batch number assigned to the group. When exporting a new group of documents, leave this field set to zero. The system assigns a new batch number to each group of exported documents.

Invoice Export (35.4.3)

Use Invoice Export to export individual, multiple, or cumulative invoices to a customer.

Enter ranges of selection criteria for invoice number, sales order number, and so on as required to select invoices for export.

*   System uses these criteria to execute the appropriate gateway program
*   Select the appropriate trading partner information
*   Transform outbound QAD Enterprise Applications data to the format required by receiving party's EC subsystem
*   The Update/Export functions the same as in the Shipment ASN Export

Consignment Usage Export (35.4.2)

Purchase Order Export (35.4.9)

Purchase Order Acknowledgement (35.4.5)

You can use Purchase Order Acknowledgement Maintenance (35.4.4) to assign or modify the status of purchase orders before exporting them with this program.

Supplier Self Billing Export (35.4.11)

Supplier Shipping Schedule (35.4.8)

Inventory Cycle Count Export (35.4.13)

Packing List Export (35.4.15)

DO Packing List Export (35.4.16)

Price Catalog Export (35.4.17)

Price Catalog Export

Price Catalog Export

Go To ▾ | Actions ▾ | Copy ▾ | Print | Preview | Attach

Customer: ▾ To: ▾ Item Number:

Customer: [🔍]   To: [🔍]

Item Number: [🔍]   To: [🔍]
Product Line: [🔍]   To: [🔍]
Type: [▾]   To: [▾]
Status: [🔍]   To: [🔍]
Group: [▾]   To: [▾]

TP Location Cross-Reference   Effective Date: 10/28/2010 ▾
Application Site: [🔍]   TrM Division:
App Addr: [🔍]   TrM Group:
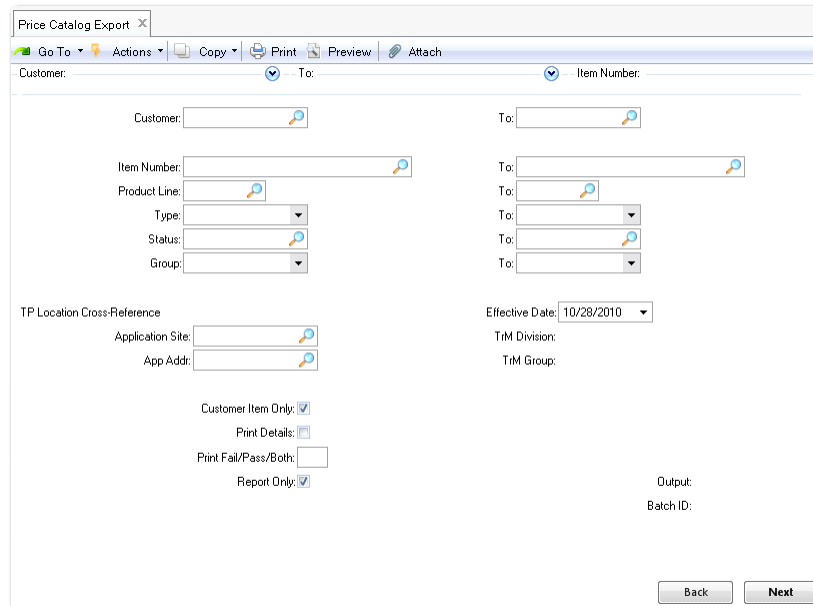
Customer Item Only: ☑
Print Details: ☐
Print Fail/Pass/Both: [ ]
Report Only: ☑   Output:
Batch ID:

[Back] [Next]

QAD   EDI-EC-Pro-430

Warehouse Shipping Advice (35.4.18)

Generic Gateway Export (35.4.20)

Generic Gateway Export

Generic Gateway Export ✕

Go To ▾   Actions ▾   🗐 Copy ▾   🖨 Print   🖹 Preview

Site:		To:	
Ship To:		To:	

Print Details: ☑

Update/Export/Both: E   Export

Print Failed/Passed/Both: B   Both

EDI Batch No.: 0

Output: saz

Batch ID:

> The generic gateway can be used to manually export an EDI document using an existing template.

Back   Next

QAD

EDI-EC-Pro-450

QAD

Exporting Documents - Review

Related Functions

Turnaround Data Maintenance (35.9.17)

Turnaround Data Maintenance

Turnaround Data Maintenance ✕

Go To ▾   Actions ▾   Copy ▾   Print   Preview

Target Domain: Domain1

Table Name: sod_det

Index Field Name: sod_nbr,sod_line

Index Field Value:

Turnaround Data Item: rep-det-field-1

Turnaround Data Item Value:

Back   Next

QAD

EDI-EC-Pro-480

QAD

Import/Export Controller (35.17.5)

Use Export/Import Controller to export and import files on a regular schedule.

Based on the frequency and number of hours specified, the system searches the QAD Enterprise Applications database for confirmed shippers or invoices that have not been exported. When it finds a document, eCommerce begins processing automatically.

• If import = Yes, the system polls the import directory defined in eCommerce Control

Note Outbound directories are specified in the destination field in Transmission Group Maintenance (35.13.13).

Polling Frequency per Hour. Number of times per hour the process should check for files to import or documents to export. Logical flags allow polling for various combinations of import and export functions.

Hours of Polling. Number of hours the process should check for files to import or documents to export.

• If zero, the process keeps checking for available items until manually interrupted

Ship Notice. When this is Yes, the system automatically searches for and processes confirmed shippers in the QAD Enterprise Applications database and generates ASNs.

Import Files. Yes = system automatically searches for and processes files in the inbound directory specified in the eCommerce Control.

Invoice. Yes = system automatically searches for and processes invoices in the QAD Enterprise Applications database.

Print Details. Yes = error and warning message detail appears on report that is output when program executes. No = report is limited to higher-level summary information.

Reprocessing Documents

Import Reprocessing

Reprocessing Documents
- **Import Reprocessing**
- Export Reprocessing

QAD

EDI-EC-Pro-510

QAD

Import Reprocessing (35.9.21)

After resolving a problem with import or export processing, use the appropriate program to repeat processing for selected process sequence numbers.

The system generates a report on the reprocessed files to the device specified in Output.

Pre-Select All. Yes = all documents selected when displayed on the selection list. No = the documents still display, but none are initially selected.

Print Details. Yes = include detailed information on the report that is output when this program is executed. No = report includes only summary information.

Sequence. Each document is automatically assigned a sequence number during processing.

- Enter the sequence numbers to be reprocessed
- Separate multiple entries with commas
- The system validates the entries

Import Reprocessing Report

```
Import Reprocessing Report


edixrpr.p 3+                                    35.9.21 Import Reprocessing
Date: 05/14/09
Page:    1                                          DOM1 USD DB NY
Time: 11:23:23

                                            eCommerce Session Report

    Session ID:              3737        Date:      05/14/09      Time:        11:23:AM        Direction:  Inbound

Transformation Process Errors

Status      Reference ID          EDI Customer Number  Doc ID          Doc Type        Site       TP Addr    Site
Address
---------- -------------------- -------------------- --------------- --------------- ---------- ---------- ----------
----------
Passed      edi000002199          CA720055            P14457          850
WARNING: Trading partner location cross-reference does not exist: 10000/10000/.
ERROR: Function returned error: 4441 getMFGPROAddress: Address cross reference does not
existTP-ID/TP-DOC-ID/DIRECTION/T
P-SITE/TP-ADDRESS:CA720055/850/yes/10000/10000.
ERROR: Function returned error: 4441 getMFGPROSite: Site cross reference not available
TP-ID/TP-DOC-ID/DIRECTION/TP-SITE
/TP-ADDRESS:CA720055/850/yes/10000/10000.
ERROR: Mandatory data field has not been set: O / HDR.tp-ship-to.
ERROR: Mandatory data field has not been set: O / HDR.tp-ship-from.
Passed      edi000002262          CA720055            P14530          850
WARNING: Trading partner location cross-reference does not exist: 3010/emtex01/.
ERROR: Function returned error: 4441 getMFGPROAddress: Address cross reference does not
existTP-ID/TP-DOC-ID/DIRECTION/T
P-SITE/TP-ADDRESS:CA720055/850/yes/3010/emtex01.
ERROR: Function returned error: 4441 getMFGPROSite: Site cross reference not available
```

QAD

EDI-EC-Pro-530

QAD

Export Reprocessing

Export Reprocessing (35.9.22)

Export Reprocessing Report

Export Reprocessing Report

```
edoxrpr.p 3+                          35.9.22 Export Reprocessing
Date: 05/14/09
Page:    1                                  DOM1 USD DB NY
Time: 11:34:44


                                    eCommerce Session Report

    Session ID:              3738        Date:      05/14/09     Time:      11:34:AM        Direction:
Outbound


Transformation Process Errors

Status      Reference ID         EDI Customer Number  Doc ID          Doc Type        Site       TP Addr    Site
Address
---------- -------------------- -------------------- --------------- --------------- ---------- ---------- ----------
----------
Failed      TPoApp000000200      SHP001               SH000000205,100 856             10000      SHP001     10000
Shp001
ERROR: Mandatory data field has not been set: O / Item-Info.asn-item.
Failed      TPoApp000000201      SHP001               SH000000206,100 856             10000      SHP001     10000
Shp001
ERROR: Mandatory data field has not been set: O / Item-Info.asn-item.
Failed      TPoApp000000202      SHP001               SH000000207,100 856             10000      SHP001     10000
Shp001
ERROR: Mandatory data field has not been set: O / Item-Info.asn-item.
Failed      TPoApp000000203      SHP001               SH000000205,100 856             10000      SHP001     10000
Shp001
ERROR: Mandatory data field has not been set: O / Item-Info.asn-item.
Failed      TPoApp000000204      SHP001               SH000000206,100 856             10000      SHP001     10000
Shp001
ERROR: Mandatory data field has not been set: O / Item-Info.asn-item.
Failed      TPoApp000000205      SHP001               SH000000207,100 856             10000      SHP001     10000
Shp001
ERROR: Mandatory data field has not been set: O / Item-Info.asn-item.
Failed      TPoApp000000206      SHP001               SH000000205,100 856             10000      SHP001     10000
Shp001
```

QAD

EDI-EC-Pro-580

QAD

Reprocessing Documents - Review

Reprocessing Documents - Review
- Import Reprocessing
- Export Reprocessing

QAD

EDI-EC-Pro-590

Document Tracking

Trading Partner Maintenance (35.13.7)

Trading Partner Maintenance

Trading Partner Maintenance ✕

Go To ▾ Actions ▾ Copy ▾ 🖶 Print 🔍 Preview

TP ID: ACME Supply   Name: ACME Supply

Trading Partner Document Records

Track: ☑

Acks: ☑

Fields: ☑

Save Repository: ☑

Document Group: [   ]

cApplication: [EDI   ] 🔍

Exchange Counter: [   ] 🔍

Application Counter: [   ] 🔍

Use Primary Reference: ☐

Suppress Warnings: ☐

Stop Processing On Error: ☐

Suppress Session Report: ☐

Set to 'Yes' to enable document tracking functionality.

If set to 'Yes,' a return acknowledgement is expected.

Back   Next

QAD

EDI-EC-Pro-610

Document Tracking Maintenance (35.9.16.1)

Document Tracking Maintenance

Document Tracking Inquiry (35.9.16.3)

Document Tracking Inquiry

Document Tracking Inquiry ✕

Go To ▾ Actions ▾ Copy ▾ Print Preview

Doc Type: *
Direction: Out
Status Type: *

TP ID: _____ To: _____
Doc Ref: _____ To: _____
Create Date: ▾ To: ▾

Back   Next

QAD   EDI-EC-Pro-640

Document Tracking Inquiry

Document Tracking Inquiry

Document Tracking Inquiry

Document Tracking Inquiry

Document Tracking Archive/Delete (35.9.13.16)

Advanced EDI eCommerce Set Up and Processing

Advanced EDI eCommerce Set Up and Processing

- eCommerce Function Maintenance
- Transformation
- Looping
- Cross-References and Validation
- eCommerce Utilities

QAD

EDI-EC-Pro-700

Defining eCommerce Transformation Functions

Advanced EDI eCommerce Set Up and Processing

- **eCommerce Function Maintenance**
- Transformation
- Looping
- Cross-References and Validation
- eCommerce Utilities

QAD

EDI-EC-Pro-710

eCommerce Function Maintenance (35.15.21)

Use eCommerce Function Maintenance to create user-defined functions, if needed.

