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JD Edwards EnterpriseOne Integration with Oracle Transportation Management 9.0 Implementation Guide

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JD Edwards EnterpriseOne Integration with Oracle Transportation Management 9.0 Implementation Guide
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Contents

About This Documentation Preface

JD Edwards EnterpriseOne implementation guides provide you with the information that you need to implement and use JD Edwards EnterpriseOne applications from Oracle.

This preface discusses:

- JD Edwards EnterpriseOne application prerequisites.
- Application fundamentals.
- Documentation updates and downloading documentation.
- Additional resources.
- Typographical conventions and visual cues.
- Comments and suggestions.
- Common fields in implementation guides.

Note. Implementation guides document only elements, such as fields and check boxes, that require additional explanation. If an element is not documented with the process or task in which it is used, then either it requires no additional explanation or it is documented with common fields for the section, chapter, implementation guide, or product line. Fields that are common to all JD Edwards EnterpriseOne applications are defined in this preface.

JD Edwards EnterpriseOne Application Prerequisites

To benefit fully from the information that is covered in these books, you should have a basic understanding of how to use JD Edwards EnterpriseOne applications.

You might also want to complete at least one introductory training course, if applicable.

You should be familiar with navigating the system and adding, updating, and deleting information by using JD Edwards EnterpriseOne menus, forms, or windows. You should also be comfortable using the World Wide Web and the Microsoft Windows or Windows NT graphical user interface.

These books do not review navigation and other basics. They present the information that you need to use the system and implement your JD Edwards EnterpriseOne applications most effectively.

Application Fundamentals

Each application implementation guide provides implementation and processing information for your JD Edwards EnterpriseOne applications.

For some applications, additional, essential information describing the setup and design of your system appears in a companion volume of documentation called the application fundamentals implementation guide. Most product lines have a version of the application fundamentals implementation guide. The preface of each implementation guide identifies the application fundamentals implementation guides that are associated with that implementation guide.

The application fundamentals implementation guide consists of important topics that apply to many or all JD Edwards EnterpriseOne applications. Whether you are implementing a single application, some combination of applications within the product line, or the entire product line, you should be familiar with the contents of the appropriate application fundamentals implementation guides. They provide the starting points for fundamental implementation tasks.

Documentation Updates and Downloading Documentation

This section discusses how to:

- Obtain documentation updates.
- Download documentation.

Obtaining Documentation Updates

You can find updates and additional documentation for this release, as well as previous releases, on Oracle's PeopleSoft Customer Connection website. Through the Documentation section of Oracle's PeopleSoft Customer Connection, you can download files to add to your Implementation Guides Library. You'll find a variety of useful and timely materials, including updates to the full line of JD Edwards EnterpriseOne documentation that is delivered on your implementation guides CD-ROM.

Important! Before you upgrade, you must check Oracle's PeopleSoft Customer Connection for updates to the upgrade instructions. Oracle continually posts updates as the upgrade process is refined.

See Also

Oracle's PeopleSoft Customer Connection, http://www.oracle.com/support/support_peoplesoft.html

Downloading Documentation

In addition to the complete line of documentation that is delivered on your implementation guide CD-ROM, Oracle makes JD Edwards EnterpriseOne documentation available to you via Oracle's website. You can download PDF versions of JD Edwards EnterpriseOne documentation online via the Oracle Technology Network. Oracle makes these PDF files available online for each major release shortly after the software is shipped.

See Oracle Technology Network, http://www.oracle.com/technology/documentation/psftent.html

Additional Resources

The following resources are located on Oracle's PeopleSoft Customer Connection website:

Resource	Navigation
Application maintenance information	Updates + Fixes
Business process diagrams	Support, Documentation, Business Process Maps

Resource	Navigation
Interactive Services Repository	Support, Documentation, Interactive Services Repository
Hardware and software requirements	Implement, Optimize + Upgrade; Implementation Guide; Implementation Documentation and Software; Hardware and Software Requirements
Installation guides	Implement, Optimize + Upgrade; Implementation Guide; Implementation Documentation and Software; Installation Guides and Notes
Integration information	Implement, Optimize + Upgrade; Implementation Guide; Implementation Documentation and Software; Pre-Built Integrations for PeopleSoft Enterprise and JD Edwards EnterpriseOne Applications
Minimum technical requirements (MTRs)	Implement, Optimize + Upgrade; Implementation Guide; Supported Platforms
Documentation updates	Support, Documentation, Documentation Updates
Implementation guides support policy	Support, Support Policy
Prerelease notes	Support, Documentation, Documentation Updates, Category, Release Notes
Product release roadmap	Support, Roadmaps + Schedules
Release notes	Support, Documentation, Documentation Updates, Category, Release Notes
Release value proposition	Support, Documentation, Documentation Updates, Category, Release Value Proposition
Statement of direction	Support, Documentation, Documentation Updates, Category, Statement of Direction
Troubleshooting information	Support, Troubleshooting
Upgrade documentation	Support, Documentation, Upgrade Documentation and Scripts

Typographical Conventions and Visual Cues

This section discusses:

- Typographical conventions.
- Visual cues.
- Country, region, and industry identifiers.
- Currency codes.

Typographical Conventions

This table contains the typographical conventions that are used in implementation guides:

Typographical Convention or Visual Cue	Description
Bold	Indicates PeopleCode function names, business function names, event names, system function names, method names, language constructs, and PeopleCode reserved words that must be included literally in the function call.
Italics	Indicates field values, emphasis, and JD Edwards EnterpriseOne or other book-length publication titles. In PeopleCode syntax, italic items are placeholders for arguments that your program must supply. We also use italics when we refer to words as words or letters as letters, as in the following: Enter the letter *O*.
KEY+KEY	Indicates a key combination action. For example, a plus sign (+) between keys means that you must hold down the first key while you press the second key. For ALT+W, hold down the ALT key while you press the W key.
`Monospace font`	Indicates a PeopleCode program or other code example.
“ ” (quotation marks)	Indicate chapter titles in cross-references and words that are used differently from their intended meanings.
. . . (ellipses)	Indicate that the preceding item or series can be repeated any number of times in PeopleCode syntax.
{ } (curly braces)	Indicate a choice between two options in PeopleCode syntax. Options are separated by a pipe (|).
[ ] (square brackets)	Indicate optional items in PeopleCode syntax.
& (ampersand)	When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object. Ampersands also precede all PeopleCode variables.

Visual Cues

Implementation guides contain the following visual cues.

Notes

Notes indicate information that you should pay particular attention to as you work with the JD Edwards EnterpriseOne system.

Note. Example of a note.

If the note is preceded by *Important!,* the note is crucial and includes information that concerns what you must do for the system to function properly.

Important! Example of an important note.

Warnings

Warnings indicate crucial configuration considerations. Pay close attention to warning messages.

Warning! Example of a warning.

Cross-References

Implementation guides provide cross-references either under the heading "See Also" or on a separate line preceded by the word *See.* Cross-references lead to other documentation that is pertinent to the immediately preceding documentation.

Country, Region, and Industry Identifiers

Information that applies only to a specific country, region, or industry is preceded by a standard identifier in parentheses. This identifier typically appears at the beginning of a section heading, but it may also appear at the beginning of a note or other text.

Example of a country-specific heading: "(FRA) Hiring an Employee"

Example of a region-specific heading: "(Latin America) Setting Up Depreciation"

Country Identifiers

Countries are identified with the International Organization for Standardization (ISO) country code.

Region Identifiers

Regions are identified by the region name. The following region identifiers may appear in implementation guides:

- Asia Pacific
- Europe
- Latin America
- North America

Industry Identifiers

Industries are identified by the industry name or by an abbreviation for that industry. The following industry identifiers may appear in implementation guides:

- USF (U.S. Federal)

- E&G (Education and Government)

Currency Codes

Monetary amounts are identified by the ISO currency code.

Comments and Suggestions

Your comments are important to us. We encourage you to tell us what you like, or what you would like to see changed about implementation guides and other Oracle reference and training materials. Please send your suggestions to your product line documentation manager at Oracle Corporation, 500 Oracle Parkway, Redwood Shores, CA 94065, U.S.A. Or email us at appsdoc@us.oracle.com.

While we cannot guarantee to answer every email message, we will pay careful attention to your comments and suggestions.

Common Fields Used in Implementation Guides

Address Book Number

Enter a unique number that identifies the master record for the entity. An address book number can be the identifier for a customer, supplier, company, employee, applicant, participant, tenant, location, and so on. Depending on the application, the field on the form might refer to the address book number as the customer number, supplier number, or company number, employee or applicant ID, participant number, and so on.

As If Currency Code

Enter the three-character code to specify the currency that you want to use to view transaction amounts. This code enables you to view the transaction amounts as if they were entered in the specified currency rather than the foreign or domestic currency that was used when the transaction was originally entered.

Batch Number

Displays a number that identifies a group of transactions to be processed by the system. On entry forms, you can assign the batch number or the system can assign it through the Next Numbers program (P0002).

Batch Date

Enter the date in which a batch is created. If you leave this field blank, the system supplies the system date as the batch date.

Batch Status

Displays a code from user-defined code (UDC) table 98/IC that indicates the posting status of a batch. Values are:

Blank: Batch is unposted and pending approval.

A: The batch is approved for posting, has no errors and is in balance, but has not yet been posted.

D: The batch posted successfully.

E: The batch is in error. You must correct the batch before it can post.

P: The system is in the process of posting the batch. The batch is unavailable until the posting process is complete. If errors occur during the post, the batch status changes to *E*.

U: The batch is temporarily unavailable because someone is working with it, or the batch appears to be in use because a power failure occurred while the batch was open.

Branch/Plant

Enter a code that identifies a separate entity as a warehouse location, job, project, work center, branch, or plant in which distribution and manufacturing activities occur. In some systems, this is called a business unit.

Business Unit

Enter the alphanumeric code that identifies a separate entity within a business for which you want to track costs. In some systems, this is called a branch/plant.

Category Code

Enter the code that represents a specific category code. Category codes are user-defined codes that you customize to handle the tracking and reporting requirements of your organization.

Company

Enter a code that identifies a specific organization, fund, or other reporting entity. The company code must already exist in the F0010 table and must identify a reporting entity that has a complete balance sheet.

Currency Code

Enter the three-character code that represents the currency of the transaction. JD Edwards EnterpriseOne provides currency codes that are recognized by the International Organization for Standardization (ISO). The system stores currency codes in the F0013 table.

Document Company

Enter the company number associated with the document. This number, used in conjunction with the document number, document type, and general ledger date, uniquely identifies an original document.

If you assign next numbers by company and fiscal year, the system uses the document company to retrieve the correct next number for that company.

If two or more original documents have the same document number and document type, you can use the document company to display the document that you want.

Document Number

Displays a number that identifies the original document, which can be a voucher, invoice, journal entry, or time sheet, and so on. On entry forms, you can assign the original document number or the system can assign it through the Next Numbers program.

Document Type

Enter the two-character UDC, from UDC table 00/DT, that identifies the origin and purpose of the transaction, such as a voucher, invoice, journal entry, or time sheet. JD Edwards EnterpriseOne reserves these prefixes for the document types indicated:

P: Accounts payable documents.

R: Accounts receivable documents.

T: Time and pay documents.

I: Inventory documents.

O: Purchase order documents.

S: Sales order documents.

Effective Date

Enter the date on which an address, item, transaction, or record becomes active. The meaning of this field differs, depending on the program. For example, the effective date can represent any of these dates:

- The date on which a change of address becomes effective.
- The date on which a lease becomes effective.
- The date on which a price becomes effective.
- The date on which the currency exchange rate becomes effective.
- The date on which a tax rate becomes effective.

Fiscal Period and **Fiscal Year**

Enter a number that identifies the general ledger period and year. For many programs, you can leave these fields blank to use the current fiscal period and year defined in the Company Names & Number program (P0010).

G/L Date (general ledger date)

Enter the date that identifies the financial period to which a transaction will be posted. The system compares the date that you enter on the transaction to the fiscal date pattern assigned to the company to retrieve the appropriate fiscal period number and year, as well as to perform date validations.

JD Edwards EnterpriseOne Integration with Oracle Transportation Management Preface

This preface discusses:

- Oracle products
- JD Edwards EnterpriseOne application fundamentals

Oracle Products

This implementation guide refers to these products from Oracle:

- JD Edwards EnterpriseOne Accounts Payable
- JD Edwards EnterpriseOne Accounts Receivable
- JD Edwards EnterpriseOne Address Book
- JD Edwards EnterpriseOne General Accounting
- JD Edwards EnterpriseOne Inventory Management
- JD Edwards EnterpriseOne Procurement and Subcontract Management
- JD Edwards EnterpriseOne Sales Order Management
- Oracle Transportation Management

JD Edwards EnterpriseOne Application Fundamentals

Additional, essential information describing the setup and design of the system appears in companion volumes of documentation called *JD Edwards EnterpriseOne Financial Management Application Fundamentals 9.0 Implementation Guide, JD Edwards EnterpriseOne Human Capital Management Application Fundamentals 9.0 Implementation Guide,* and *JD Edwards EnterpriseOne Customer Relationship Management Application Fundamentals 9.0 Implementation Guide.*

Customers must conform to the supported platforms for the release as detailed in the JD Edwards EnterpriseOne minimum technical requirements. In addition, JD Edwards EnterpriseOne may integrate, interface, or work in conjunction with other Oracle products. Refer to the cross-reference material in the Program Documentation at http://oracle.com/contracts/index.html for Program prerequisites and version cross-reference documents to assure compatibility of various Oracle products.

See Also

JD Edwards EnterpriseOne Financial Management Application Fundamentals 9.0 Implementation Guide,"JD Edwards EnterpriseOne Financial Management Application Fundamentals Preface"

JD Edwards EnterpriseOne Human Capital Management Application Fundamentals 9.0 Implementation Guide,"JD Edwards EnterpriseOne HCM Fundamentals Preface"

JD Edwards EnterpriseOne Customer Relationship Management Application Fundamentals 9.0 Implementation Guide, "JD Edwards EnterpriseOne CRM Application Fundamentals Preface

CHAPTER 1

Getting Started with JD Edwards EnterpriseOne Integration with Oracle Transportation Management

This chapter provides an overview of the JD Edwards EnterpriseOne integration with Oracle Transportation Management.

JD Edwards EnterpriseOne Integration with Oracle Transportation Management Overview

The integration of JD Edwards EnterpriseOne and Oracle Transportation Management enhances Oracle's EnterpriseOne solution by providing robust transportation planning and execution capabilities for shippers and third-party logistics providers. This integration:

- Enables the streamlining of all transportation planning, transportation execution, and freight payment on a single application.
- Provides a complete collaborative solution for logistics operations, suppliers, service providers, carriers, customers, purchasing, and finance.
- Accommodates all modes of transportation from full truckload to complex multi-leg air, ocean, and rail shipments.
- Lowers transportation costs and improves customer service and asset utilization, while providing flexible, global fulfillment options.
- Increases supply chain reliability, customer service levels, and asset utilization.
- Improves process efficiencies, high performance optimization, and seamless order processing

An additional benefit is that JD Edwards EnterpriseOne provides choices, so that customers may:

- Implement JD Edwards EnterpriseOne to Oracle Transportation Management whereby implementing the JD Edwards EnterpriseOne Transportation Management system is not required.
- Continue using the JD Edwards EnterpriseOne module without using Oracle Transportation Management.
- Run both JD Edwards EnterpriseOne and Oracle Transportation Management systems parallel to one another.

Products

This implementation guide documents the integrations between these JD Edwards EnterpriseOne applications and Oracle Transportation Management:

- JD Edwards EnterpriseOne Accounts Payable

- JD Edwards EnterpriseOne Accounts Receivable
- JD Edwards EnterpriseOne Address Book
- JD Edwards EnterpriseOne General Accounting
- JD Edwards EnterpriseOne Inventory Management
- JD Edwards EnterpriseOne Procurement and Subcontractor Management
- JD Edwards EnterpriseOne Sales Order Management

When determining which electronic software updates (ESUs) to install for JD Edwards EnterpriseOne integration with Oracle Transportation Management, use the JD Edwards EnterpriseOne and JD Edwards World Change Assistant. JD Edwards EnterpriseOne and JD Edwards World Change Assistant, a Java-based tool, reduces the time required to search and download ESUs by 75 percent or more, and enables you to install multiple ESUs at one time.

Features

The Oracle Transportation Management features that benefit the JD Edwards EnterpriseOne system include:

- Global transportation (multi-modal, multi-leg).
- Automated planning and optimization.
- Freight rating and routing.
- Transportation visibility and tracking.
- Planning and optimization.
- High-volume shipments.

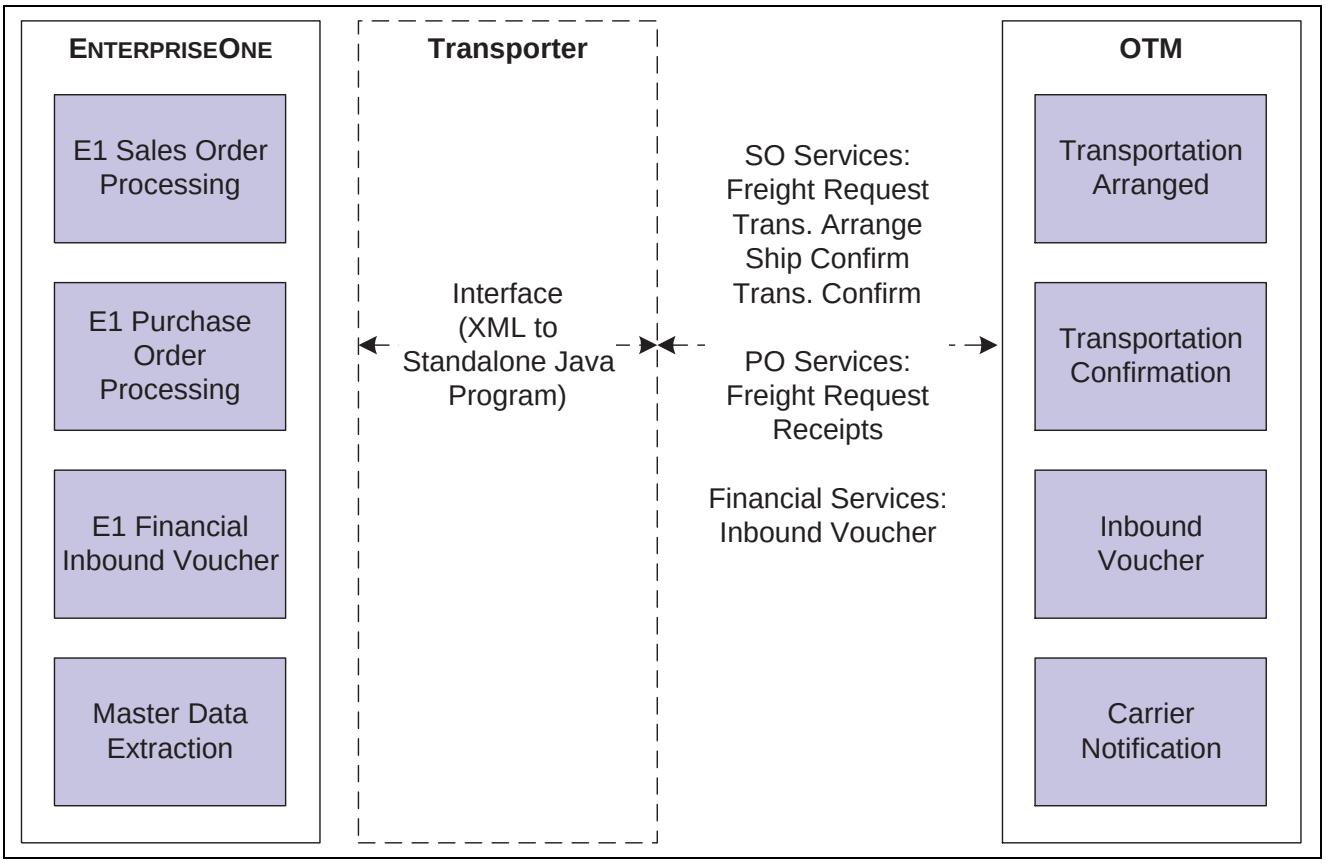
Functional Interface

JD Edwards EnterpriseOne interacts with Oracle Transportation Management in two functional areas:

Functional Area	Description
Sales Order Management	You create sales orders in the JD Edwards EnterpriseOne Sales Order Management system. The JD Edwards EnterpriseOne system sends the sales order information to the Oracle Transportation Management system to arrange transportation for the sold inventory. The Oracle Transportation Management system arranges the transportation and sends the shipment information to the JD Edwards EnterpriseOne Sales Order Management system. The JD Edwards EnterpriseOne system sends the shipment confirmation to Oracle Transportation Management. After accepting the JD Edwards EnterpriseOne shipment confirmation, Oracle Transportation Management executes transportation confirmation back to JD Edwards EnterpriseOne Sales Order Management. It also sends voucher information to the JD Edwards EnterpriseOne Accounts Payable system for payment.
Procurement	You create purchase orders in the JD Edwards EnterpriseOne Procurement system. The JD Edwards EnterpriseOne system sends the purchase order information to the Oracle Transportation Management system to arrange transportation for the purchased inventory. The Oracle Transportation Management system arranges shipment and does all of the planning. It then sends voucher information to the JD Edwards EnterpriseOne Accounts Payable system for payment.

Integrations

This diagram illustrates the four main areas in the integration process:



JD Edwards EnterpriseOne to Oracle Transportation Management Integration

The four main areas for integration are:

- Sales order processing.
- Purchase order processing.
- Financials.
- Master Data Extraction.

The JD Edwards EnterpriseOne system transmits information to and from Oracle Transportation Management via HTTP post. The system transmits the data in XML format based on the Oracle Transportation Management Schema. The Schema name is GLogXML-v2001.xsd and located at URL http://www-apps.us.oracle.com/otm/.

The sales order integration points include:

1. Sales Freight Request.
2. Sales Transportation Arranged.
3. Sales Ship Confirmation.
4. Sales Transportation Confirmation.

The purchase order integration points include:

1. Purchase Order Freight Request.
2. Purchase Order Close/Cancel.

Both sales order and purchase order integrations use the same inbound logic for the Inbound Voucher process. You must set up Java programs. Access the Update Center for instructions.

CHAPTER 2

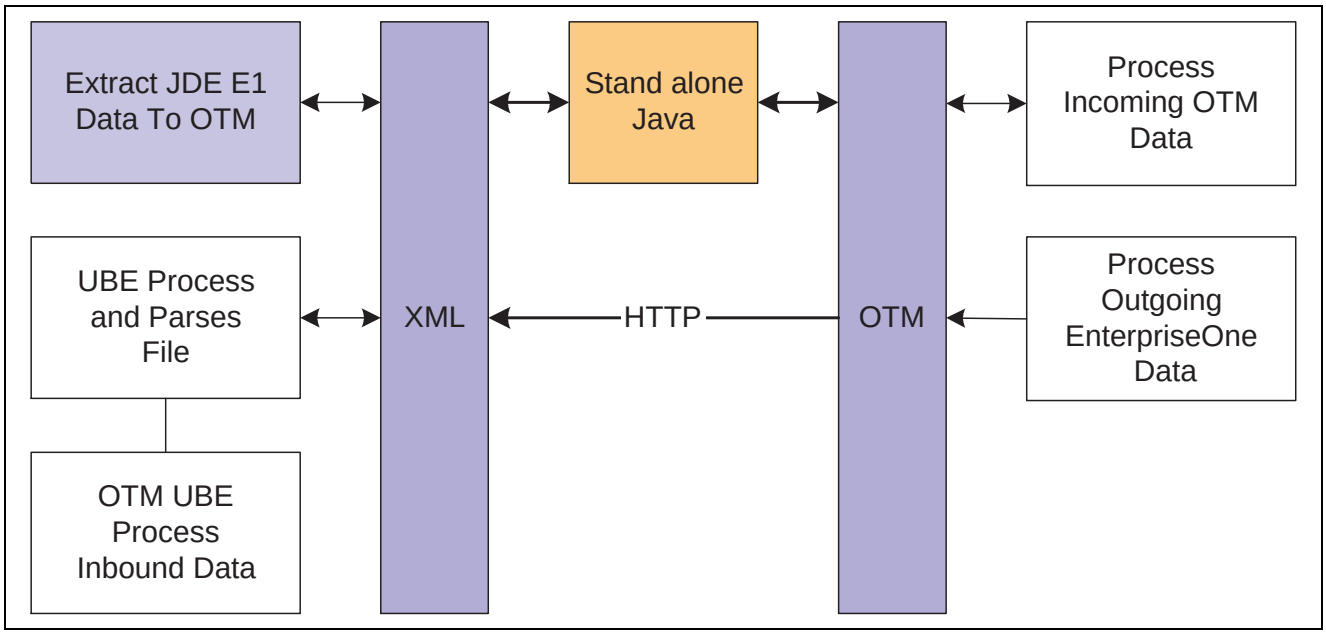
Integrating JD Edwards EnterpriseOne with Oracle Transportation Management

This chapter provides an overview and discusses:

- Activating the JD Edwards EnterpriseOne integration to Oracle Transportation Management.
- Setting up transportation planning integration constants.
- Setting up cross-reference data.
- Setting up shipping document and line type combinations.
- Executing outbound transmissions from JD Edwards EnterpriseOne to Oracle Transportation Management.
- Executing inbound transmissions from Oracle Transportation Management to JD Edwards EnterpriseOne.
- Extracting Master Data.
- Assumptions and requirements of the integration process.