Define the type of return required—alphanumeric, integer, real number, date, or logical—as well as the names and types of the parameters passed by the function.

- The program uses input to create a Progress program template
- After saving the template to disk, use an editor to open the file and complete the code

The system saves user-defined functions in the directory specified in eCommerce Control (35.13.24) with the file name of the function.

Function Name. Alphanumeric name for this function.

Description. Optionally describe what this function does.

Return Type. Type of value returned as output when this function is performed:

- AN: Alphanumeric
- R: Real number
- I: Integer
- L: Logical
- D: Date

Type. Type of value represented by this variable.

Name. Name of the variable that will be created inside the program.

Important   Do not use Progress keywords or special characters as the variable name. Doing so will cause the function to fail. Also, you can compile these programs if you want to see if they will compile.

eCommerce Function Inquiry (35.15.22)

Scroll through summary information on functions.

eCommerce Function Report (35.15.23)

Generate a complete report on a selected range of functions.

List of QAD Defined Functions

List of QAD Defined Functions

getCumShipped	create-addr-mstr	getTPAddress	get_pod_field	Raise-Error
get_po_no	Date-Offset	getTPSite	get_shipto_TA	Round
Isblank	DateToString	getXrefValue	get_sod_det	Saturn-Kanban
SysDate	DetailHash	get_abs_field	get_sod_field	SetXrefValue
Add	Divide	get_addr_mstr	get_so_field	Substring
Check-Hash	get-release-id	get_comm_code	get_so_nbr	Subtract
CheckHashOut	get-schd-po	get_custpart	Isgreater	Systime
Comment	get-val-chkhash	get_custpart_field	Modulo	ToDate
compare	GetBatchNo	get_mfgpart	Multiply	Truncate
ComparePairs	getMFGPROAddress	get_partshipto_TA	Progress	get_part_mstr
Concat	getMFGPROSite	get_part_field	put-val-chkhash	CnvtTime

QAD

EDI-EC-Pro-740

QAD

Transformation Maps
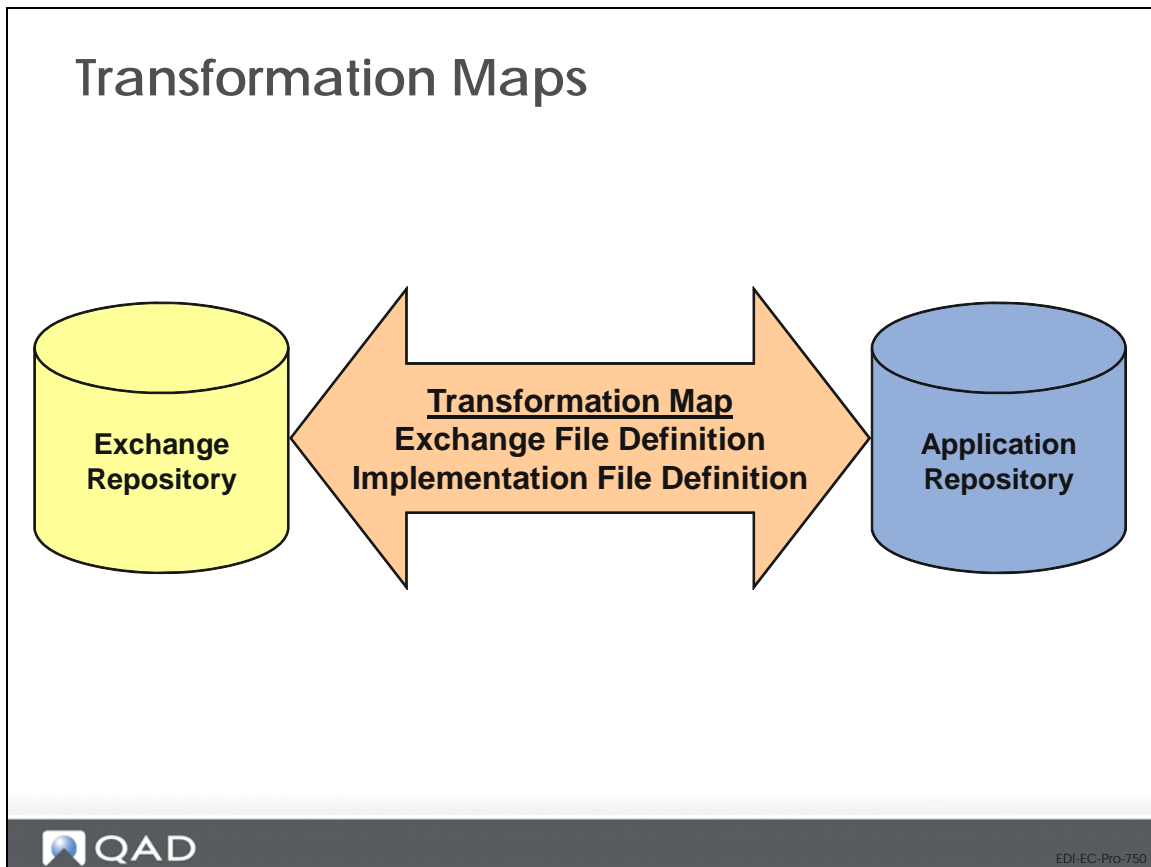
Transformation

Advanced EDI eCommerce Set Up and Processing

- eCommerce Function Maintenance
- **Transformation**
- Looping
- Cross-References and Validation
- eCommerce Utilities

Transformation Definition Maint (35.15.17)

Transformation. Name for this transformation definition.

Direction. Direction of the documents to be transformed using this map.

Exchange File, Ver. Name and version of the exchange file definition used in this transformation.

Application, Ver. Name and version of the application document definition used in this transformation.

Implementation, Ver. Implementation definition and version used in this transformation.

Can Run. Yes = makes this transformation map completely operational.

Important   During testing, set this field to No. The system then runs the entire transformation process, but backs the data out of the application repository instead of storing it. Identify mapping problems and correct them before changing this field to Yes.

Debug Level. Enter a value between 0 and 9.

- Level of detail reported in the activity file created when this transformation is run
- Lower levels provide less detail, with zero providing none
- It produces a file in your current home directory and appends sessions in file names <MMDDYYYY.DBG>

Note   You can set this to 9 during testing to get a complete record of what happens during transformation processing.

Warning   Leaving this field set to a high value can produce very large files and lead to disk space problems.

Many to Many. Yes = combine multiple input documents and treat them as one or more documents. Allows the system back out multiple files or create a single output from several inputs

No = the system always maps one input document to one or many output documents

• Depends on how many times the transformation definition indicates a new header should be written

Before displaying the second frame, the system creates variables from the exchange file and the implementation associated with this transformation definition. Only these and user-defined variables can be used during transformation, along with the following automatically assigned variables.

• tp-id	• map-name
• tp-document-id	• map-exf-vers
• tp-message-nbr	• map-imp-name
• tp-func-grp-nbr	• map-imp-vers
• tp-interchange-nbr	• map-mfg-name
• tp-document-nbr	• map-mfg-vers
• tp-doc-dir	• map-exf-name
• tp-site	• map-many-to-many
• tp-address	• map-debug-level
• tp-token-val-list	• map-can-run
• mfg/pro-site	• current-exf-seq
• mfg/pro-address	• current-mfg-seq
	• conditional-rec-flushed

The trading partner variables correspond to tokens. The system uses MFG/PRO-SITE and MFG/PRO-ADDRESS to determine the customer address and the site code automatically, based on the cross-reference defined in Trading Partner Maintenance (35.13.7). You can also assign these values as an event that takes place during transformation. Other variables contain information associated with the transformation definition.

Transformation Definition Maint, Events Frame

In the Event Qualifiers frame, begin identifying a new event by specifying a combination of:

- Event qualifier
- Event
- Record name
- Action sequence

Ev Qual. An event qualifier. The current version of eCommerce uses only the Each option.

Event. Type of event.

- Loop-Entry
- Record-Entry
- Field-Entry
- Loop-Exit
- Record-Exit
- Field-Exit

Record Name. Name of the record that has the event occurring.

Action Seq. A number to represent the sequence in which this event occurs. When setting up event qualifiers, consider using increments of 10 so that intermediate sequence numbers can be inserted later.

Type. Type of action to be performed.

Field Level:

- Equate: Set the target equal to the source
- If: Conditional logic based on source and source qualifier
  - The If statement must return a value of True or Yes
  - Allows the use of Else and Endif
- Endif: End of an If statement
- Does not require a source or target
- Else: Logical branch between If and Endif statements
  - Does not require a source or target

Record Level:

- Read: Read the target record fields into memory
  - Can be used only with an input record
- Clear: Remove the target record fields from memory
- Write: Write the target record to the database
  - You can only write an output record
  - Must write a header record before another record can be written
  - Write can be used optionally with the QAD-provided check-hash function, which determines the header for which the detail will be written
- New: Logical place holder for creating outbound transactions
- Loop: Loop through the records already read into memory
- LoopEnd: End a loop
  - Does not require a source or target

Qual (target). Form of data to be specified as the target for this event:

- I: Input data
- O: Output data
- V: Variable

Target

- Inbound record or field
- Outbound record or field
- Variable that is the target of the action specified in Type

Qual (source). Form of data to be specified as the source for this event:

- I: Input data
- O: Output data
- V: Variable
- C: Constant
- F: Function

Note If you specify a function and enter its name in Source, another frame lets you modify it as needed for this specific instance. You can also define your own functions with eCommerce Function Maintenance (35.15.21). Use eCommerce Function Copy/Delete (35.17.2) to copy an existing function before modifying it as required.

Source

- Inbound record or field based on qualifier
- Outbound record or field based on qualifier
- Variable
- Constant
- Function that is the source of the action specified in Type
    - Modify the qualifiers and parameters as needed for this specific instance

    Qual. A code indicating the structure of the data passed in this parameter.
- I: Input data
- O: Output data
- V: Variable
- C: Constant

Parameter

- Name of the input, output, or variable
- If Qual is C, you can enter a constant
- If a value entered is not already defined, the system prompts to define the data type:
    - AN: Alphanumeric
    - D: Date
    - I: Integer
    - L: Logical
    - R: Real number

Transformation Definition Maint - Events

Transformation Definition Maintenance, Record Sort Capability

Transformation Definition Maint – Record Sort Capability

Transformation Definition Maintenance, Editing Records
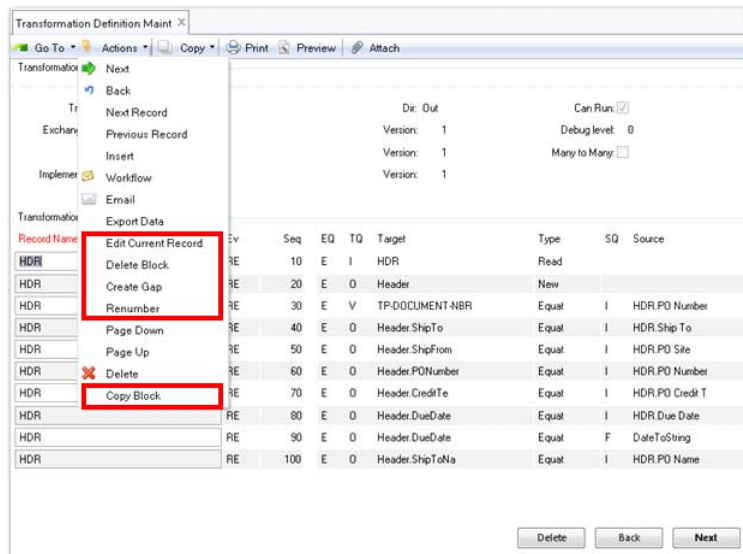
Transformation Definition Maintenance includes editing options that let you—among other actions—modify current event records without deleting and re-entering them, as required in earlier product versions. These options are available in both QAD .NET UI and character user interface when focus is on a record in the Transformation File Records frame.

- In QAD .NET UI, choose an option from the Actions menu.
- In the character UI, use the appropriate keyboard shortcut:
  - Edit Current Record: Esc-e
  - Delete Block: Esc-d
  - Create Gap: Esc-g
  - Renumber: Esc-r
  - Copy Block: Esc-c

Note If you have Standard Edition with the Windows (GUI) interface, use similar shortcuts, substituting Shift for Esc.

Edit Current Record

Use this option to update a transformation map event. You can change the event type, qualifier, target, source, and sequence. If the event action calls a function, you can reset the parameter values or change to a different function.

Delete Block

The system displays a selection range for the current record. The defaults cover all the action event sequence numbers for the record. Leave the fields as-is to delete all the events for the record, or modify them to delete just the range of events you want to remove.

Create Gap

The system prompts you to specify the length of the gap in sequence numbers to be created after the selected event. For example, if focus is on event action sequence 60 and you set the Create Gap Of field to 100, the system adds 100 to all the subsequent events in the current record. So, if the next sequence numbers were 70, 80, 90, the system would set the sequence numbers for the record to 60, 170, 180, 190, and so on.

Renumber

The system prompts you for an Interval—the new starting sequence number for each record in the transformation map, as well as the increment between event sequences. The system disregards the current sequences and begins each record with the specified value. For example, if you set Interval to 5, the system renumbers the events in each record as 5, 10, 15, 25, 35, and so on. You can perform this same function using Transformation ReNumber Utility (35.17.3).

Copy Block

Use this function to copy a specified range of event actions to the current transformation map or any other map in the system.

The system prompts you for the range of sequence numbers you want to copy. The default range is from the current event through the last one in the record. You then specify the destination of the copied events. The defaults represent the current record and transformation map. Use the arrow keys to scroll through valid destinations.

The new events start with the specified Destination Sequence; the system maintains the increments between the source events when assigning new sequence numbers. For example, if you copy sequence numbers 10, 15, 20 and specify a Destination Sequence of 21, the new events would be numbered 21, 26, 31—maintaining the original increment of 5 between events.

Looping

Advanced EDI eCommerce Set Up and Processing

- eCommerce Function Maintenance
- Transformation
- **Looping**
- Cross-References and Validation
- eCommerce Utilities

QAD

EDI-EC-Pro-840

QAD

Example of Loop Occurs

Example of Loop Occurs

Sequence		Loops Occur	Loops End
1	Header	1	0 or 6
2	Header-Comm	9999	2
3	Header-Ext	1	3
4	Item	9999	6
5	Item-Comm	9999	5
6	Item-Ext	1	6

QAD

EDI-EC-Pro-850

QAD

Example of Looping

Example of Looping

	Record Exit	Loop Exit	Loop Entry	Record Entry
Header			Header	Header
Header-Comm	Header		Header-Comm	Header-Comm
Header-Ext	Header-Comm	Header-Comm		Header-Ext
Item	Header-Ext		Item	Item
Item-Comm	Item		Item-Comm	Item-Comm
Item-Ext	Item-Comm	Item-Comm Item		Item-Ext
***End of File**	Item-Ext	Header		

QAD

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QAD

Cross-Reference and Validation

Advanced EDI eCommerce Set Up and Processing

- eCommerce Function Maintenance
- Transformation
- Looping
- **Cross-References and Validation**
- eCommerce Utilities

QAD

EDI-EC-Pro-870

QAD
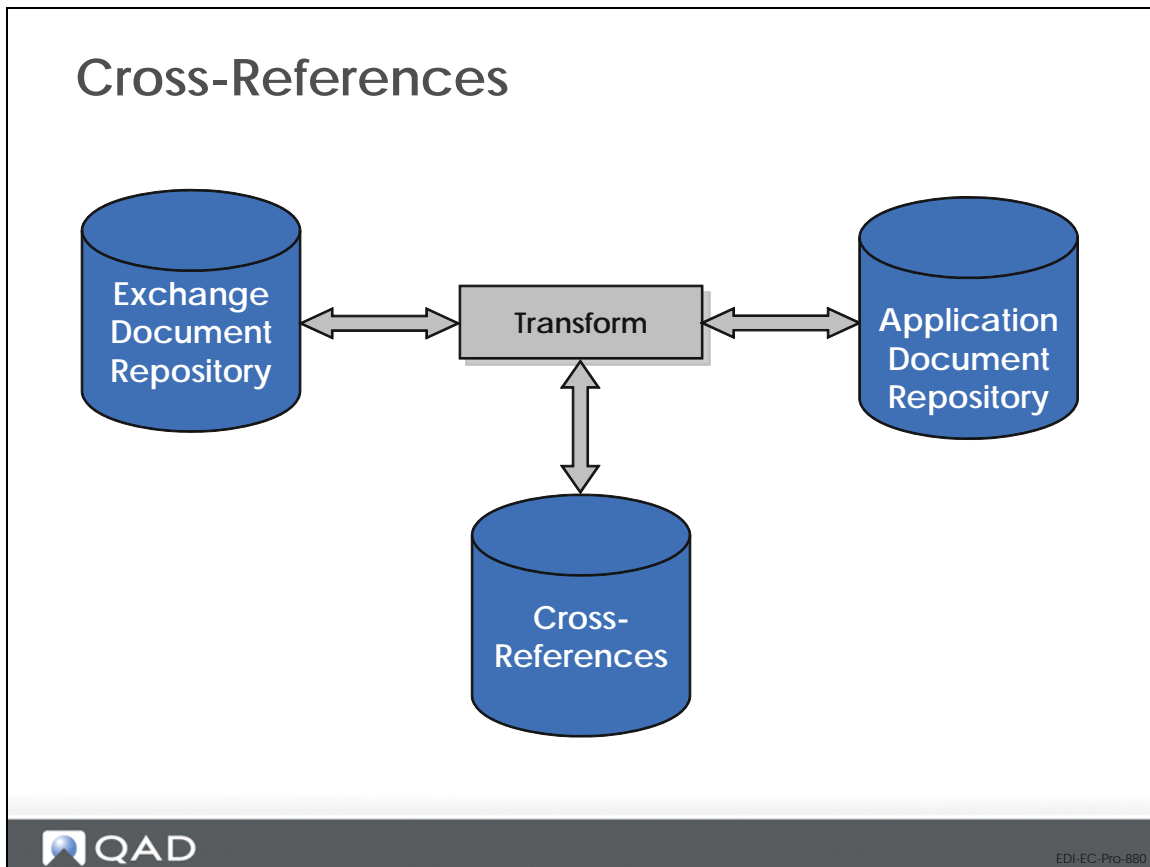
Cross-References

Data Cross-Reference Maintenance (35.13.16)

Use Data Cross-Reference Maintenance to set up automatic conversions from one specified value to another in inbound or outbound documents during the transformation process. For example, use this function to perform unit-of-measure conversions between an incoming trading partner document and the target QAD Enterprise Applications document.

Use Data Cross-Reference Browse (35.13.17) or Data Cross-Reference Report (35.13.18) to view existing cross-references.

TP Doc ID. Trading partner document to which this conversion applies.

Direction. Direction of the documents to which this conversion applies.

TP ID. A valid ID code of a trading partner defined in Trading Partner Maintenance 35.13.7. This conversion will apply only to documents involving this trading partner

QAD Enterprise Applications Doc Name and Version. QAD Enterprise Applications document and version to which this conversion applies.

Record Seq. Sequence number of the record to be modified during the conversion.

Field Seq. Sequence number of the field to be modified during the conversion.

Initial Value. Target value to be converted, indicating how the field reads before conversion.

Converted Value. New value, indicating how the field will read after conversion.

Data Validation Maintenance (35.13.21)

Use Data Validation Maintenance to define values that will automatically be validated in inbound or outbound documents during the transformation process. Fields are validated in transformation (IN) during writes to QAD Enterprise Applications, or (OUT) when reading the field.

Note If the data cannot be validated against the specified value during transformation, the system generates an error.

Direction. Direction of the documents that will have the field value validated.

Application Name and Version. Name and version of the application document that contains the field to be validated.

Implementation Name and Version. Name and version of the implementation associated with the document to be validated.

Implementation Record Seq. Sequence number of the record containing the field to be validated.

Implementation Field Seq. Sequence number of the field containing the value to be validated.

Field Value. Value against which the field will be validated.

Field Desc. System displays the description from the field definition.

Use Data Validation Browse (35.13.22) or Data Validation Report (35.13.23) to view existing data codes.

eCommerce Utilities

Advanced EDI eCommerce Set Up and Processing

- eCommerce Function Maintenance
- Transformation
- Looping
- Cross-References and Validation
- **eCommerce Utilities**

QAD

EDI-EC-Pro-910

Create eCommerce Doc Definitions (35.15.4)

You can create exchange file, application, and implementation document definitions by loading them from trading partner library files, entering them manually, or copying them from an existing definition of the same type.

An additional menu program—Create eCommerce Doc Definitions (35.15.4)—offers more ways to create these document definitions. You can create a definition from:

* A different type of document definition
* A temp-table definition in Progress syntax from either Progress source code (.p or .i file) or a .txt file
* An XML document (.xml file)
* An XSD document (.xsd file)

Source Type. Select the type of source you want to use for creating the new document definition. Valid values are:

Exchange File Definition

Application Definition

Implementation Definition

Temp Table Definition (*.i, *.p, *.txt)

XML Document (*.xml)

XSD Document (*.xsd)

Input File. Enter the name of the file that contains the source file for the new definition. You can only access this field when the source type is a temp table, .xml document, or .xsd document. Leave blank to display a navigation screen for selecting files.

Source Name. Select the source document that the new document will be copied from. You can only access this field when the source type is an exchange file, application, or implementation definition. Use the arrow keys to scroll through available documents of the selected source type. The system displays information about each document.

Create Document Type. Select one or more document types to be created. You must select at least one type.

Destination Name, Version, Direction. Specify a name, version, and direction (inbound, outbound) for the new document definitions.

Exchange Definition Copy (35.15.1)

Use Exchange Definition Copy to copy an exchange file definition from an existing definition.

• Use Exchange Definition Maintenance (35.15.6) to modify the copy as needed

Source Exchange File, Version, and Direction. Exchange file definition to be copied.

Destination Exchange File, Version, and Direction. Unique combination of file name, version, and direction.

• Direction does not have to be the same for the source and destination file
  • An outbound definition copy can be based on an inbound source definition

Application Definition Copy (35.15.2)

Use Application Definition Copy to copy an application document definition from an existing definition.

- Use Application Definition Maintenance (35.15.10) to modify the copy as needed

  Source Applications File, Version, and Direction. The application document definition to be copied.

  Destination Application File, Version, and Direction. Unique combination of file name, version, and direction to identify the new application definition.

Implementation Definition Copy (35.15.3)

Use Implementation Definition Copy to copy an implementation definition from an existing definition.

- Use Implementation Definition Maint (35.15.13) to modify the copy as needed

Source Application File, Version, and Direction. Application document definition associated with the implementation definition to be copied.

Source Implementation File and Version. Application document definition associated with the implementation file to be copied.

Destination Implementation File and Version. Unique combination of file name and version to identify the new implementation definition.

Transformation Definition Copy (35.17.1)

Use Transformation Definition Copy to copy an existing transformation definition to a new file.

- Use Transformation Definition Maint (35.15.17) to modify the mapping data in the new definition file as needed

  Transformation Direction. Direction of the transformation definition to be copied.

  Determines the records that will be available for copying in the Source Transformation field

  Source Transformation. Name of the transformation definition to be copied.

  Destination Transformation. Name of the new transformation definition.

Note The transformation definition will be the same direction for the destination definition.

The following fields will default to the file definition names and versions used by the source transformations:

New Exchange File and Version. Optionally enter a new exchange file definition name and version.

New Application and Version. Optionally enter a new application document definition name and version.