Understanding the JD Edwards EnterpriseOne to Oracle Transportation Management Integration

This diagram illustrates the process flow and technology used to successfully import and export data from JD Edwards EnterpriseOne and Oracle Transportation Management:



JD Edwards EnterpriseOne to Oracle Transportation Management Process Flow and Technology

Initially outbound to the Oracle Transportation Management system, you must run the JD Edwards EnterpriseOne programs to extract data from JD Edwards EnterpriseOne. The JD Edwards EnterpriseOne programs write outbound data to a staging table where the data is read and an XML file is generated. Run the standalone Java program to process the generated XML files to Oracle Transportation Management through a HTTP connection. As for the inbound from Oracle Transportation Management to JD Edwards EnterpriseOne, the Oracle Transportation Management system invokes an HTTP post. The application server that listens for the HTTP post validates and authorizes the inbound message and updates JD Edwards EnterpriseOne transmission F49T90 table. All the inbound batch programs parses the information from the F49T90 table into the JD Edwards EnterpriseOne tables.

Activating the JD Edwards EnterpriseOne Integration to Oracle Transportation Management

This section provides an overview of the JD Edwards EnterpriseOne integration to Oracle Transportation Management activation and discusses how to activate the integration.

Understanding the JD Edwards EnterpriseOne Integration to Oracle Transportation Management

Before you can use the features of the JD Edwards EnterpriseOne integration to Oracle Transportation Management, you must activate it within JD Edwards EnterpriseOne. When you activate the integration, the system creates the links between the JD Edwards EnterpriseOne system and the Oracle Transportation Management system. Specifically, you can now transmit information between the two systems.

Forms Used to Activate the JD Edwards EnterpriseOne Integration to Oracle Transportation Management

Form Name	FormID	Navigation	Usage
Work With EnterpriseOne System Control	W99410A	Setup (G49T41), Activate External Transportation Integration	Access forms to activate external transportation integration.
EnterpriseOne System Control - Revisions	W99410B	Select data item SY49T on the Work With EnterpriseOne System Control form, and click the Select button.	Activate the JD Edwards EnterpriseOne Transportation Integration module.

Setting Up Transportation Planning Integration Constants

This section provides an overview of transportation planning integration constants and discusses how to set up transportation planning integration constants.

Understanding Transportation Planning Integration Constants

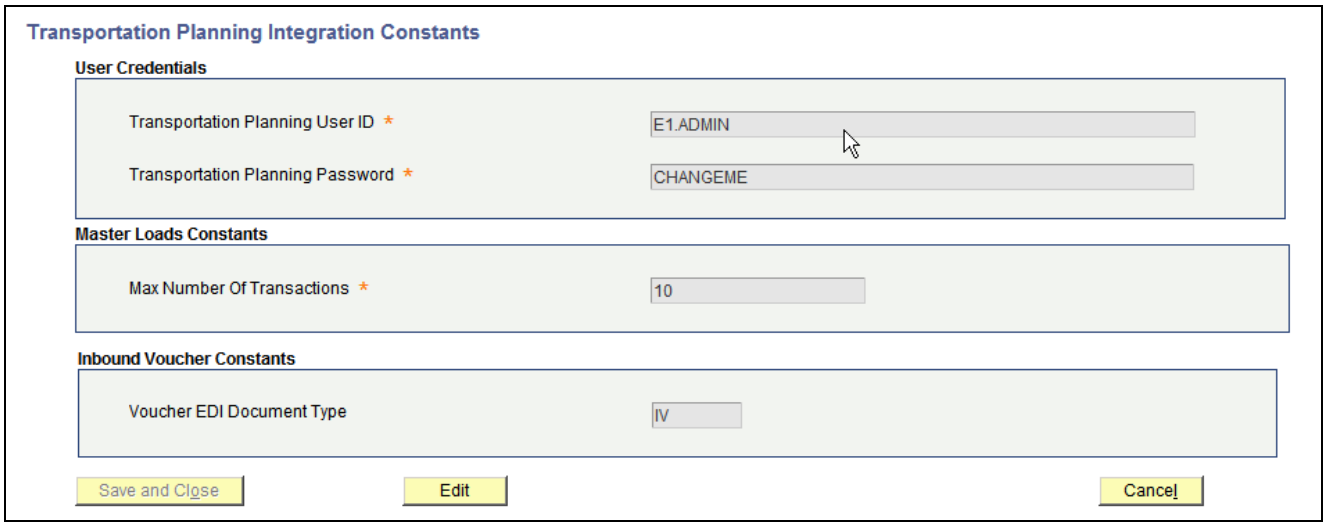
Transportation planning integration constants are data constants that support the JD Edwards EnterpriseOne to Oracle Transportation Management integration. These constants allow communication and transference of other constant information that is needed between both systems.

Form Used to Set Up Transportation Planning Integration Constants

Form Name	FormID	Navigation	Usage
Transportation Planning Integration Constants	W49T00A	Setup (G49T41), Integration Constants	To set up transportation planning integration constants.

Setting Up Transportation Planning Integration Constants

Access the Transportation Planning Integration Constants form.



Transportation Planning Integration Constants form

Transportation Planning User ID Specify the user ID to login to the Transportation Planning system.

Transportation Planning Password Specify the password to use for login to the Transportation Planning system.

Max Number of Transactions Specify the maximum number of transactions per transmission. This is only applicable to the master data and is used for scalability purposes.

Voucher EDI Document Type Specify the user defined code (00/DT) that identifies the origin and purpose of the transaction. The document type is the same as the default value used when creating EDI records for inbound voucher interface.

Note. J.D. Edwards reserves several prefixes for document types, such as vouchers, invoices, receipts, and time sheets.

Setting Up Cross Reference Data

This section provides an overview of cross reference data discusses how to set up cross reference data.

Understanding Cross-Reference Data

Cross-referencing static data between JD Edwards EnterpriseOne and Oracle Transportation Management minimizes manual data configuration in both systems. You use the X-Ref Application (P49T01) program to reduce the number of master data uploads. The cross-referenced static data includes:

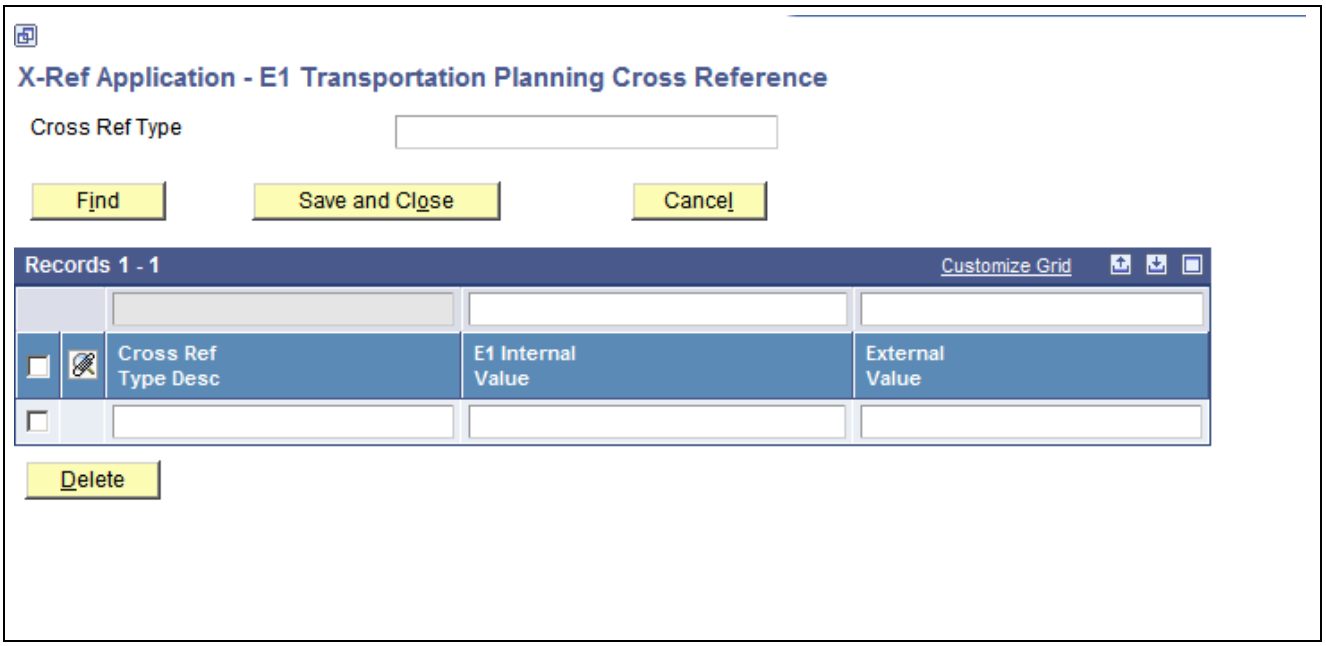
- Country codes.
- Currency codes.
- Units of measure.
- Freight UDC.
- Mode of Transport UDC.

Form Used to Set Up Cross-Reference Data

Form Name	FormID	Navigation	Usage
E1 Transportation Planning Cross Reference	W49T01	Setup (G49T41), X-Ref Application.	To set up cross-reference data.

Setting Up Cross Reference Data

Access the E1 Transportation Planning Cross Reference form.



E1 Transportation Planning Cross Reference form

Cross Ref Type Enter a name for the cross-reference type.

Cross Ref Type Desc The cross reference description is the default value found in UDC table 49/XR.

E1 Internal Value Enter a code that exists in the JD Edwards EnterpriseOne system. This code is for cross reference purposes.

External Value Enter a code which is native to the external system such as Oracle Transportation Management.

Setting Up Shipping Document and Line Type Combinations

This section provides an overview of shipping document and line type combinations.

Understanding Shipping Document and Line Type Combinations

In the JD Edwards EnterpriseOne system you must identify the order type and line type of the order lines that are eligible for processing in Oracle Transportation Management. When you enter a sales order or a purchase order, the system automatically creates an inbound or outbound shipment based on the combination of order type and line type that you define in the UDC table 49/TP, Shipping Document/Line Types. This code is a four-character, alphanumeric code in which the first two characters indicate the order type and the third and fourth characters indicate the line type. The system creates eligible Oracle Transportation Management shipments only for line types on an order that match a value found in the 49/TP UDC table.