New Implementation and Version. Optionally enter a new implementation definition name and version.

eCommerce Function Copy (35.17.2)

Use eCommerce Function Copy to:

- Copy an existing transformation function to a new function name

QAD Function. Yes = the function to be copied is one provided as part of eCommerce
No = the function is user-defined

Source Function. Name of the existing function to be copied or deleted.

Destination Function. Name for the new function.

New file saved in the function directory specified in the eCommerce Control File 35.13.24 with the file name <DestinationFunction>

Important   Use function names that follow the naming conventions of the operating system.

Dest. Function Desc. An optional description for the new function.

Inbound Delete/Archive (35.17.13)

Use Inbound Delete/Archive to delete and archive imported documents from the exchange file and application document repositories.

An QAD Enterprise Applications archive program is usually run twice.

- First, run the program with all Delete flags set to No and review the report
- Then, run it again with the appropriate flag or flags set to Yes

When Archive is set to Yes, QAD Enterprise Applications stores deleted data in a file named xxyymmdd.dat, where xx is ob for outbound documents and ib for inbound documents, and yymmdd is the date you ran the archive function.You can restore this file to the system using Archive File Reload (36.16.5).

Warning Deleted data that is not archived cannot be recovered.

Sequence Number, Process Date. Ranges of selection criteria for the system to use in determining files to be archived and deleted.

Delete Passed Docs. Yes = delete documents that successfully completed processing

- To delete documents regardless of their processing status, set both this field and Delete Failed Docs = Yes

Delete Failed Docs. Yes = delete documents that did not complete processing

- To delete documents regardless of their processing status, set both this field and Delete Passed Docs = Yes

Archive. Yes = copy deleted data to an ASCII file.

Archive File. System-generated name of the file where the selected documents will be archived.

Outbound Delete/Archive (35.17.14)

Use Outbound Delete/Archive to delete and archive exported documents from repositories.

Trading Partner Library Load (35.17.7)
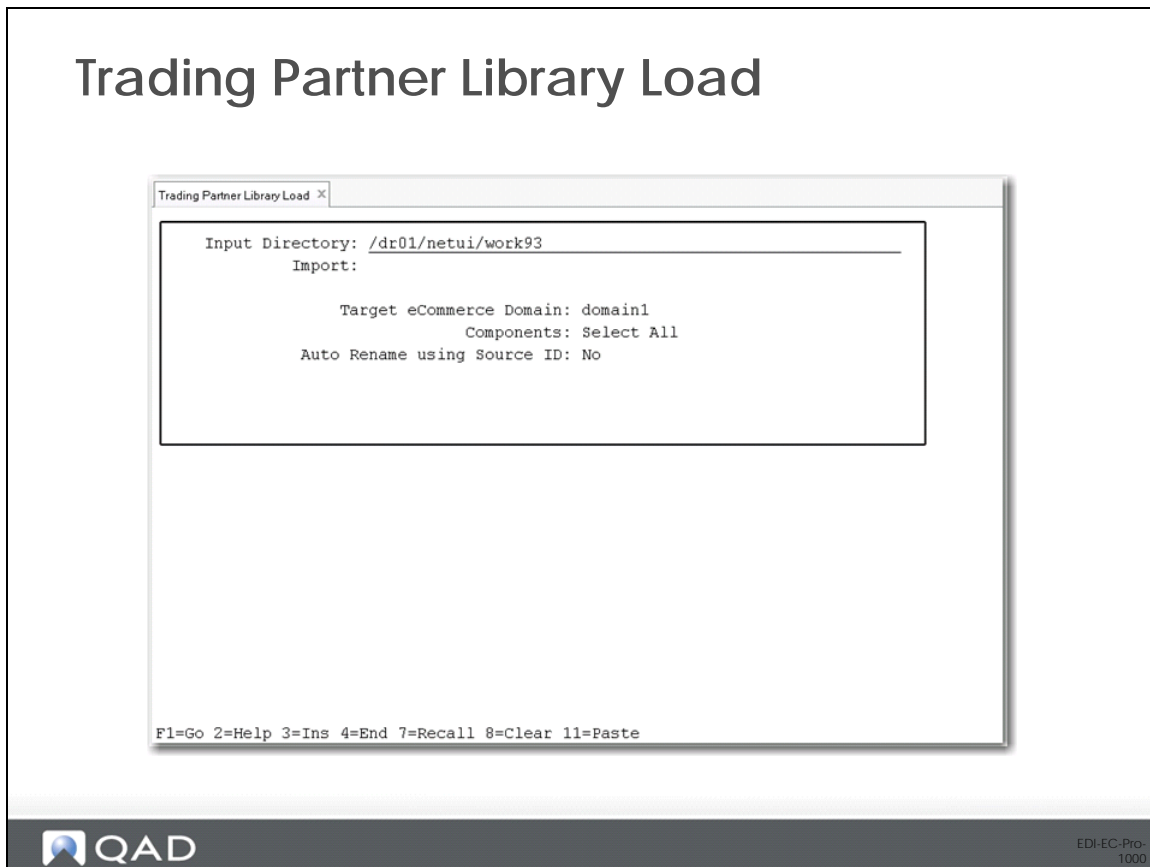
Use Trading Partner Library Load (35.17.7) to create new trading partner and supporting document definition data based on the contents of imported source files XML files created using Trading Partner Document Unload. Each file represents a complete trading partner document.

You can select individual trading partner documents from a list, or load all the documents in a specified directory at the same time. Source files are typically provided by QAD Support Services upon request.

Optionally, you also can decide which specific components of the XML files have records created in the destination domain.

Note   This program does not check or enforce data integrity for records you choose not to import. For example, you can choose to create document definitions but not the associated transformation definition. This does not cause the import process to generate an error message.

Trading Partner Library Unload (35.17.8)
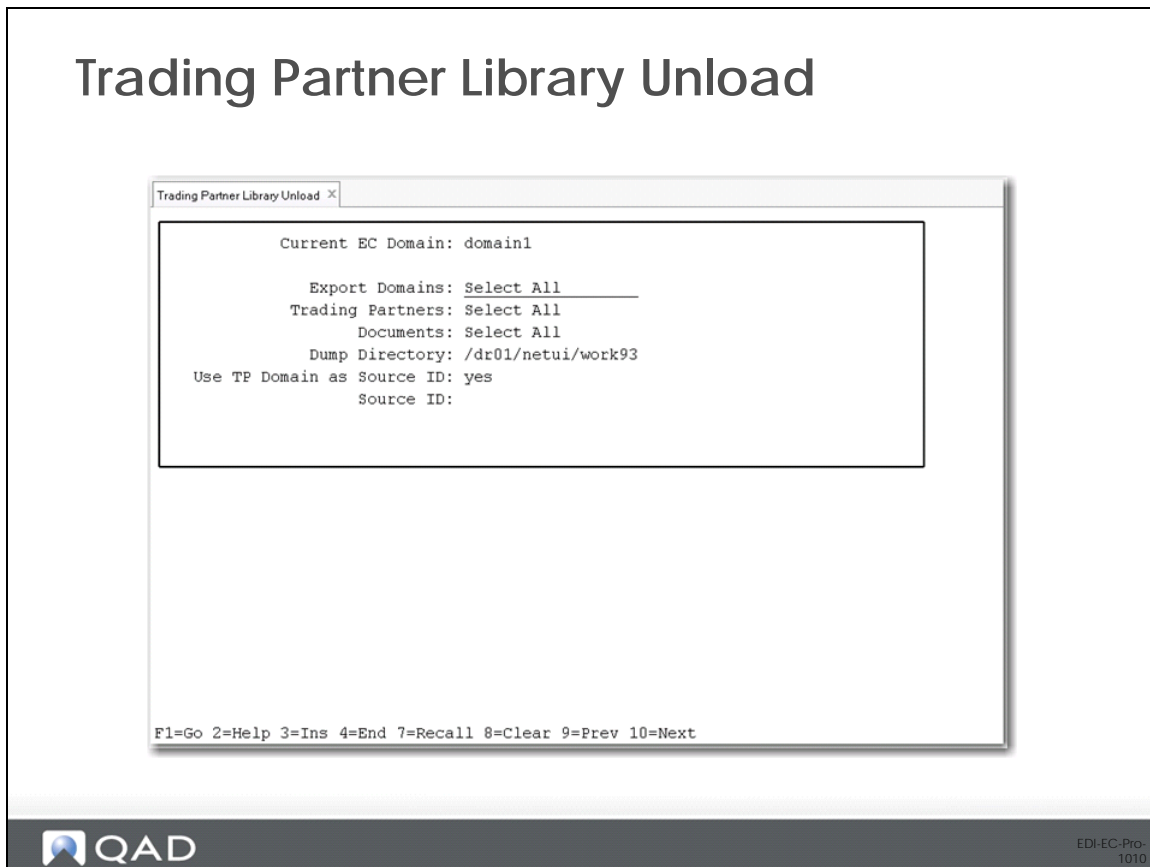
This program creates .xml files that can be loaded using Trading Partner Library Load.

Gateway Variables

You can also assign new sequence numbers to transformation events as an edit function of Transformation Definition Maintenance.

Comment Cross-ref Archive/Delete (35.17.15)

Comment Cross-ref Archive/Delete

Turnaround Data Archive/Delete (35.17.16)

Advanced EDI eCommerce - Review

Advanced EDI eCommerce Set Up and Processing - Review

- eCommerce Function Maintenance
- Transformation
- Looping
- Cross-References and Validation
- eCommerce Utilities

QAD

EDI-EC-Pro-1050

QAD

Appendix A

EDI eCommerce Error Messages

This chapter describes EDI eCommerce-specific error messages. It explains the conditions that cause the errors and suggests solutions.

Note   Many EDI eCommerce messages are self-explanatory. Such messages are not included in this chapter.

No.	Message	Cause	Solution
4400	*<directory>* listed in control program does not exist	• Control program was not initially set up or the specified path is incorrect. • Directory was removed after control program setup.	• Use eCommerce Control (35.17.24) to add or correct the directory name or path. • Contact the system administrator to have the directory created.
4401	User does not have write privileges to *<directory>*	Directory was created by user other than system administrator. or System administrator did not grant read, write, create, modify, and delete rights to all users for the specified directory.	Contact the system administrator. Users must have read, write, create, modify, and delete rights to the specified directory. or Change the directory location. • For an inbound document, use eCommerce Control (35.17.24). • For an outbound document, use Transmission Group Maintenance (35.13.13).
4402	Mandatory exchange file data record is missing: *<subsystem>; <record name>; <exchange file name>; <version>; <filename>; <error file>* **Note:** *<filename>* and *<error file>* are not applicable on outbound documents.	• The trading partner did not send the data record specified, or the SNF file *<filename>* was not complete. • *<record name>* has been defined as mandatory in the document definition for this combination of *<exchange file name>*, *<version>*, and document direction when it should be defined as optional.	• Have the trading partner correct the problem and resend the document. • If this is a recurring error for this *<exchange file name>*, *<version>*, and direction, use Exchange Definition Maintenance (35.15.6) to select the appropriate combination of exchange file name, version, and direction, go to *<record name>*, and set Requirement to Optional.
4403	No matching quote found in record. *<record>* (first 5 characters); *<file name>*; *<error file>*	The EC subsystem is defined as variable-format with a quote character surrounding alphanumeric data. A beginning quote character was found without a matching closing quote.	Have the trading partner correct the problem and resend the document. or Open the error file in a text editor and locate the subject record. Insert the closing quote character at the end of the data field. Then, use Document Import (35.1) to import the error file.
4404	Duplicate *<record code>* records: *<subsystem>*; *<filename>*; *<error file>*	A control or data record is repeated within the document without the data information. A control record can only appear once for a document. Data records are expected to follow the control records and come before the next document's control record.	Have the trading partner correct the problem and resend the document. or Open the error file in a text editor and locate the duplicate control records. Verify that the data within the records are the same. If they are the same, remove one of the control records and use Document Import (35.1) to import the error file.

No.	Message	Cause	Solution
4405	Mandatory control record is missing in input file: *<record code>*; *<subsystem>*; *<direction>*; *<filename>*; *<error file>*	• The trading partner did not send the data record specified or the SNF file *<filename>* was not complete. • The control record identified in *<record code>* has been defined as mandatory in the definition for this EC subsystem and direction when it should be defined as optional.	• Have the trading partner correct the problem and resend the document. • If this is a recurring error for this EC subsystem and direction, then use EC Subsystem Definition Maint (35.13.1) to select the EC Subsystem and direction, go to the *<record code>*, and set Requirement to Optional.
4406	Unknown or blank record code: *<record code>*; *<subsystem>*; *<file name>*; *<error file>*	The EC subsystem sent a record code that has not been defined as a control code or a data control code.	Open the error file in a text editor and determine if this code is for a data segment or a control segment. Then, define the segment as required. • For a data segment, use EC Subsystem/Exchange Maint (35.13.3) to define the data control code. • For a control segment, use EC Subsystem Definition Maint (35.13.1) to define the control code.
4407	Control field length outside boundaries: *<subsystem>*; *<record sequence>*; *<field name>*; *<field length>*; *<file name>*; *<error file>*	The EC subsystem is defined as using variable-format control field lengths. The number of characters *<field length>* is not within the minimum and maximum values specified for the field.	Using EC Subsystem Definition Maint (35.13.1), locate the specified sequence number *<record sequence>*. Select the field name for the appropriate record sequence and adjust the minimum and maximum values.
4408	Mandatory control field has not been set: *<subsystem>*; *<record sequence>*; *<field name>*; *<file name>*; *<error file>*	• The trading partner did not send the data specified. The SNF file *<filename>* was not complete. • The control record field *<field name>* for the *<record sequence>* has been defined as mandatory in the definition for EC Subsystem *<subsystem>* and direction when it should be defined as optional.	• Have the trading partner correct the problem and resend the document. • If this is a recurring error for this EC subsystem and direction, then use EC Subsystem Definition Maint (35.13.1) to select the EC subsystem and direction, go to the *<record sequence>*, locate the *<field name>*, and set the requirement to optional.

No.	Message	Cause	Solution
4409	Mandatory data field has not been set: *<subsystem>*; *<exchange file name>*; *<version>*; *<record sequence>*; *<field name>*; *<file name>*; *<error file>* **Note:** *<filename>* and *<error file>* are not applicable on outbound documents.	• The trading partner did not send the data specified, or the SNF file *<filename>* was not complete. • The data record field *<field name>* for the *<record sequence>* has been defined as mandatory in the exchange file document definition for the *<exchange file name>*, *<version>*, and direction when it should be defined as optional.	• Have the trading partner correct the problem and resend the document. • If this is a recurring error for this exchange file name, version, and direction, then use Exchange Definition Maintenance (35.15.6) to select the appropriate exchange file document definition, go to the *<record sequence>*, locate the *<field name>*, and set Requirement to Optional.
4410	Data field length outside boundaries: *<subsystem>*; *<exchange file name>*; *<version>*; *<record sequence>*; *<field name>*; *<field length>*; *<file name>*; *<error file>* **Note:** *<filename>* and *<error file>* are not applicable on outbound documents.	EC subsystem is defined as using variable-length fields. The number of characters *<field length>* is not within the minimum and maximum values specified for the field.	Use Exchange Definition Maintenance (35.15.6) to locate the specified sequence number *<record sequence>* for the specified EC subsystem *<subsystem>*, *<exchange file name>*, *<version>*, and direction. Locate the field name *<field name>* for the record sequence and adjust the minimum and maximum values.
4411	EC Subsystem does not exist: *<subsystem>*; *<file name>*; *<error file>*	The specified EC subsystem *<subsystem>* has not been defined.	• Use EC Subsystem Definition Maint (35.13.1) to define the subsystem and its control codes. • Use EC Subsystem/Exchange Maint (35.13.3) to create the data control codes.
4412	Unknown file format: *<file name>*; *<error file>*	The file extension is used to identify the subsystem name and file format. If a subsystem cannot be identified by the extension, then the system attempts to locate the subsystem definition of the default subsystem defined in the control program.	• Use EC Subsystem Definition Maint (35.13.1) to define the subsystem and its control codes. • Use EC Subsystem/Exchange Maint (35.13.3) to create the data control codes.
4413	Input control record is not in sequence: *<sequence number>*	The SNF file was not complete.	Have the trading partner correct the problem and resend the document.
4414	Exchange file record table record does not exist: *<exchange file name>*; *<version>*; *<record sequence number>*	The record was deleted from the exchange file document definition after the EC subsystem/exchange cross-reference was defined.	Use Exchange Definition Maintenance (35.15.6) to redefine the record sequence for the specified exchange file name and version.
4415	Current record sequence has exceeded its loop occurrence: *<exchange file name>*; *<version>*; *<record sequence>*	There are more occurrences of the record type within the data than allowed by the exchange file document definition.	Use Exchange Definition Maintenance (35.15.6) to locate the record sequence for the specified exchange file name and version. Increase the loop occurrences allowed for the record.

No.	Message	Cause	Solution
4416	Invalid document transmission group name: *<transmission group name>*	The specified transmission group has not been defined.	Use Transmission Group Maintenance (35.13.13) to define the transmission group.
4417	Destination dir/file prefix is blank for transmission group: *<transmission group name>*	The directory or file prefix for the specified transmission group has been left blank.	Use Transmission Group Maintenance (35.13.13) to add the missing information.
4418	Exchange file repository master record not found	Database corruption.	Contact database administrator.
4419	EC Subsystem control record does not exist: *<subsystem>*; *<transmission group name>*	Control record codes have not been defined for the subsystem.	• Use EC Subsystem Definition Maint (35.13.1) to define the subsystem and its control codes. • Use EC Subsystem/Exchange Maint (35.13.3) to create the data control codes.
4420	Repository detail record does not exist for sequence	Database corruption.	Contact database administrator.
4421	EC Subsystem cross-reference record not available for: *<subsystem>*; *<document type>*; *<record sequence number>*	Cross-reference was not set up completely, or a record sequence was added to the exchange file document definition after the cross-reference was set up.	Use EC Subsystem/Exchange Maint (35.13.3) to create the data control code.
4422	Record code is blank for data records: *<subsystem>*; *<document type>*; *<record sequence number>*	Cross-reference was not set up completely, or a record sequence was added to the exchange file document definition after the cross-reference was set up.	Use EC Subsystem/Exchange Maint (35.13.3) to create the data control code.
4423	Unable to create directory *<directory>* for transmission group: *<transmission group name>*	Directory was created by user other than system administrator. or System administrator did not grant read, write, create, modify, and delete rights to all users for the specified directory.	Contact the system administrator. Users must have read, write, create, modify, and delete rights to the specified directory. or Change the directory location. • For an inbound document, use eCommerce Control (35.17.24). • For an outbound document, use Transmission Group Maintenance (35.13.13).
4424	Unable to create directory: *<directory>*	Directory was created by user other than system administrator. or System administrator did not grant read, write, create, modify, and delete rights to all users for the specified directory.	Contact the system administrator. Users must have read, write, create, modify, and delete rights to the specified directory. or Change the directory location. • For an inbound document, use eCommerce Control (35.17.24). • For an outbound document, use Transmission Group Maintenance (35.13.13).

No.	Message	Cause	Solution
4425	Mandatory control token limits are not met: *<subsystem>*; *<record sequence>*; *<field name>*; *<token>*; *<field length>*	EC subsystem is defined as using variable-length fields. The number of characters *<field length>* is not within the range of minimum and maximum values specified for the field.	Use EC Subsystem Definition Maint (35.13.1) to locate the specified sequence number *<record sequence>* for the specified EC subsystem *<subsystem>*. Locate the field name *<field name>* for the record sequence and adjust the minimum and maximum values.
4426	Optional control token limits are not met: *<subsystem>*; *<record sequence>*; *<field name>*; *<token>*; *<field length>*	EC subsystem is defined as using variable-length fields. The number of characters *<field length>* is not within the range of minimum and maximum values specified for the field.	Use EC Subsystem Definition Maint (35.13.1) to locate the specified sequence number *<record sequence>* for the specified EC Subsystem *<subsystem>*. Locate the field name *<field name>* for the record sequence and adjust the minimum and maximum values.
4427	EC Subsystem control field records not found: *<subsystem>*; *<exchange file sequence number>*	An outbound subsystem has not been defined.	Use EC Subsystem Definition Maint (35.13.1) to define the subsystem and its control codes.
4428	Document status record does not exist:	Database corruption.	Contact database administrator.
4429	Invoice history header record does not exist: *<invoice number>*; *<sales order number>*	Database corruption. or Data may have been archived.	Contact database administrator.
4430	Trading partner location cross-reference does not exist: *<document name>*; *<version>*; *<site>*; *<address>*	Trading partner has not been set up properly.	• Use Trading Partner Report (35.13.9) to print a list of all trading partners. • Locate a trading partner ID on the report where the Application Site = *<site>* and the Application Address = *<address>*. • With the trading partner ID retrieved from the report, use Trading Partner Maintenance (35.13.7) to create a cross-reference record.
4431	Implementation record does not exist: *<document name>*; *<doc vers>*; *<imp name>*; *<imp vers>*; *<record sequence or record name>*	Setup of implementation definition not complete. or The specified record has been deleted.	Use Implementation Definition Maint (35.15.13) to create the required record.
4432	Repository master record does not exist:	Database corruption.	Contact database administrator.

No.	Message	Cause	Solution
4434	Variable not found while obtaining variable name *<variable name> <variable type>*	Variable defined for transformation is no longer available to transformation process.	Verify definitions exist in the exchange or implementation definition records. If they exist, delete them and recreate them. If they do not exist, create them in the exchange or implementation definition records, then delete them.
4435	Variable not available to be set: *<recid of variable>*	Variable defined for transformation is no longer available. Possibly, it was deleted prior to loading the transformation definitions.	Restart the transformation. If it still does not work, contact database administrator to report possible data corruption.
4436	Variable not available while obtaining variable value: *<recid of variable>*	Variable defined for transformation is no longer available. Possibly, it was deleted prior to loading the transformation definitions.	Restart the transformation. If it still does not work, contact database administrator to report possible data corruption.
4437	Variable has not been assigned a value: *<variable name> <variable qualifier>*	Variable within transformation has not been assigned a value or initialized.	Verify that the variable *<variable name>* has been assigned a value before using it as a source for another target variable.
4438	Function or variable is not available: *<variable/function name> <variable qualifier>*	Value for function or variable did not return a valid value.	Correct the returning value from the function program or verify that the function program compiled properly.
4439	Value not available for variable: *<variable/function name> <variable qualifier>*	Value for function or variable did not return a valid value.	Transformation definition is requesting a value from a variable, but variable has not yet been assigned a value. Assign the variable as a target before using it as a source.
4440	Function not found: *<function name>*	Function defined within the transformation definitions does not exist within function definitions.	Check function definitions for the function requested from the transformation definition map. If the record exists, contact database administrator. Otherwise, create the record being requested. **Note:** If the function has been saved to disk already and the function definition has been removed, do not reprocess it to the disk. This will overwrite the program currently on the disk.
4441	Function returned error: *<returned value set by function>*	Function did not perform correctly and was not able to return a value.	• Check that the function on disk compiles correctly. • Check the parameter values being sent to the function for correct data type matching. • If the function is user-defined, look at the function program to see the error message and why it occurs.