Executing Outbound Transmissions from JD Edwards EnterpriseOne to Oracle Transportation Management

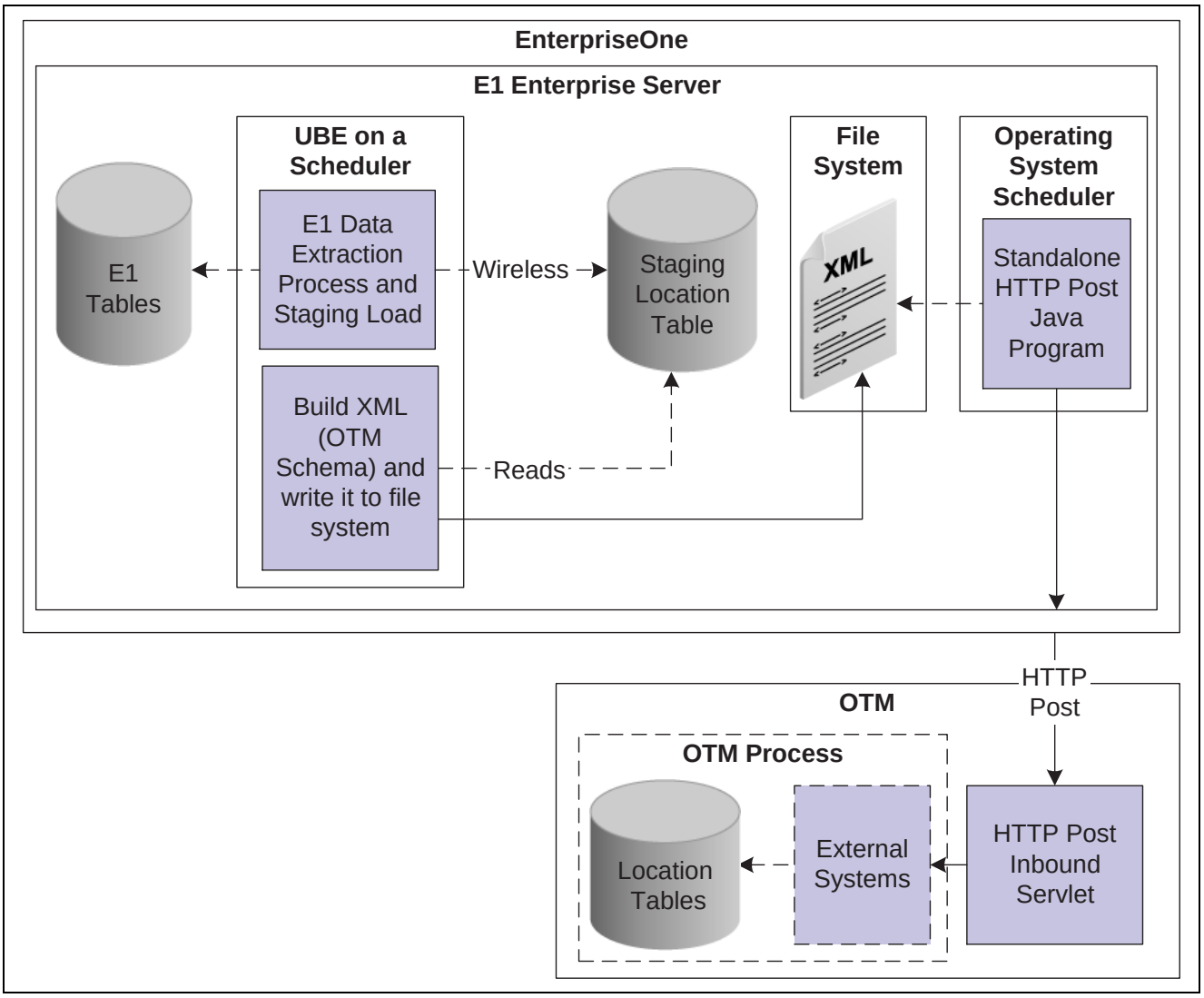
This section provides and overview and discusses the outbound transmissions process.

Understanding Outbound Transmissions from JD Edwards EnterpriseOne to Oracle Transportation Management

All outbound transmissions from JD Edwards EnterpriseOne to Oracle Transportation Management are done using a HTTP Post Java program. This program sends all XML files from a file system to Oracle Transportation Management via HTTP Post.

The Outbound Transmissions Process

This diagram illustrates the outbound transmission process:



JD Edwards EnterpriseOne Outbound Transmissions

These specifications apply:

1. The Java program sends XML formatted files to Oracle Transportation Management via HTTP Post sequentially based upon time.
2. There are no data validations performed against the XML file.
3. Examples of directory structure for outbound transmissions are listed in this table:

Structure Example	Description
c:\otm\sales\freightrequest\ready	These are the files that the system has ready to send to Oracle Transportation Management.
c:\otm\sales\freightrequest\processed	These are the files that the system processed.
c:\otm\sales\freightrequest\errors	These are the files that the system did not process.

Note. All successfully processed files have a Transmissions Acknowledgement XML file received from Oracle Transportation Management. This transmission file is stored in processed directory. This file includes the Oracle Transportation Management transmission ID for cross reference purposes.

4. The program expects an XML configuration file (for example, c:\otm\config.xml) location specified in the Java program. The configuration file contains:
   - Connection information. This connection information includes versions, XML encoding, XML schema URL location and Oracle Transportation Management HTTP post servlet and port.
   - Oracle Transportation Management userid and password. The system does not perform password encryptions.
   - Log file name.
   - Time-out settings.

Executing Inbound Transmissions from Oracle Transportation Management to JD Edwards EnterpriseOne

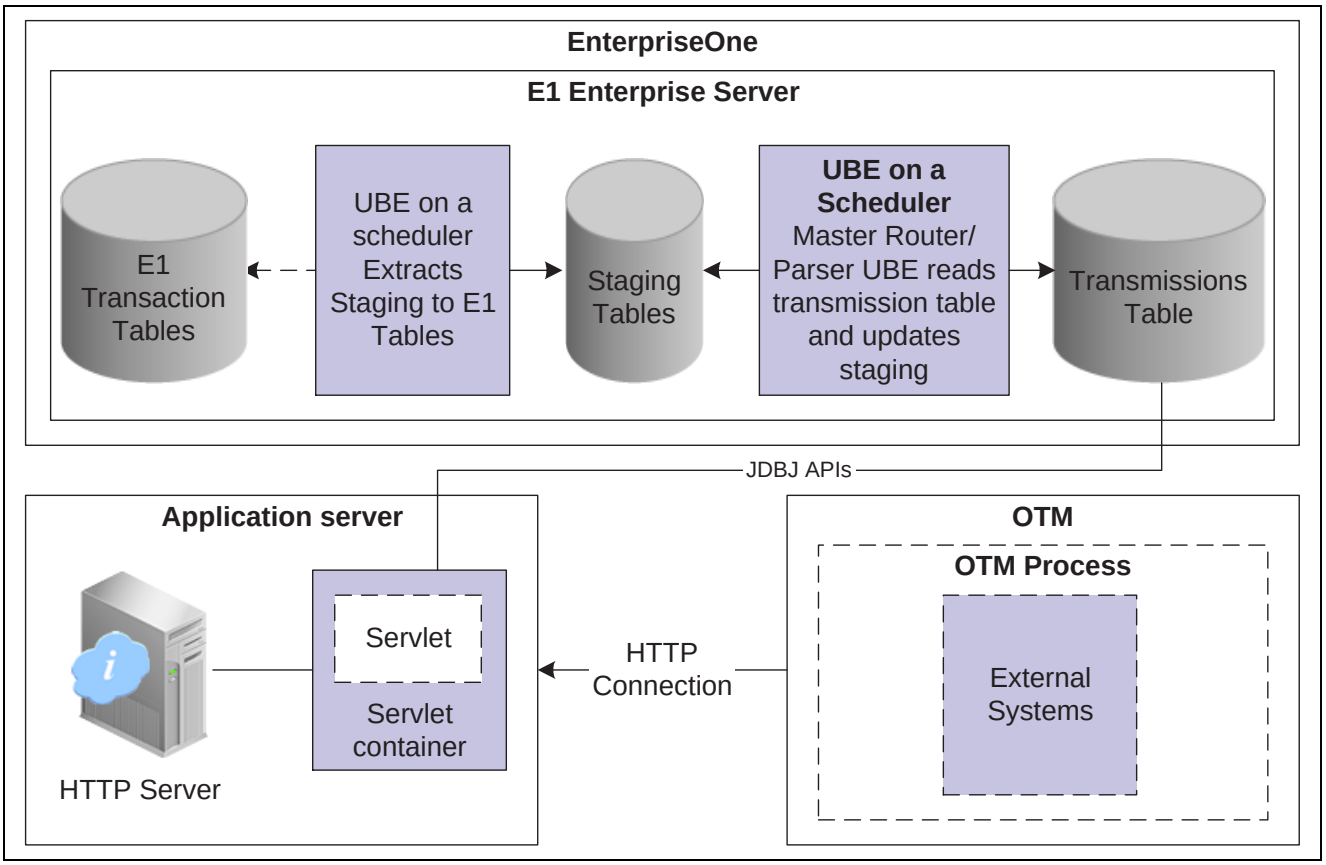
This section provides and overview and discusses the inbound transmissions process.

Understanding Inbound Transmissions from Oracle Transportation Management to JD Edwards EnterpriseOne

Oracle Transportation Management sends XML-formatted data to JD Edwards EnterpriseOne via a HTTP post. The inbound HTTP receive program deployed on an application server listens for this HTTP post, validates it, and updates the JD Edwards EnterpriseOne transmission table (F49T90).

The Inbound Transmissions Process

The following diagram illustrates the JD Edwards EnterpriseOne inbound integration process:



JD Edwards EnterpriseOne Inbound Transmissions

The inbound integration process has three stages:

1. Stage 1: Oracle Transportation Management to Application Server. Oracle Transportation Management uses HTTP Post to send transmissions to JD Edwards EnterpriseOne. The httpReceive servlet receives the HTTP Post and updates the Inbound Transmissions (F49T90) table and sends an acknowledgement to Oracle Transportation Management confirming transmission receipt into JD Edwards EnterpriseOne. The JD Edwards EnterpriseOne system can process only one transaction in a transmission. Therefore, when setting up external systems in Oracle Transportation Management, limit the number of transactions in a transmission to one. The transmission acknowledgement to Oracle Transportation Management (TransAck XML) document is based on GLogXML-v2001.xsd TransAck schema.
2. Stage 2: JD Edwards EnterpriseOne transmission table to JD Edwards EnterpriseOne staging tables. The Inbound Transmissions Master (R49T90) program reads the records in the Inbound Transmission table and processes the records in the order received. The Inbound Transmissions Master program:
    a. Initializes XML DOM Parser and creates a document.
    b. Parses the document, thereby locating the transaction types and calling the appropriate Parser function to process the elements.
    c. Deletes the transmission records from the Inbound Transmissions table after successfully extracting records from the Inbound Transmissions table into the staging tables.

Warning! If parsing a transmission fails, the system updates the error code in the Inbound Transmissions table. You can view and delete the transmissions. The JD Edwards EnterpriseOne system does not process the records again. Either these transmission must be sent again from Oracle Transportation Management if the current state has not changed in JD Edwards EnterpriseOne, or the latest transaction must be sent to JD Edwards EnterpriseOne. If transmissions fail to process into the JD Edwards EnterpriseOne staging table, the system does not communicate the failure to Oracle Transportation Management.

3. Stage 3: JD Edwards EnterpriseOne staging tables to JD Edwards EnterpriseOne transaction tables. After the transmissions are transferred to the staging tables for processing, UBE programs for the integration point processes the records to the JD Edwards EnterpriseOne transaction tables.

   For voucher transmissions, when the Inbound Transmissions Master program successfully processes the records, it calls a version of the Inbound EDI Voucher Edit/Create (R47041). For Transportation Arranged and Transportation Confirmation transmissions, when the Inbound Transmissions Master program successfully processes the transactions it calls a version of both the Sales Transportation Arranged Batch Import (R49T20) program and the Transportation Confirmation Batch Import (R49T40) program.