QAD

No.	Message	Cause	Solution
4442	Illegal target qualifier found: *<target qualifier that is illegal>*	An invalid target qualifier was mistakenly entered or allowed in transformation definitions.	Change the target qualifier to a valid target qualifier (I, O, or V). All others are considered illegal.
4443	Sequence number not processed *<sequence number>*	Either no repository exists, no trading partner information exists, or no map exists.	• Verify that the repository has been created. If not, then load or unload the file again. • If the repository is being created, verify that the trading partner information has been set up for the information found on the repository master records. • If the trading partner information is missing, create the missing information again. If the information is not missing, confirm that the trading partner map definition is pointing to a valid and existing map.
4444	Function has not been processed to disk: *<function name>*; *<internal function name)*	Transformation process tried to run the function from the disk and the program was not found.	• Verify that the program resides in the function directory specified in eCommerce Control (35.13.24). If it does not, it to the correct directory. • If the program does not exist, use eCommerce Function Maintenance (35.15.21) to create a program shell and then modify the program as required.
4445	BILL-TO does not exist in address master *<bill to address>*	The application document repository has a BILL-TO address that has not been defined.	Use Customer Address Maintenance (2.1.1) to define the customer bill-to address.
4449	Sequence number not set from conditional write function	The conditional write function *check-hash* did not return a valid sequence number. **Note:** The check-hash function is used only to write master records; for example, a new application document such as an order header or schedule header. This function is not used for lower data record writes. Use IF logic to perform lower-level conditional writes.	• Verify that the parameters are being sent to the function. • If so, and this error still occurs, call QAD support.
4450	Invoice history detail record does not exist: *<invoice number>*; *<sales order number>*	Database corruption. or Data may have been archived.	Contact database administrator.
4451	Turnaround Mapping record does not exist: *<document name>;document version>;<Implementation name>;<Implementation version>;<record sequence>;<field name>*	The implementation definition does not have a Table Name and Index Name specified for a field with Src/Dest set to T.	Use Implementation Definition Maint (35.15.13) to add the missing information.

No.	Message	Cause	Solution
4452	Field(s) # cannot be blank	Blank field number.	Enter field number.
4453	Control record cannot be deleted	The control record is being used and therefore cannot be deleted.	Remove all references to the control record before deleting.
4454	Invalid default subsystem	Subsystem has not been defined.	Enter a valid subsystem set up in in EC Subsystem Definition Maint (35.13.1).
4455	Directory does not exist: *<directory name>*; attempting to create	Warning issued when specifying directory path names in eCommerce Control and Transmission Group Maint.	If you want to use this path, ignore warning. If incorrect, manually delete unneeded directory and modify path as needed.
4456	Positive/negative integer expected from check-hash function: *<returned value>*	The write function was called with a function that returned an invalid sequence number.	Verify that the conditional write is on a record defined as sequence number 1. Also verify that the function being used is the check-hash function.
4460	Additional error message can be found in *<file name>*	Errors were discovered after control was passed to the gateway program. Error messages have been captured and written to *<file name>*.	Open the file with a viewer or editing program and review the error messages.
4464	Processing flat file. Please hold.	This is a normal status message during an EDI session and is for information only.	No action necessary.
4465	Transformation occurring. Please hold.	This is a normal status message during an EDI session and is for information only.	No action necessary.
4466	Processing application documents. Please hold.	This is a normal status message during an EDI session and is for information only.	No action necessary.
4469	No matching else or endif within record seq *<record sequence>* and action type *<event type>*	An If statement used in transformation did not have an Else or closing Endif statement within the record sequence and event type.	Use Transformation Definition Maint (35.15.17) to change the transformation definitions to include a closing Else or Endif within the same record and event type.
4470	Else with no matching if within record seq *<record sequence>* and action type *<action type>*	An Else statement used in transformation did not have an If beginning statement within the record sequence and event type.	Use Transformation Definition Maint (35.15.17) to change the transformation definitions to include a beginning If within the same record and event type.
4471	No closing endif within record seq *<record sequence>* and action type *<action type>*	An If or Else statement in the transformation definitions is not closed by an Endif statement within the record sequence and event type.	Use Transformation Definition Maint (35.15.17) to change the transformation definitions to include a closing Endif within the same record and event type.

No.	Message	Cause	Solution
4472	No invoices were exported	One or more invoices were selected on the invoice export that were unable to cross-reference the site and address to retrieve a valid implementation file name and version number.	Check the following intruding Partner Parameter Maint (35.17.10) for the address and site of the invoice being exported: • Logical parameter 2: Send Invoice must be set to Yes. • Char parameter 2: Invoicing Document Name must be set to a valid application document definition name. • Integer parameter 2: Invoicing Document Version must be set to a valid application document definition version number. In addition, check to see that the address and site are entered in the correct Trading Partner Maintenance (35.13.7) record.
4473	Code does not exist in validation codes table *<document name>;<document version>;<implemention name>;<implementation version>;<record sequence>;<field sequence>;<field name>*	The implementation definition has Validate set to Yes for this field name and the code has not been defined in Data Validation Maintenance (35.13.21).	Do one of the following: • Correct the invalid code data. • Enter the code in Data Validation Maintenance. • Change Validate to No in the implementation definition for this field.
4474	Cannot delete record; related record found in # # #	This error is displayed while trying to delete a record or field in Exchange Definition Maintenance, Application Definition Maintenance or Implementation Definition Maintenance when it is being used in a transformation map.	Delete the record or field from the transformation map.
4475	A seq in a many-to-many list failed. All sequences were deleted: *<list of bad sequences>*	A map defined as many-to-many had either a single or multiple document sequence fail, which caused all of the related input documents to fail.	Correct the error in the failed document, then reprocess the files as a group.
4477	*<file name>* file record cannot have 2 records with the same name	When entering a file definition the record names within the file must be unique.	If duplicate record names occur in a file, the record name must be unique but can be cross-referenced in EC Subsystem/ Exchange Maint (35.13.3) to the same record code using the Break Level field.
4478	Cannot delete exchange file record; used in map:	Exchange file definition is being used in an active transformation map; deletion is not allowed.	Definition can only be deleted if it is not in use.

No.	Message	Cause	Solution
4479	No files to process.	This error message is displayed under one of the following conditions: • No files are found in the inbound directory during Document Import (35.1). • No sequences are available with Failed status during Import Reprocessing (35.9.21) or Export Reprocessing (35.9.23) • No records are available in both exchange and application statuses during Session Report (35.7).	Make sure that SNF flat file exists in the inbound directory and that Exchange Document Status / Application Document Status records exists for reprocessing.
4480	No files selected, procedure cancelled	This error message is displayed when no files are selected during Document Import (35.1) or when no sequences are selected using Import Reprocessing (35.9.21), Export Reprocessing (35.9.23), or Session Report (35.7).	Make sure that SNF flat files are selected during Document Import, and that Exchange / Application Document sequences are selected during import/export processing and session report.
4481	*<function name>* function not defined	A function name has been used that has not been defined.	Define function in 35.15.21 eCommerce Function Maint
4482	*<##>* not found. Press down arrow to get selection	This error message is displayed in Transformation Definition Maintenance (35.15.17) when no action type (read, write, and so on) is specified in the Type field.	Make sure that at least one action type is selected before leaving the Type field.
4483	Trading Partner name cannot be blank.	A valid trading partner name must be entered	Enter a valid trading partner name.
4484	Cannot use target qualifier *<qualifier>* with action type *<action type>*.	This error message is displayed when action types such as Read, Clear, Write, New, Loop, Loopend, Repeat, Repeatend, Else (without If) are selected, and when the Target Qualifier is not O (output) or I (Input).	Make sure that the record or field from Input or Output is selected.
4485	Cannot find Trading Partner record.	This error message is displayed in Data Cross-Reference Maintenance (35.13.16) when an entered Trading Partner ID does not exist.	Make sure that the entered Trading Partner ID exists in Trading Partner Maintenance (35.13.7).
4486	Document definition does not exist.	Invalid application document definition name.	Use correct application document name or add using Application Definition Maintenance (35.15.10).
4487	Document record definition does not exist.	Invalid application document record name.	Use correct application document record name OR add the record to the application document definition using Application Definition Maintenance (35.15.10).

No.	Message	Cause	Solution
4488	File *<gateway program name>* not found for gateway document: *<document name>* version: *<document version>*	This error message is displayed when the Gateway Report Program specified in Application Definition Maintenance (35.15.10) is blank.	Make sure that the proper Gateway Report Program is specified in Application Definition Maintenance.
4489	Document field definition does not exist.	Invalid application document field name.	Use correct application document field name or add the field using Application Definition Maintenance (35.15.10).
4490	Function cannot contain spaces.	Function name with spaces.	Remove spaces from function name.
4491	Data type not defined. Must be AN, I, R, D or L.	Invalid data type entered.	Enter valid data type—AN, I, R, D, or L.
4492	Process function to disk?	This prompt displays when a new function has been defined in eCommerce Function Maintenance (35.15.21).	• Yes: The system writes a shell program source code to the user function directory with the name of the function. To make the function operational, you must add logic to the code that will calculate the return value. • No: Source code for the new function is not created.
4493	Sequence value of *<sequence value>* is not numeric. It will be discarded.	This error message is displayed in various programs. • Import and Export Reprocessing. This error is displayed when a sequence number selected is not numeric. This can happen when a user enters the sequence number manually. • When defining REPEAT logic in Transformation Definition Maintenance (35.15.17). During transformation processing, the REPEAT logic repeats the number of times specified in the transformation map. If the value specified is non-numeric, this error message displays.	Specify a numeric value when using these functions.
4494	Processed function *<function name>* to disk	This status message displays when a new function has been defined in eCommerce Function Maintenance (35.15.21) and you have answered Yes to the Process to disk prompt.	No action needed; message indicates that the .p program source code has been written to the user function directory with the name of the function. To make the function operational, logic must be added to the code that will calculate the return value.
4496	Enter the data type for new # variable (#)	This prompt displays when a new variable has been specified in Transformation Definition Maint (35.15.17).	Enter the data type for the new variable: AN, I, R, D, or L.

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No.	Message	Cause	Solution
4497	BILL-TO does not exist in address master *<bill to address>*	The application repository has a BILL-TO address that has not been defined.	Use Customer Address Maintenance (2.1.1) to define the customer bill-to address.
4498	Document record *<document sequence number>* skipped; not supported.	This error message is displayed during Shipment ASN Export (35.4.1) when Implementation Definition Maint (35.15.13) has record names other than the following: HDR, HDR-EXT, HDR-USER-FLDS, CTR-USER-FLDS, ITM, ITM-EXT, ITM-USER-FLDS, CTR-DATA, ITM-CHARGES, CTR-ITEM-LID, TARE-HDR, TARE-DET, ITM-SEQ, ITM-SUMM, CTR-SUMM, CTR-TARE-SUMM, and PLT-SUMM	Use only valid record names when setting up implementation definitions for outbound ASNs.
4700	Status record in use: *<record id>*	This error message is displayed when during Shipment ASN Export (35.4.1) the sequence in the application document status master record is locked by another user.	This check is done as a precautionary measure. This situation will not arise in a normal condition.
4701	Turnaround data repository does not exist	This warning message is displayed when the QAD-defined function GetTadData is unable to locate a turnaround data record for the passed parameter.	Make sure that turnaround data exists in the turnaround data repository master table for the data passed as parameters.
4702	Schedule has not been printed	Status message information only	No action.
4703	Implementation record does not exist: *<document name>;<document version>;<implementation name>;<implementation version>*	Invalid implementation record name.	Use correct implementation record name or add using Implementation Definition Maint (35.15.13).
4704	Sequence *<sequence number>* is invalid for reprocessing.	Reprocessing EDI and this record cannot reprocess.	Rerun the EDI import or export process to reprocess this record.
4706	Sequence *<sequence number>* does not exist	This error message is displayed during import or export reprocessing when an entered application document sequence does not exist in the application document status table.	Enter a valid application sequence.
4707	Map does not exist with name: *<map name>*	The trading partner setup has specified a Document Map (transformation definition name) that does not exist.	For the document type and trading partner being processed, enter a valid Document Map name in Trading Partner Maintenance (35.13.7).
4708	Two parameters within same function cannot have the same name	When entering the parameter names in EC Function Maintenance (35.15.21), each parameter name must be unique.	Correct the parameter name being entered.

No.	Message	Cause	Solution
4709	Function exists on disk! Overwrite?	Creating a new function where the .p program for the function already exists in the user's function directory.	Answering Yes to this prompt will cause the system to overwrite the .p function program in the user's function directory with the newly created shell .p program. Answer No and enter a new function name to keep the existing .p program.
4710	Function name cannot be blank	Blank function name	Enter a function name.
4711	*<definition record name>* Definition record does not exist	The file definition record name that has been entered cannot be found.	Enter a valid file definition record name
4712	Please confirm delete of EC Subsystem/Exchange File Cross-Ref	Warning message prompt.	Enter Yes to delete.
4713	Transformation Function does not exist	A function name has been used that has not been defined.	Define function in eCommerce Function Maint (35.15.21).
4714	Record Code *<record code>* already exists	A record code that has already been used cannot be entered.	Entering a different Break Level will allow duplicate record codes.
4715	Record Name already exists	Record Name must be unique	Enter unique record name.
4716	Field Name already exists	Field names must be unique within a record.	Enter unique field name.
4717	Please confirm delete of Control Record Fields	Confirmation prompt.	Enter Yes to proceed with the deletion.
4718	Invalid token name	Name entered is not a valid token name.	Enter a valid token name.
4719	Cannot flush record until header record has been flushed.	The header record must always be the first record written. Attempting to write another record before the header will cause this.	Correct the transformation write logic.
4720	Variable *<variable name>* can not be source; has not been targeted for update	Using a variable as a source before it has a value assigned to it.	Correct the transformation to initialize the variable before using it as the source in an event action statement.
4721	Adding new control record field	Message	Status message
4722	Adding new control record	Message	Status message
4723	Invalid number of characters in record code	The value entered for the record code has exceeded the specified record code length.	Enter an allowable record code or expand the allowable length of the record code in the EC Subsystem Definition Maint (35.13.1).
4724	Record code length must be between 1 and 4	The record code length entered is greater than the field length limit.	In eB2 and later the record code field length is expanded to 20.
4725	Cannot delete a Qad designed function: #	Attempting to delete a QAD-provided function.	Deleting a QAD function is not allowed.
4726	Cannot change File Name or Version	Attempting to change a file name or version is not allowed.	Cannot change file name or version.

No.	Message	Cause	Solution
4727	Order does not exist for incoming schedule: *<Ship from>;<ship to>;<item>;<PO>*	Schedule load EDI gateway cannot find scheduled order for this incoming release	Enter order for this ship-from/ship-to for item/PO in Customer Scheduled Order Maintenance (7.3.13).
4728	Record code is blank for control record: *<subsystem>*; *<direction>*; *<record sequence number>*	The specified EC subsystem *<subsystem>* has not been defined.	• Use EC Subsystem Definition Maint (35.13.1) to define the subsystem and its control codes. • Use EC Subsystem/Exchange Maint (35.13.3) to create the data control codes.
4729	Mandatory data record is missing: *<document name>*; *<document version>*; *<implementation name>*; *<implementation version>*; *<record name>*	• The trading partner did not send the data specified, or the SNF file *<filename>* was not complete. • The data record field noted *<field name>* for the *<record sequence>* has been defined as mandatory in the exchange file document definition for the *<exchange file name>*, *<version>* and direction when it should be defined as optional.	• Have the trading partner correct the problem and resend the document. • If this is a recurring error for this *<exchange file name>*, *<version>* and direction, use Exchange Definition Maintenance (35.15.6) to select the appropriate combination of exchange file name, version, and direction. Then, select the *<record sequence>*, locate the *<field name>*, and set Requirement to Optional.
4730	Data field length outside boundaries: *<document name>;<document version>;<implementation name>;<implementation version>;<record sequence>; <field name>;<field length>*	The data in *<record sequence>* is greater than the maximum allowed in the implementation definition for the specified field.	Correct the invalid data or change field length in Implementation Definition Maint (35.15.13).
4731	Created *<directory name>* successfully	Status message	Information only

No.	Message	Cause	Solution
4732	Master table locked, document not processed	This error message is displayed when during the export of the following gateways, the sequence in the Application Document Status Master record is locked by another user: • PO Change Export (35.22.16) • Inventory Cycle Count Export (35.4.13) • Generic Gateway Export (35.4.20) • Invoice Export (35.4.3) • Purchase Order Export (35.4.9) • PO Change Ack. Export (35.22.15) • Purchase Order Acknowledgement (35.4.5) • Packing List Export (35.4.15) • Purchase Order Ack. Maintenance (35.4.4) • Supplier Shipping Schedule (35.4.8) • Consignment Usage Export(35.4.2) • Supplier Self Billing Export(35.4.11)	This check is done as a precautionary measure. This situation will not arise in a normal condition. If this happens, make sure that no other process or user is locking this record.
4733	Data field length outside boundaries: *<document name>;<document version>;<implementation name>;<implementation version>;<record sequence>; <field name>;<field length>*	The data in *<record sequence>* is greater than the maximum allowed in the implementation definition for the specified field.	Correct the invalid data or change field length in Implementation Definition Maint (35.15.13).
4734	Loop occurrence must be 1 or greater	This error message is displayed in the following programs when the Loop Occurrence value of the current record is less than or equal to zero: • Exchange Definition Maintenance (35.15.6) • Implementation Definition Maintenance (35.15.13) • Application Definition Maintenance (35.15.10)	Make sure that the Loop Occurrence of the current record is greater than or equal to zero.
4735	End loop cannot be less than current loop sequence	This error message is displayed when adding a record using the following programs if the Loop End Sequence of the current record is less than the Record Sequence: • Exchange Definition Maintenance (35.15.6) • Implementation Definition Maintenance (35.15.13) • Application Definition Maintenance (35.15.10)	Make sure that the Loop End Sequence of the current record is greater than or equal to the Loop End Sequence.

No.	Message	Cause	Solution
4736	Directory does not exist: *<directory name>*; Create it?	Control program is initially doing set up or the specified path is incorrect.	Use one of the following methods: • Answer Yes to create the directory. • If permission is not granted, then contact the system administrator to have the directory created.
4737	Transmission group name can not be blank	Blank transmission group is not allowed for outbound documents.	Enter a valid transmission group name.
4739	Extension already defined	The file extension must be unique for each EC Subsystem.	Enter a unique file extension.
4740	Exchange file document status record does not exist	This error message is displayed when the Sequence Number entered in Exchange Doc Status Inquiry (35.9.1) does not exist in the Exchange Document Status Master table.	Enter a valid Exchange Sequence.
4742	Distribution dump file created	Status message	Status message
4743	Transformation definition *<transformation definition>* flagged as nonrunnable	The transformation definition record has the Can Run field set to No.	In Transformation Definition Maint (35.15.17), change the transformation definition by setting Can Run to Yes.
4745	Exchange file definition does not exist	The exchange file definition name cannot be found.	Enter valid exchange file definition name.
4746	Minimum length greater than maximum length	Entering a minimum field length that is greater than the maximum field length is not allowed.	Change either the minimum or maximum length to allowable range.
4747	Cross reference already exists	Cross-reference must be unique.	Enter a unique cross-reference.
4748	Variable *<variable name>* could not be validated with the value *<value>*	This error is displayed when transformation processing tries to validate the data written to a field by looking up in EDI eCommerce Validation Master (edval_mstr). This is done when a Write is performed in an inbound document and when a Read is performed on an outbound document.	Make sure that validation codes are set up correctly in Data Validation Maintenance (35.13.21).
4749	Trading partner parameter does not exist for site *<site id>* / address *<address id>*	The system is unable to find a parameter record for the trading partner.	This is an abnormal situation, because Trading Partner Maint (35.13.7) automatically creates the trading partner parameter record when the site and address are entered. Delete the site and address entry in Trading Partner Maint, then reenter the line to create a TP parameter record. Go to Trading Partner Parameter Maint (35.13.10) to verify the record has been added.

No.	Message	Cause	Solution
4750	Trading partner parameter states document should not be exported	At least one of the documents that have been selected for export does not have the trading partner parameter set to Yes for exporting the specified document type.	Using Trading Partner Parameter Maint (35.13.10) to ensure that the export parameters have been set to Yes to allow the EDI export.
4751	Using default shipment document: Shipping Notice	Normal status message	Normal status message
4752	Document definition is not defined correctly # / #	This error message is displayed when the application document definition record does not exist.	Make sure that application document definition being used does exist in Application Definition Maintenance (35.15.10).
4753	Skipping Shipment <shipment number>	The ASN export is skipping this shipper for export. This is caused by the Trading Partner Parameter not being set properly to export ASN for this site / address.	Can be a normal situation if shippers are selected for export that should not be exported. Correct the Trading Partner Parameter 35.13.10 setup if shippers are being skipped that should be exported.
4754	Using default invoicing document: Invoice	Normal status message	Normal status message
4755	Skipping Invoice <invoice number>	The Invoice export is skipping this invoice for export because a trading partner parameter is not set to export invoices for this site/address.	This can be a normal situation if invoices are selected for export that should not be exported. If this is not the case, correct the Trading Partner Parameter (35.13.10).
4756	Implementation does not exist:	The implementation file definition specified in the transformation definition (document map) does not exist	Correct the implementation file specification. In Transformation Definition Maintenance 35.15.17 make sure that the Implementation file name and version number are the same as an entry in Implementation Definition Maintenance 35.15.13. The application document definition must also be the same
4757	Function returned warning: *<warning description>*	Transformation has made a call to a function that has encountered an error that is not fatal and returns a warning with a description of the error condition.	Analyze the warning description to determine any corrective action if necessary.

No.	Message	Cause	Solution
4761	Document HEADER record does not exist:	Reference from the status table to a application header record has failed.	Normally this is a problem with exporting a document. Check the application definition and version being used in TP Parameter setup. Try re-exporting.
4766	Record written out of sequence	This is displayed when an error occurs while creating records in Application Data Repository Detail table; for example, when trying to create duplicate records in Application Data Repository Detail. This situation should not happen in a normal environment. This is done just as a precaution.	Correct the transformation logic.

Transformation Definition Information

Transformation Definition

Tokens

tp-id	Mandatory data token
tp-document-id	Mandatory data token
tp-site	Optional data token
tp-address	Optional data token
tp-message-nbr	Optional data token
tp-func-grp-nbr	Optional data token
tp-interchange-nbr	Optional data token
tp-document-nbr	Optional data token
tp-doc-dir	Optional data token
mfgpro-site	Optional data token
mfgpro-address	Optional data token
map-name	Transformation state token
map-exf-name	Transformation state token
map-exf-vers	Transformation state token
map-imp-name	Transformation state token
map-imp-vers	Transformation state token
map-mfg-name	Transformation state token
map-mfg-vers	Transformation state token
map-many-to-many	Transformation state token
map-debug-level	Transformation state token
map-can-run	Transformation state token
current-exf-seq	Transformation state token
current-mfg-seq	Transformation state token
conditional-rec-flushed	Transformation state token

Field Types

AN	Alphanumeric
D	Date
I	Integer
L	Logical
R	Real Number

Associated Variable Types

G	Gateway	This variable is used by the gateway during the transform process (variables are defined in the gateway variable definition include file).
T	Turnaround	This variable type represents imported data that is stored in the turnaround data table, indexed, and later associated with an exported document.
D	Data Entry	The operator adds this data during processing. This function is not currently implemented.

Event Qualifier

Each   First and last to be implemented later

Events

RE	Record Entry
RX	Record Exit
LE	Loop Entry
LX	Loop Exit

Event Actions

Action Type	Internal Action	Level	Description
Equate	=	Field	Set the target equal to the source.
If	if	Field	Conditional logic based on source and source qualifier.
			The if statement must return a value of True or Yes.
			It allows the use of Else and EndIf and does not require a source or target.
EndIf	endif	Field	End of an If statement.
			EndIf does not require a source or target.
Else	Else	Field	Logical branch between If and EndIf statements.
			Else does not require a source or target.
Read	put	Record	Read the source record files into memory (only input).
Clear	free	Record	Remove the source(input)/target(output) record file from memory.
Write	flush	Record	Write the target record to the database (only output).
			You must write a header record before another record can be written.
			Write can be used optionally with the check hash function, which determines the header against which the detail will be written.
Loop	loop	Record	Loop through the records already read into memory.
LoopEnd	end	Record	End a loop. Does not require a source or target.
New	new	Record	Just for documentation purposes (a kind of separator).