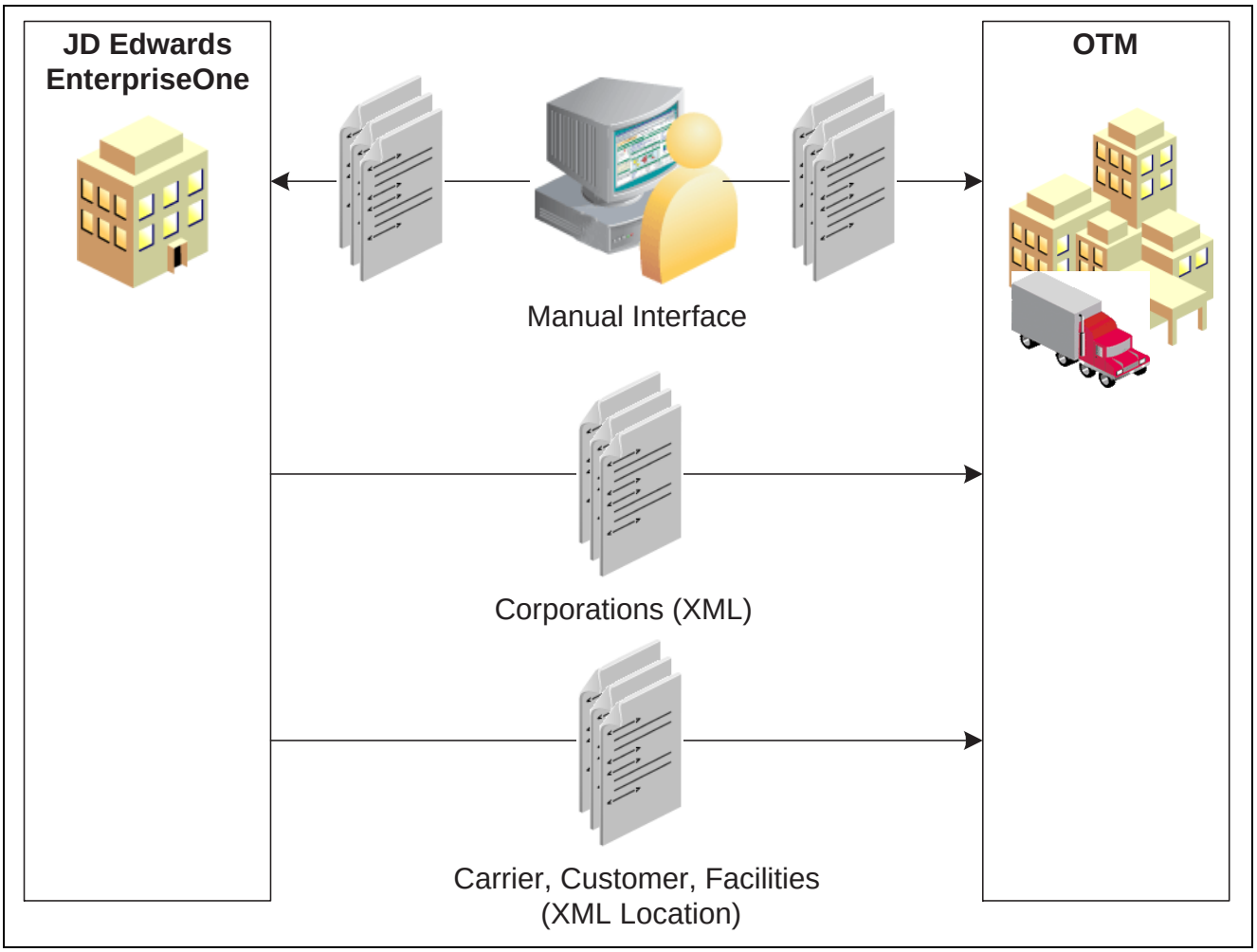
Extracting Master Data

This section provides and overview and discusses

- Running the Corporation Extraction program.
- Setting the processing options for Corporation Extraction (R49T70).
- Running the Locations Extraction program.
- Setting the processing options for Locations Extraction (R49T80).

Understanding Master Data Extraction

The diagram represents an overview of the key reference data and the methods to synchronize between Oracle JD Edwards EnterpriseOne and Oracle Transportation Management:



JD Edwards EnterpriseOne Master Data Extraction

The Master Data requirements:

1. The order in which the Master Data synchronization occurs is as follows:
   a. You run the Corporation Extraction (R49T70) program to transmit corporations or parent address book numbers to Oracle Transportation Management.
   b. You run the Location Extraction (R49T80) program to transmit carrier master, customer master (ship to and sold to), facilities address book, and supplier information to Oracle Transportation Management.

   Note. You create different versions of the Location Extraction program based upon processing options setup. The processing options determine which data the respective version transmits to Oracle Transportation Management.

2. The system can load locations and carrier information as master data.
3. Locations are updated on a transactional basis.
4. Items are created at the time of transaction with the order interface.

Running the Corporation Extraction Program.

Select Periodic Processing (G49T20), Corporations Upload

Setting the Processing Options for Corporation Extraction (R49T70).

Processing options enable you to specify the default processing for programs and reports.

Domain

Transportation Planning Domain Designate the domain in which you want to conduct transportation planning.

Generate XML Files Specify whether to generate XML files.

Blank: Do not generate XML files.

1: Generate XML files.

XML Directory Path Designate a directory path for XML files. A path is require if you set the Generate XML Files option to *1*. The maximum length is 255 characters.

Note. Make sure the path ends with a valid slash for the environment.

Running the Locations Extraction Program.

Select Periodic Processing (G49T20), Carrier Upload

Select Periodic Processing (G49T20), Supplier Upload

Select Periodic Processing (G49T20), Customers Upload

Select Periodic Processing (G49T20), Facilities Upload

Setting the Processing Options for Locations Extraction (R49T80).

Processing options enable you to specify the default processing for programs and reports.

Process

Transportation Planning Domain Designate the domain in which you want to conduct transportation planning.

Search Type Specify the type of address book record to search for. Examples include:

*C:*Customers.

*TC:*Transportation Carriers.

*V:*Vendors.

Generate XML Files Specify whether to generate XML files.

Blank: Do not generate XML files.

1: Generate XML files.

XML Directory Path Designate a directory path for XML files. A path is require if you set the Generate XML Files option to *1*. The maximum length is 255 characters.

Note. Make sure the path ends with a valid slash for the environment.

Assumptions and Requirements of the Integration Process

This section discusses assumptions and requirements of the integration process:

Setup Requirements

These actions are required:

- Set up parent address book data for address book numbers in JD Edwards EnterpriseOne.
- Set up calendars in Oracle Transportation Management. The calendars can mirror JD Edwards EnterpriseOne workday calendars per the sales and purchase order calendar setup.
- Set up currency code exchange rates manually in both Oracle Transportation Management and JD Edwards EnterpriseOne.

Item Preference for Options and Equipment

The JD Edwards EnterpriseOne system cannot transmit options and equipment information at the time of Freight Request. You must set up options and equipment information in the Oracle Transportation Management system and apply to applicable transaction with the Oracle Transportation Management system.

Taxes

Oracle Transportation Management calculates taxes based on source and destination. Thus, if a shipment is taxable, the Oracle Transportation Management system uses all of the costs associated with the shipment to calculate the taxes. You can use the Oracle Transportation Management system to calculate both provincial tax and VAT taxes.

Sales Integration

No purge mechanism is provided for the Sales Order Detail Oracle Transportation Management Tag Table (F49T211).

Freight Charges

Manually apply shipment level accessorial charges to shipments in the Oracle Transportation Management system prior to shipment confirmation. The Oracle Transportation Management system returns the accessorial charges to JD Edwards EnterpriseOne as an addition to the estimated freight charges. You must apply any additional charges prior to Transportation Confirmation.

This integration consolidates freight charges (base plus any accessorial and miscellaneous charges). You must access Oracle Transportation Management to view itemized charges for both billable and payable freight charges.

Packing

If the customer is using JD Edwards EnterpriseOne Warehouse Management, this integration does not support any functionality derived from the Carton Detail Information table (F4620). Such functionality includes EPC number generation, carton reorganization, standard pack, and so on.

Time Zones

Time zones are inferred in this integration. The JD Edwards EnterpriseOne system converts the date and time information received from the Oracle Transportation Management system to the equivalent JD Edwards EnterpriseOne date and time.

See Sales Transportation Arranged Assumptions

XML Transmissions

Transactions from Oracle Transportation Management to JD Edwards EnterpriseOne consist of one transaction per transmission. If a transaction within the transmission fails, the entire transmission fails, invoking exit course of actions such as roll back, log errors, and so on. You then have to send the transmission again if needed.

Oracle Transportation Management Domains

This integration handles transmissions from multiple domains by enabling you to set the domain in the extraction UBE.

CHAPTER 3

Integrating JD Edwards EnterpriseOne Sales Order Management with Oracle Transportation Management

This chapter provides an overview and discusses these integration points:

- Sales Freight Request.
- Sales Transportation Arranged.
- Sales Order Confirmation.
- Sales Transportation Confirmation.

Understanding Integrating JD Edwards EnterpriseOne Sales Order Management with Oracle Transportation Management

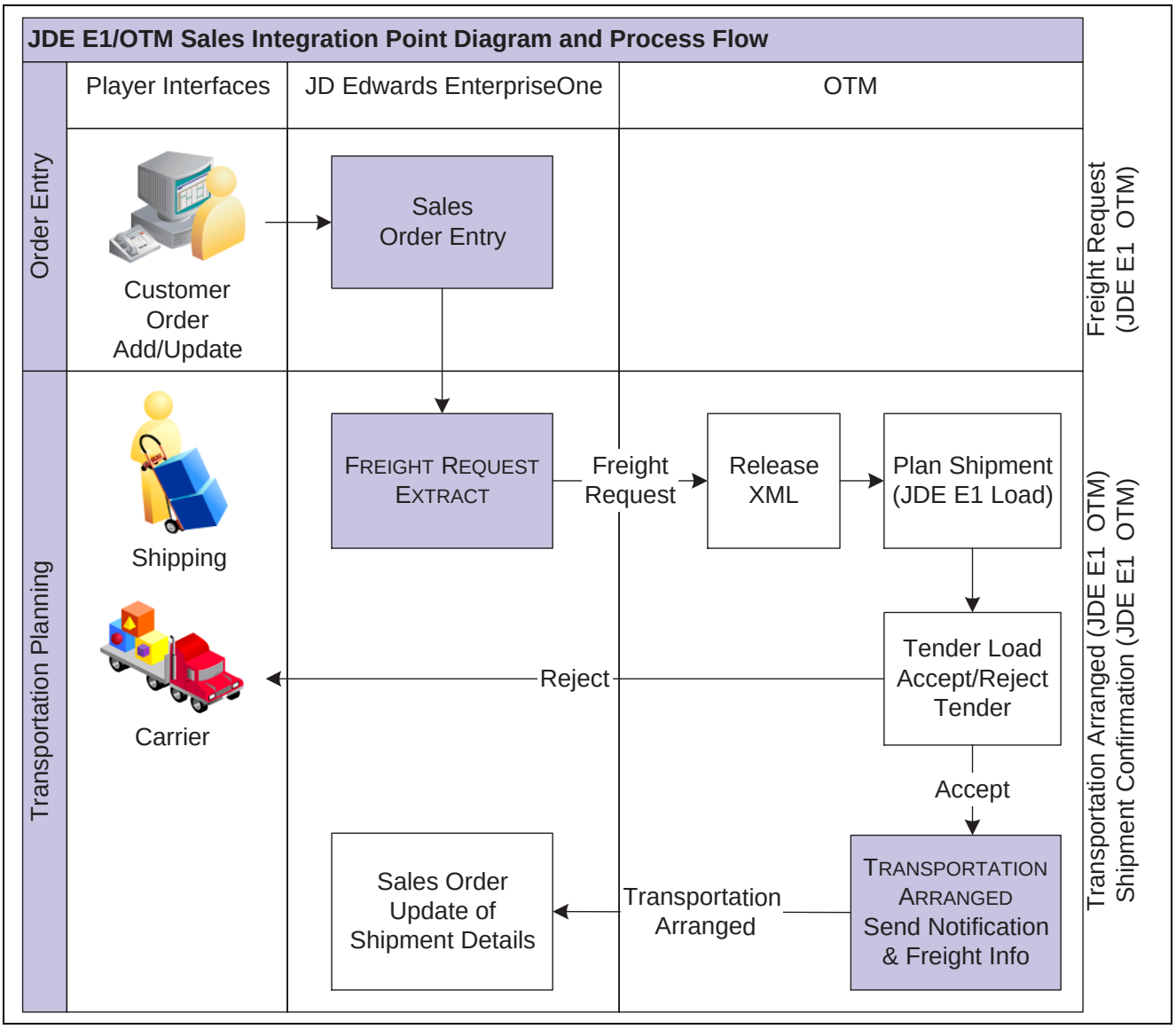
The Oracle Transportation Management system delivers robust transportation planning and execution capabilities for manufacturers, retailers, distributors, and third-party logistics providers. The JD Edwards EnterpriseOne Sales Order Management system communicates with the Oracle Transportation Management through these integration points:

Integration Point	Description
Sales Freight Request	1. You enter and update the sales orders. 2. The JD Edwards EnterpriseOne system extracts the data and places it in an XML request file and sends it to Oracle Transportation Management. 3. The Oracle Transportation Management system creates shipments and plans loads.
Sales Transportation Arranged	1. After creating shipments and planning loads, the Oracle Transportation Management system extracts the data and places it in XML-formatted data and sends it to the JD Edwards EnterpriseOne system. 2. The JD Edwards EnterpriseOne system parses the XML formatted data, stages the data and imports the Oracle Transportation Management shipment ID, dates, carriers, and modes of transport. Additionally, the JD Edwards EnterpriseOne system assigns a shipment number.