Quali2fier

Depends on the document direction!

- I means input to transformation
- O means output from transformation

I	Input Data	Source
O	Output Data	Target
V	Variable	Source and Target
F	Function	Source only
C	Constant	Source only

Appendix C

QAD Functions Available

Function Name	Description	Parameters	Return Value	Name
getCumShipped	Get cumulative qty shipped for SO line.	1 AN ShipFromSite	R	edfct032.i
		2 AN ShipToAddr		
		3 AN MfgProItem		
		4 AN PurchaseOrder		
get_po_no	Get PO Number	1 AN i_tad_itm	AN	edfct024.i
		2 AN i_po_no		
isblank	Check whether the string is blank	1 AN str1	L	edfct031.i
SysDate	Returns the system date	None	D	edfct033.i
Add	Add to values (integer or decimal)	1 R val1	R	edfct032.i
		2 R val2		
Check-Hash	Check Hash table to write new record used for inbound record processing. Check hash on the Application Repository.	1 an PARAM1	R	edfct017.i
		2 an PARAM2		
		3 an PARAM3		
		4 an PARAM4		
		5 an PARAM5		
		6 an PARAM6		
		7 an PARAM7		
		8 an PARAM8		
		9 an PARAM9		
		10 an PARAM10		
CheckHashOut	Check Hash table to write new record used for outbound processing. Check hash on the Exchange Repository.	1 an PARAM1	R	edfct067.i
		2 an PARAM2		
		3 an PARAM3		
		4 an PARAM4		
		5 an PARAM5		
		6 an PARAM6		
		7 an PARAM7		
		8 an PARAM8		
		9 an PARAM9		
		10 an PARAM10		
Comment	Func to add Comment line between maps	1 AN line-1	AN	edfct050.i
		2 AN line-2		
		3 AN line-3		
		4 AN line-4		
		5 AN line-5		
		6 AN line-6		
		7 AN line-7		
		8 AN line-8		
		9 AN line-9		
		10 AN line-10		

Function Name	Description	Parameters	Return Value	Name
compare	Compares equality of two passed params	1 an param1 2 an param2	L	edfct022.i
ComparePairs	Compares equality of pairs of data passed as sets of params. Five pairs are maximum. param1=param2 param3=param4 param5=param6 param7=param8 param9=param10	1 an param1 2 an param2 3 an param3 4 an param4 5 an param5 6 an param6 7 an param7 8 an param8 9 an param9 10 an param10	L	edfct064.i
Concat	Concatenates two strings together.	1 AN str1 2 AN str2	AN	edfct001.i
create-addr-mstr	Creates a customer address record in QAD Enterprise Applications	1 an cust-id 2 an shipto-id 3 an addr-name 4 an addr-line1 5 an addr-line2 6 an addr-line3 7 an addr-city 8 an addr-state 9 an addr-zip 10 an tax-status	AN	edfct.57.i
Date-Offset	Modifies input date by the number of days specified in i-days either positive or negative.	1 d i-date 2 i i-date	AN	edfct053.i
DateToString	Converts date into MMDDYY, etc., formats	1 d InputDate 2 an OutputFormat	AN	edfct035.i
DetailHash	This functions the same as the Check-hash function except it checks at the inbound application repository detail level.	1 an Identifier 2 an param1 3 an param2 4 an param 3 5 an param 4 6 an param 5 7 an param6 8 an param7 9 an param8 10 an param9	R	edfct063.i

Function Name	Description	Parameters	Return Value	Name
Divide	Divides two values val1/val2	1 r val1 2 r val2	R	edfct006.i
get-release-id	Get Release ID from Planning Schedule	1 i schd-type 2 an ship-from 3 an ship-to 4 an part-number 5 an po-number	AN	edfct037.i
get-schd-po	Get PO from Schedule	1 i chd-type 2 an ship-from 3 an ship-to 4 an part-number 5 an model-year	AN	edfct036.i
get-val-chkhash	This function is the complement of the put-val-chkhash function. It retrieves a value from the outbound hash table (exchange repository) that has been stored with the put-val-chkhash function.	1 an param1 2 an param2 3 an param3 4 an param4 5 an param5 6 an param6 7 an param7 8 an param8 9 an param9	AN	edfct055.i
GetBatchNo	Retrieves the batch number controlling the current session.	1 i order-type 2 an supplier-addr 3 an shipto-site 4 an part-number 5 an po-number	an	edfct068.i
getMFGPROAddress	Get the QAD Enterprise Applications Address	1 AN tp_id 2 AN tp_doc 3 AN L doc_in 4 AN tp_site 5 AN tp_addr	AN	edfct008.i
getMFGPROSite	Get the QAD Enterprise Applications Site Code	1 AN tp_id 2 AN tp_doc 3 L doc_in 4 AN tp_site 5 AN tp_addr	AN	edfct041.i
getTPAddress	Get the TP Address	1 an tp_id 2 an tp_doc 3 L doc_in 4 an mfg_site 5 an mfg_addr	AN	edfct041.i

Function Name	Description	Parameters	Return Value	Name
get TPSite	Get the TP site Code	1 an tp_id	AN	edfct042.i
		2 an tp_doc		
		3 L doc_in		
		4 an mfg_site		
		5 an mfg_addr		
getXrefValue	Get the Cross-Reference Value	1 AN tp_id	AN	edfct010.i
		2 AN tp_doc		
		3 L doc_in		
		4 AN mfd_name		
		5 I mfd_vers		
		6 I mfd_rec_seq		
		7 I mfd_fld_seq		
		8 AN init_value		
get_abs_field	Get shipment file abs_mstr field value	1 an i_tad_item	AN	edfct066.i
		2 an shipper		
		3 an field-name		
get_addr_mstr	Get Address Master Turnaround Data	1 an i_tad-item	AN	edfct016.i
		2 an i_ad_addr		
get_comm_code	Get Commodity Code based on Part Number	1 an part-number	AN	edfct049.i
get_custpart	Get the Customer's Part Number	1 an mfg_addr	AN	edfct040.i
		2 an mfg_item_no		
get_custpart_field	Get any field from Customer/Part Master	1 an field-name	AN	edfct048.i
		2 an cust-no		
		3 an cust-part		
get_mfgpart	Get the internal QAD Enterprise Applications part number	1 an mfg_addr	AN	edfct046.i
		2 an cust_part_no		
get_partshipto_TA	Get TurnAround data using Part# & ShipTo from cp_mstr	1 an TA_data-item	AN	edfct039.i
		2 an part_number		
		3 an ship_to		
get_part_field	To get any field value from Part Master	1 an field-name	AN	edfct045.i
		2 an part-number		
get_pod_field	To get any field value from Purchase Order Detail File	1 an order_type	AN	edfct056.i
		2 an supplier-addr		
		3 an shipto-site		
		4 an part-number		
		5 an po-number		
		6 an field-name		
get_shipto_TA	Get TurnAround data using the ShipTo	1 an TA_Data_Item	AN	edfct047.i
		2 an ship_to		

Function Name	Description	Parameters	Return Value	Name
get_sod_det	Get Sales Order Detail Turnaround data	1 AN i_tad_item	AN	edfct015.i
		2 AN i_sod-no		
		3 AN i_sod_line		
get_sod_field	Get any field value from the Sales Order Detail File	1 an Order_Number	AN	edfct060.i
		2 I Line_Number		
		3 an Field_Name		
get_so_field	Get any field value from the Sales Order File	1 an Order_Number	AN	edfct065.i
		2 an Field_Name		
get_so_nbr	Get Sales Order Header Turnaround Data	1 AN i_tad_item	AN	edfct014.i
		2 AN i_so_nbr		
isgreater	Checks to see if 1st param is>the 2nd	1 r first_value	L	edfct038.i
		2 r second_value		
Modulo	Takes the modulo of val1 and val2	1 I val1	L	edfct011.i
		2 I val2		
Multiply	Multiplies two values	1 R val1	R	edfct005.i
		2 R val2		
Progress	Calls any Progress function	1 an Function_Name	R	edfct061.i
		2-10 an param1....9		
put-val-chkhash	Stores a passed value into the outbound hash table associated with the exchange repository using the parameters 1-9 specified as a key. The value to be stored os passed as the 10th parameter.	1 an param1	R	edfct054.i
		2 an param2		
		3 an param3		
		4 an param4		
		5 an param5		
		6 an param6		
		7 an param7		
		8 an param8		
		9 an param9		
		10 an value-to-store		
Raise-Error	Raise an ERROR or WARNING flag	1 an E_or_W	AN	edfct051.i
		2 an i_Text		
Round	Rounds a decimal value	1 r dec_value	R	edfct043.i
		2 i precision		
Saturn-Kanban	Generates kanban sequence numbers where only a starting number is given.	1 i MFG-PRO-Req-Seq	AN	edfct058.i
		2 an Starting		

Function Name	Description	Parameters	Return Value	Name
SetXrefValue	Stores a record in the EDI eCommerce cross-reference table.	1 an tp-id	R	edfct059.i
		2 an tp-doc		
		3 an doc-in		
		4 an mfd-name		
		5 i mfd-vers		
		6 i mfd-rec-seq		
		7 i mfd-fld-seq		
		8 an init-value		
		9 an conv-value		
Substring	Returns a protion of a string	1 an src_text	AN	edfct007.i
		2 i start_pos		
		3 i total_len		
Subtract	Subtract two values	1 R val1	R	edfct004.i
		2 R val2		
Systime	Get system time	None	AN	edfct034.i
ToDate	Converts to Progress Date from Character	1 AN i-date	D	edfct003.i
		2 AN i-format		
Truncate	Truncates a decimal value	1 r dec_value	R	edfct044.i
		2 i precision		

User Functions Available from the TP Library

Function Name	Description	Parameters	Return Value	Name
capitalize	Capitalize any passed parameter	1 an i_caps_param	AN	
chk-nte-seg	This is a special function that was written to search the NTE note segment inbound data in the comments record and comparing against previously received NTE data that had been stored as TurnAround data. It issues warning error if the data has changed. This was done for a Ford requirement.	1 an part-number		
get-addr-field	Get Address field from Address Master Table	1 an addr-number 2 an field-name	AN	
get-cust-field	Get any field from Customer Master Table	1 an cust-id 2 an field-name		
get-tad-data	Generic retrieval program to retrieve any data from the TurnAround Data Table This will become a QAD function in eB service pack 1	1 an table-name 2 an index-fld-name 3 an index-fld-value 4 an index-fld value 5 an index-fld-value 6 an index-fld-value 7 an index-fld-value 8 an index-fld-value 9 an index-fld-value 10 an tad-item		
is-part-available	Check to see if item master record exists	1 an part-number		
rm-prev-untseg	Deletes previous UNT segments. EDIFACT looping issue.			
CnvTime				
cnv_from_decimal				
conv-frm-vda-date				

Appendix D

Repository Error Codes

Inbound Repository Error Codes

11	Inbound Exchange File Status	Load process failed. Could indicate problem in SNF file or with trading partner or document definition.
12	Inbound Exchange File Status	Exchange file load successful.
13	Inbound Exchange File Status	Exchange file transformation errors.
14	Inbound Exchange File Status	Exchange file transformation successful.
21	Inbound Application File Status	Application repository data created but has not initiated the gateway process. Indicates a problem with gateway processing.
22	Inbound Application File Status	Gateway process errors.
23	Inbound Application File Status	Gateway process successful.

Outbound Repository Error Codes

30	Outbound Application File Status	Gateway didn't run.
31	Outbound QAD Enterprise Applications File Status	Gateway process errors. Correct in QAD Enterprise Applications then re-export
32	Outbound Application File Status	Gateway process successful.
33	Outbound Application File Status	Application document transformation errors.
34	Outbound Application File Status	Application document transformation successful.
41	Outbound Exchange File Status	Exchange repository data created, but has not moved to unload process. Indicates a problem with unload processing.
42	Outbound Application File Status	Exchange file unload errors.
43	Outbound Application File Status	Exchange file unload successful.

QAD