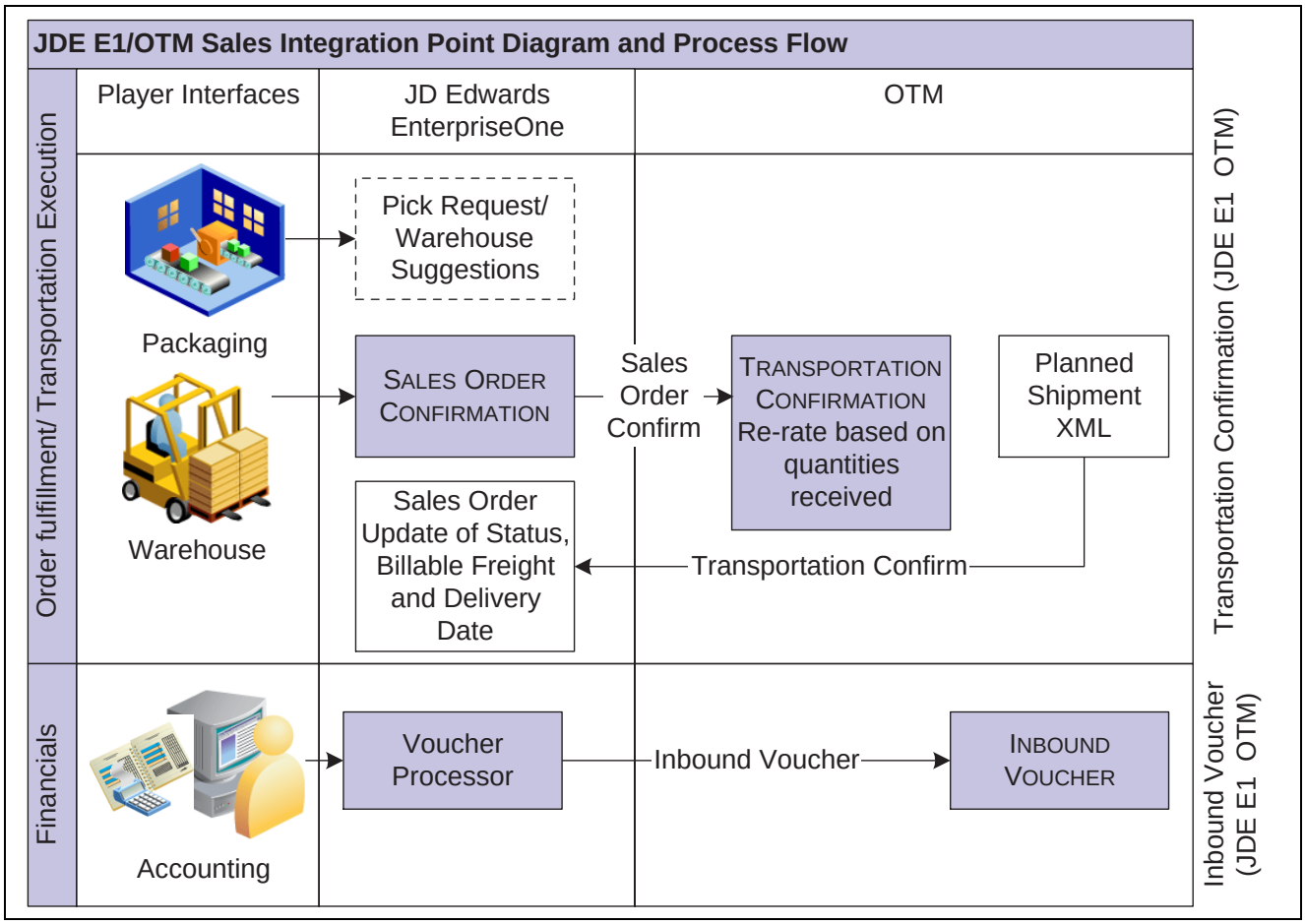
Integration Point	Description
Sales Order Confirmation	1. You confirm the sales order in the JD Edwards EnterpriseOne Sales Order Management system. 2. The JD Edwards EnterpriseOne system extracts the confirmed sales order data, creates an updated XML request and shipment file, and sends the information to the Oracle Transportation Management system for transportation confirmation.
Sales Transportation Confirmation	1. The Oracle Transportation Management system re-rates shipments based upon the updated shipment and request information. 2. The Oracle Transportation Management system extracts the re-rated data, places it in XML-formatted data, and sends this information to the JD Edwards Sales Order Management system. 3. The JD Edwards EnterpriseOne system parses the XML formatted data, stages the data, imports the billable freight charges and latest optionally promised delivery date, and updates the sales order status.

Sales Integration Process Flow

The sales integration process flow is represented by the following diagrams:



JD Edwards EnterpriseOne Sales Integration to Oracle Transportation Management (1 of 2)



JD Edwards EnterpriseOne Sales Integration to Oracle Transportation Management (2 of 2)

Oracle Transportation Management Eligibility and Filter Criteria

This section discusses eligibility and filter criteria for:

- Sales order types.
- Sales order lines.
- Document type and line type combinations.
- Items.

Sales Order Types

The JD Edwards EnterpriseOne sales order types that are *eligible* for processing with Oracle Transportation Management include:

- Sales orders.
- Credit orders.
- Direct ship orders.
- Transfer orders.
- Intercompany orders.
- Interbranch orders.

- Manually sequenced orders.

Note. For direct ship orders and transfer orders, it is a good practice to include only one order type in UDC table 49/TP. For example, enter sales transfer order type or procurement direct ship order type but not both. If you include both order types you will get two freight requests and two shipments for the same transportation movement of goods.

The JD Edwards EnterpriseOne sales order types that are *ineligible* for processing with Oracle Transportation Management include:

- Blanket orders.
- Store and forward orders.
- Recurring template orders.
- Held orders.
- Orders that originate from JD Edwards EnterpriseOne Demand Scheduling Execution.

Sales Order Lines

You determine JD Edwards EnterpriseOne sales order lines as eligible for processing within Oracle Transportation Management by entering the document type and line type combination into the user-defined code (UDC) table 49/TP.

The sales order lines that are *eligible* for processing within Oracle Transportation Management include:

- New order lines on sales orders without processed freight-request order lines.
- New order lines on sales orders with processed freight-request order lines.
- Updated transportation-critical fields order lines
- Canceled order lines that Oracle Transportation Management received prior to cancellation.
- Orders in which the order-line requested dates fall within a specified date and time period as designated by the Sales Freight Request processing options.

The sales order lines that are *ineligible* for processing within Oracle Transportation Management include:

- Held order lines.
- Canceled order lines.

Note. When orders lines are placed on hold or canceled after freight request, JD Edwards EnterpriseOne Sales Order Management system flags the canceled or held order lines. At freight request, the JD Edwards EnterpriseOne system notifies the Oracle Transportation Management system to delete the corresponding order release line.

Items

Stock items, non stock items, and kit items are *eligible* for processing within Oracle Transportation Management. The JD Edwards EnterpriseOne system sends kit items to Oracle Transportation Management as parent items. Regarding configured items, the system sends the parent item to Oracle Transportation Management.

Bulk items are *ineligible* for processing within Oracle Transportation Management.

Sales Freight Request

This section provides an overview of Sales Freight Request and discusses:

- Sales Freight Request prerequisites.
- Sales Freight Request process flow.
- Sales Freight Request data processing.
- Running the Sales Freight Request Export program.
- Setting processing options for Sales Freight Request Export (R49T10).

Understanding Sales Freight Request

The Sales Freight Request process enables the JD Edwards EnterpriseOne system to extract eligible sales order lines and place them in a new freight request staging table, enabling XML request for transportation planning to Oracle Transportation Management. This occurs after sales orders have been added, updated, or canceled manually (or using EDI) within the JD Edwards EnterpriseOne Sales Order Management system when you run the Sales Freight Request Export (R49T10) program on a scheduler or standalone.

Prerequisites

These prerequisites apply for Sales Freight Request. You must:

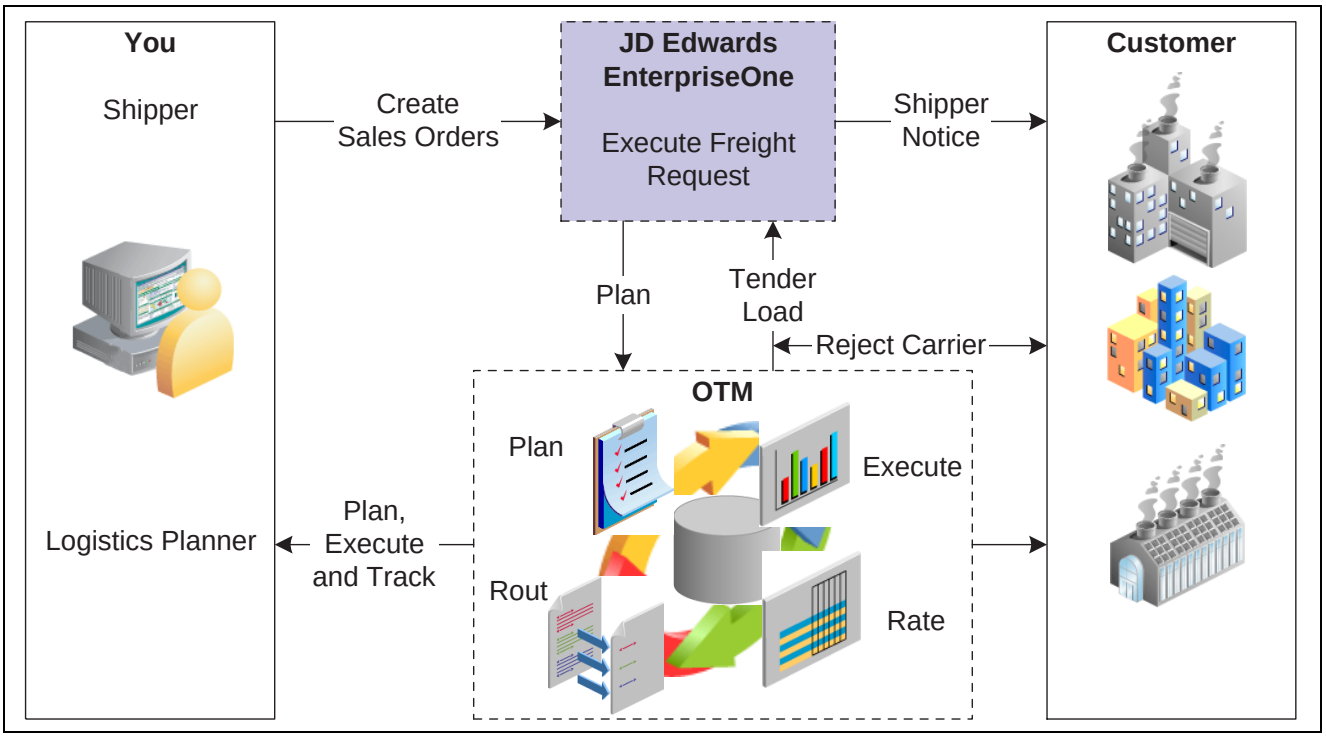
1. Set up the parent address book data for all customers that the JD Edwards EnterpriseOne Sales Order Management system sends to Oracle Transportation Management.
2. Ensure that calendars in the JD Edwards EnterpriseOne system are set up such that they mirror the calendar setup in the Oracle Transportation Management system. This setup is based on the ship to and ship from combinations.

   Note. This is optional and only required if the Oracle Transportation Management calendaring system is preferred.

3. Set up the base weight and volume unit of measure conversions for all items.
4. Define the sales order document type and line type combinations in UDC table 49/TP.

Sales Freight Request Process Flow

The following diagram depicts the process flow for the JD Edwards EnterpriseOne to Oracle Transportation Management Sales Freight Request integration point:



Sales Freight Request Process Flow

The process is threefold:

1. The system filters sales order header and detail data. This includes sales order document types, line types, item types, date and time, and a new integration state indicating the state of the order line within the integration process.
2. Data processing. This includes the retrieval of required data to be mapped to Oracle Transportation Management data, evaluation of customer sets to determine ship-to, override address consideration, date/time evaluation, shipping unit of measure processing, and credit order processing.
3. The system updates order release, item, and location information to three staging tables: the Order Release Staging table (F49T10), the Item Staging table (F49T11), and the Order Release Locations Staging table (F49T50). The system also updates each sales order line successfully staged for transmittal to the Oracle Transportation Management system to a state flag value of *FR* in the Sales Order Detail Secondary Tag table (F49T211). After writing all records to the staging tables, the system creates the Oracle Transportation Management item and order release XML files to be placed on the configured file system. After successfully creating the XML files, the system deletes the records from all the staging tables for the processed Oracle Transportation Management shipments. The HTTP Post Java program, which runs on the native operating system scheduler, picks up the XML files and sends them to the Oracle Transportation Management system.

Sales Freight Request Data Processing

This section discusses data mapping clarifications and data processing:

Data Mapping Clarifications

The JD Edwards EnterpriseOne system transmits data to Oracle Transportation Management at the transactional level, which is freight request execution. This data is not provided as initial master data and includes:

Data	Description
Item Master Data	Oracle Transportation Management receives item, packaged item and description.
Address Book Data	The JD Edwards EnterpriseOne system overrides address book information based upon the override order address information (F4006) or address book effective date (F0116) and sends it to Oracle Transportation Management. The system determines the ship-to address book based on customer sets and sends it to Oracle Transportation Management.
Carrier Data	Carrier setup is required in the Address Book Master. Oracle Transportation Management determines the SCAC code and sends this information back to the JD Edwards EnterpriseOne system during transportation arranged.

Data Processing

Data processing occurs in these functional areas:

Functional Area	Comments
Origin (ship from) Address Book Determination	The origin (ship from) address book number is derived from the sales order detail business unit (MCU) value.
Customer Sets	Sales order customer sets are processed in such a way that the JD Edwards EnterpriseOne system sends either the ship-to or deliver-to address book number designated as the ship-to per customer setup for the sold-to ship-to combination on the sales order.
Override Addresses	If the JD Edwards EnterpriseOne system has designated an override ship-to or deliver-to address in the Order Address Information table (F4006), then the system sends the override address information to the Oracle Transportation Management system. The system also takes the valid address book information from the Address by Date table (F0116) and stages it for transport to the Oracle Transportation Management system.
Bypassing Order Lines	The JD Edwards EnterpriseOne system performs bypass processing of order lines with line types that are not eligible to process using the Oracle Transportation Management system or are defined as text. Accordingly, the system does not assign a shipment number to the order line. However, consideration is required for these order lines at a sales order confirmation such that the order line is assigned a shipment number facilitating its relationship to the other lines on the order.
Date and Time	To qualify for processing, the JD Edwards EnterpriseOne request date on the sales order line must fall within a specified Oracle Transportation Management date and time window that is designated in the Sales Freight Request processing options. The sales order line also qualifies for processing if the request date is changed to a date and time that falls outside the parameters of the Oracle Transportation Management date and time window and the Oracle Transportation Management system state flag indicates a previously freight-request processed order line.

Functional Area	Comments
Shipping Information	The JD Edwards EnterpriseOne system assumes standard unit of measure conversions for volume and weight on each order line. The JD Edwards EnterpriseOne system sends this information to the Oracle Transportation Management system. If extended weight and volume are missing, the system will bypass processing the record and send an error message to the work center. The JD Edwards EnterpriseOne system concatenates the item with the transaction unit of measure and branch/plant to enable a package item designation in Oracle Transportation Management and sends this information to Oracle Transportation Management.
Currency Code	Oracle Transportation Management calculates billable freight charges based on the carrier's currency code, and JD Edwards EnterpriseOne calculates currency code conversions when necessary from the carrier currency code to the customer's transactional currency code for the billable freight returned at the Transportation Confirmation integration point.
Order Release and Ship Units	At the initial freight request extraction of a sales order line, the JD Edwards EnterpriseOne system creates an Oracle Transportation Management order release ID and order release line ID by concatenating the JD Edwards EnterpriseOne sales order key and sales order line key respectively. The system stores the order release ID and order release line ID in the Sales Order Detail Secondary Tag Table (F49T211). The system also assigns the order release line ID value to the Oracle Transportation Management ship unit and stores its value in the tag table. A JD Edwards EnterpriseOne sales order may contain one or more order releases and each order release has unique transportation critical field values. Also, each new order release assigned within the sales order is created with the concatenation of a next number to the sales order key.
Credit Order	Credit order quantities are reversed upon extraction and consolidation.
Report Output/Error	Each system, JD Edwards EnterpriseOne and Oracle Transportation Management, is the source by which to review errors generated from each system. Errors from the respective systems are not sent to or received by the other system. If the Oracle Transportation Management transmission report reflects that the data received from JD Edwards EnterpriseOne could not be processed, you must make corrections in the JD Edwards EnterpriseOne system and resubmit the data. The sales order lines are not extracted when errors are detected during processing. The freight request process ensures that Oracle Transportation Management-required values are supplied. The system sends an error message to the work center if any values are missing. Upon failure of the freight request process, the system publishes a work center message that identifies the order line key from which the error originated along with the errors responsible for the failure. This report displays: • Keys of the failed lines. • A count of successfully processed lines. • The message *(0) records processed* if none of the selected lines were eligible for processing. • The message *No Data Selected* if the data selection fails.

Running the Sales Freight Request Export Program

Select Sales Order Processing (G49T11), Freight Request.

Setting Processing Options for Sales Freight Request Export (R49T10)

Processing options enable you to specify the default processing for programs and reports.

Process

1. Transportation Planning Date Range Factor	Indicate the number of days the that system looks forward from the date of sales freight request execution. The system uses this number to determine the latest requested date that the system exports.
2. Freight Request XML Directory Path	Indicate the path to the location where the release XML document is stored when the system executes Sales Freight Request.
3. Generate XML files	Specify whether to generate XML documents. Values are: *Blank:* Do not generate XML files. *1:* Generate XML files.

Domains

1. Transportation Planning Domain	Designate the domain in which transportation planning is planned. **Note.** A domain is a unique name that typically identifies a company. The purpose of a domain is to allow you to keep company data separate and secure from other company data in a shared, web-based environment.
2. Location Domain	Designate the domain in which transportation planning *locations* are stored.
3. Item Domain	Designate the domain in which *items* are stored.

Sales Transportation Arranged

This section provides an overview of Sales Transportation Arranged and discusses:

- Sales Transportation Arranged assumptions.
- Sales Transportation Arranged process flow.
- Sales Transportation Arranged data processing.

Understanding Sales Transportation Arranged

Sales transportation arranged is an inbound process wherein the Oracle Transportation Management system returns transportation arranged data to staging tables within the JD Edwards EnterpriseOne system. The Sales Transportation Arranged Import program (R49T20) extracts the data from the staging tables and updates the corresponding sales order lines within JD Edwards EnterpriseOne Sales Order Management.

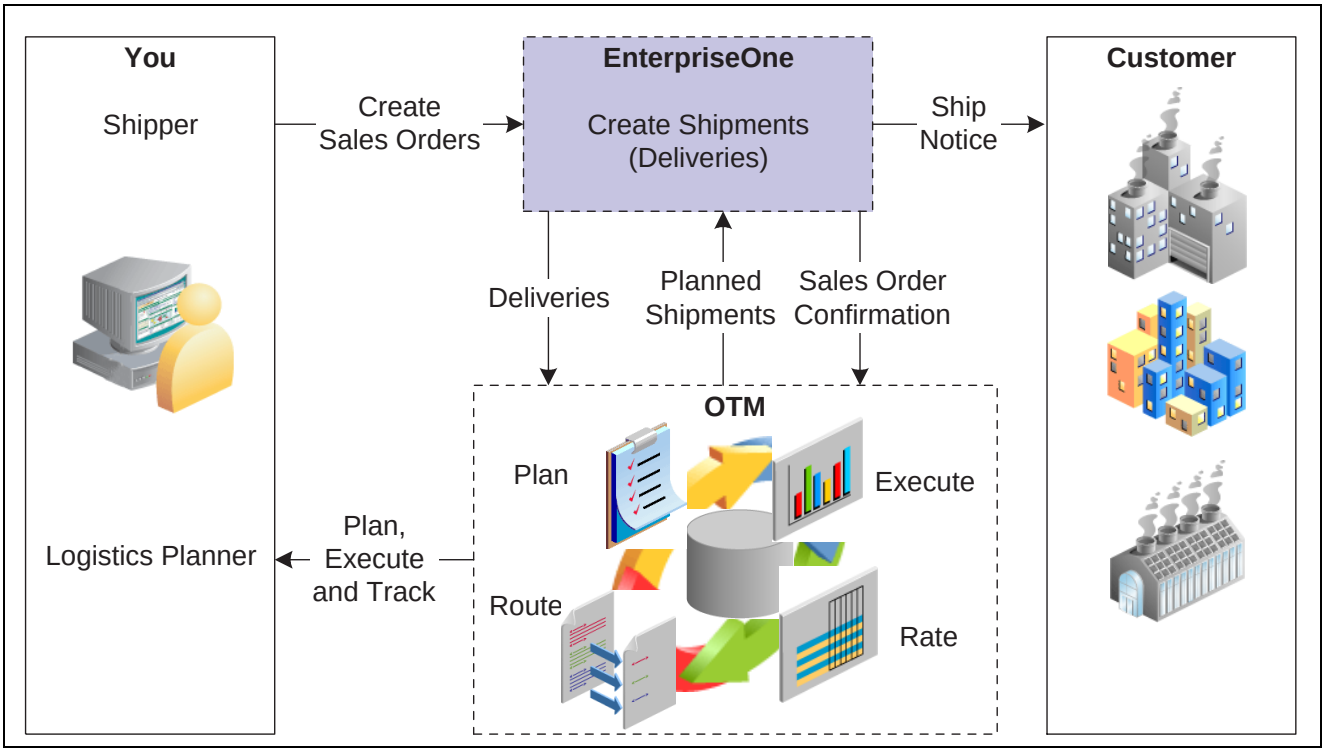
Sales Transportation Arranged Assumptions

These assumptions apply to the function of Sales Transportation Arranged:

1. Sales order entry time zones are based on the assumption that the sales order promised shipment date and time are associated with the origin location's time zone, and the requested and promised delivery date and time are associated with the customer's ship to location.
2. Order changes are made within JD Edwards EnterpriseOne Sales Order Management and any changes originating in Oracle Transportation Management may create data integrity issues.
3. The freight handling code is required in the sales order header for billable freight-charge availability work center processing.

Sales Transportation Arranged Process Flow

The following diagram depicts the process flow for the JD Edwards EnterpriseOne to Oracle Transportation Management Sales Transportation Arranged integration point:



Sales Transportation Arranged Process Flow

Sales Transportation Arranged Data Processing

Upon execution, the Sales Transportation Arranged Import (R49T20) program runs within a scheduler or standalone system and uses the Oracle Transportation Management shipment ID parsed into the staging table to determine whether the JD Edwards Enterprise One sales order detail record has received arranged transportation data from Oracle Transportation Management. Each staging record is processed in the following way:

Split Order Lines

In some instances, Oracle Transportation Management may split the order line over multiple shipments. The JD Edwards EnterpriseOne Sales Order Management system compares the extracted quantity-shipped value to the sales order line shipped quantity. A discrepancy indicates that the Oracle Transportation Management system split the order line. As a result, the JD Edwards EnterpriseOne Sales Order Management system splits the order line and updates shipment information.

The JD Edwards EnterpriseOne system evaluates the order release and ship unit value of an extracted staging record that has a quantity discrepancy to determine the order to which the split shipment applies. The system splits order lines until the entire order line quantity has been reached. The JD Edwards EnterpriseOne Sales Order Management system creates split lines with the Oracle Transportation Management state flag set to value *FR* to prevent a sales freight requests for the new split lines. The JD Edwards EnterpriseOne system does not notify Oracle Transportation Management about the split lines. The system maintains the order release line ID across split sales order lines.

Whenever a net change of transportation-critical fields occurs on the original or any of the split lines, the JD Edwards EnterpriseOne Sales Order Management system retransmits the aggregation of the original and split line quantities, weight, and volume to Oracle Transportation Management for subsequent modification of the previously arranged transportation. JD Edwards EnterpriseOne Sales Order Management reevaluates the updated arranged transportation shipment information to update the original and any related split order lines.

Oracle Transportation Management Shipment ID Storage

The first-leg Oracle Transportation Management shipment ID and ship unit ID are stored in the Sales Order Detail File - Secondary Tag table (F49T211).

JD Edwards EnterpriseOne Shipment Number Derivation

The JD Edwards EnterpriseOne shipment number for a sales order line that has been placed on an Oracle Transportation Management planned shipment is derived by using a unique next number. All sales order lines with the same Oracle Transportation Management shipment ID, origin, and destination are assigned to the same JD Edwards EnterpriseOne shipment number in the Sales Order Detail table (F4211).

Time Zones and Shipment Date/Time Evaluation

Date and time fields within the Sales Order Entry application (P4210) are not universal date and time fields. Instead, the time zone is implied based on the location associated with the date. Hence, the Oracle Transportation Management system:

- Calculates the promised *shipment* date and time based on the time zone of the origin location, which is determined by the detail branch plant.
- Calculates the promised *delivery* date based on the time zone of the customer's ship to location. The promised delivery date is subsequently transmitted from Oracle Transportation Management and staged in JD Edwards EnterpriseOne as Oracle Transportation Management plans shipments.

Estimated Billable Freight Charges

Oracle Transportation Management sell-side shipment configuration is required for billable freight charges. You must have access to Oracle Transportation Management to inquire on estimated billable freight charges. The Sales Transportation Arranged Import program detects billable freight charges from a sell-side shipment. If the freight handling/special handling code of the sales order indicates billable freight and no sell-side billable freight charge exists, the Sales Transportation Arranged Import program sends a corresponding warning to the work center.

Sales Order Line Update

For all sales order lines that are received from Oracle Transportation Management, the JD Edwards EnterpriseOne Sales Order Management system updates these fields:

- Shipment Number.
- Scheduled Pick Date.
- Scheduled Pick Time.

- Promised Ship Date.
- Promised Ship Time.
- Promised Delivery Date.
- Promised Delivery Time.
- Carrier.
- Mode of Transport.

The system updates carrier and mode of transportation to generate an advanced ship notice (ASN). The system also imports the SCAC and the imported shipment's equipment ID for subsequent use during the Sales Order Confirmation integration point.

Net Change Processing

Order-centric data changes within the JD Edwards EnterpriseOne system result in propagation of the data changes to the associated shipments and the system receives subsequent shipment messages from Oracle Transportation Management. The Sales Transportation Arranged Import program detects order quantity changes that originate in Oracle Transportation Management. As a result, the system prevents updates to sales orders and issues an error message to the work center for the sales order line, indicating a change in quantity from Oracle Transportation Management on the incoming transportation plan.

Oracle Transportation Management notifies JD Edwards EnterpriseOne of any shipments that have been deleted from Oracle Transportation Management. The Sales Transportation Arranged Import program deletes the Oracle Transportation Management shipment ID and JD Edwards EnterpriseOne shipment number on all order lines that are associated with the deleted shipment. It then resets the Oracle Transportation Management state flag to *FR* (freight request) to indicate that order lines have not received a transportation arrangement. Similarly, if an order release is unassigned from a shipment, Oracle Transportation Management communicates the change to JD Edwards EnterpriseOne and stages the information for transportation arrangement processing. The results of route-centric data changes in Oracle Transportation Management are unassigned order releases and deleted shipments.

Report Output and Error Processing

These points apply to report output and error processing:

- If any errors are detected within the processing described previously, the system does not update the sales order line. If the system does not update a sales order line based on data integrity processing, it sends an error message to the work center. Additionally, the report output displays keys of the failed lines.
- The system publishes a work center message with the errors that are responsible for the failure that occurs during the transportation-arranged process.
- The report output displays the count of successfully processed lines. If none of the selected lines were eligible for processing, the report output displays the message *(0) records processed.*
- If the data selection fails, the report output displays the message *No Data Selected.*

Running the Sales Transportation Arranged Program

Select Sales Order Processing (G49T11), Transportation Arranged.

Setting Processing Options for Sales Transportation Arranged (R49T20)

Processing options enable you to specify the default processing for programs and reports

Warehouse

1. Request Processing Mode

Specify whether the system creates a pick request in the Warehouse Management system. If you use Warehouse Management, the system generates a pick request and processes the request through the subsystem. A pick request is used to process a suggestion to pick the inventory for an order from a particular location. Values are:

Blank: The system does not generate pick requests.

1: The system generates requests only.

2: The system generates requests and creates the pick request through the subsystem

2. Subsystem Process Pick Request Version

Specify whether the system generates warehouse management pick requests through the subsystem. You must specify which version of Process Pick Request (R46171) that is set up for subsystem processing. A blank value indicates that the system uses version XJDE0007.

3. Warehouse Override Next Status

Enter the override next status from UDC 40/AT. The system uses the override next status for the sales order detail lines for which requests are generated.

4. Preference Processing Version

Determine which version of the Preference Profiles program (P42520) the system uses to process orders based on preferences that are activated on the Preference Selection form. If you leave this processing option blank, the system uses version ZJDE0001.

Sales Order Confirmation

This section provides and overview of Sales Order Confirmation and discusses:

- Sales order confirmation assumptions.
- Sales order confirmation process flow.
- Sales order confirmation data processing.
- Running the Sales Order Confirmation Export program.
- Setting processing options for Sales Confirmation Export (R49T30).

Understanding Sales Order Confirmation

Sales Order Confirmation is an outbound process within the JD Edwards EnterpriseOne system. The Sales Order Confirmation process enables the JD Edwards EnterpriseOne system to send updated order and actual shipment information to Oracle Transportation Management; enabling an Actual Shipment XML transmissions to Oracle Transportation Management. This occurs when sales orders have been confirmed interactively or in batch within the JD Edwards EnterpriseOne Sales Order Management system.

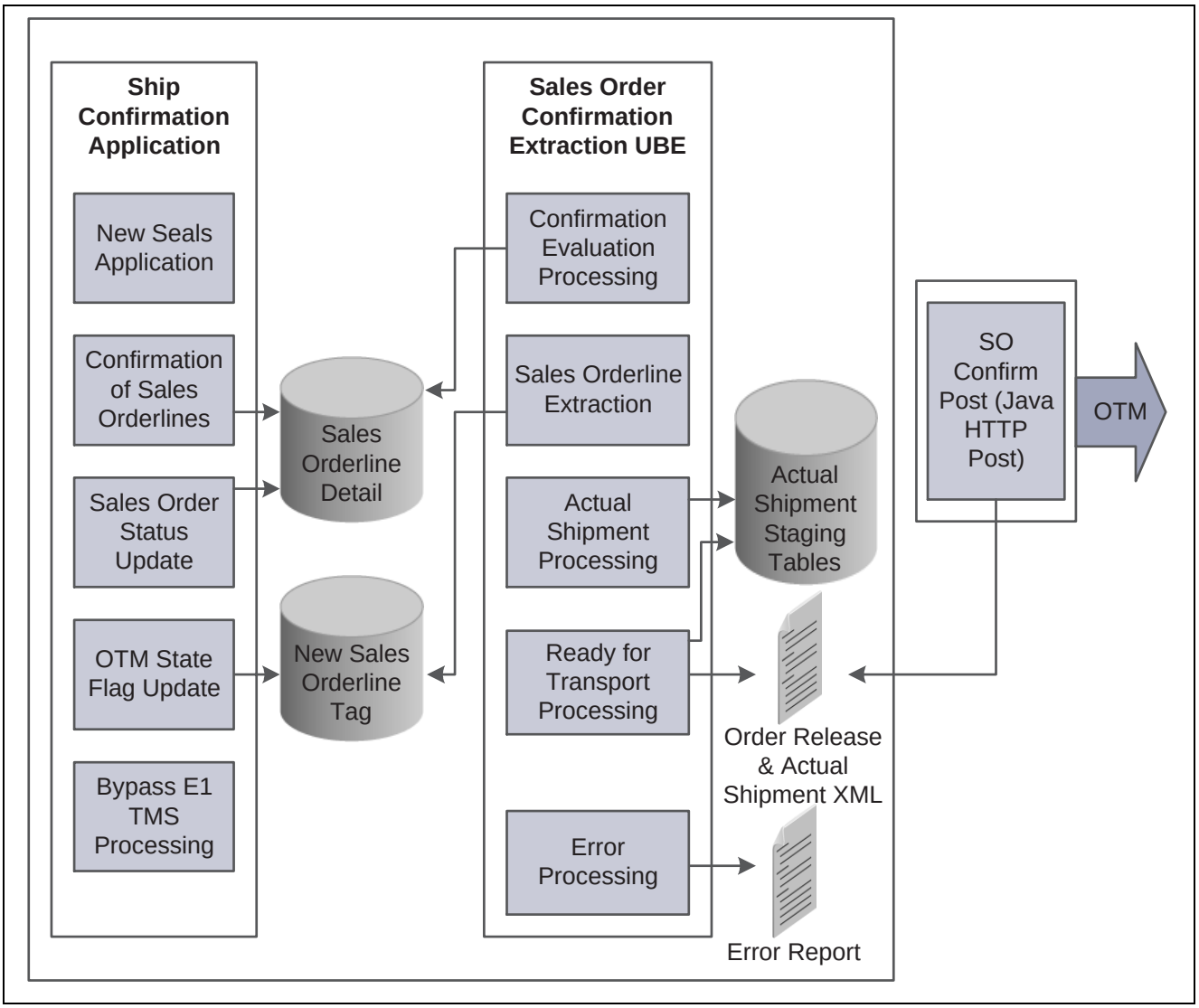
Sales Order Confirmation Assumptions

These assumptions apply to the Sales Order Confirmation integration point:

1. The system holds the staging table records representing the confirmed order lines and actual shipments until all of the order lines that are associated with all pickup stops within an Oracle Transportation Management shipment have been confirmed. At this point the system transmits the staging table records to Oracle Transportation Management as an actual shipment message and request for transportation confirmation.
2. The system bypasses the subsystem auto-launch of the Print Invoice program at shipment confirmation or an additional invoice is required for billable freight charges that are not determined until the next integration point transaction of Sales Transportation Confirmation.

Sales Order Confirmation Process Flow

The following diagram depicts the process flow for the JD Edwards EnterpriseOne to Oracle Transportation Management Sales Order Confirmation integration point:



Sales Order Confirm

The sales confirmation process includes three steps:

1. The Shipment Confirmation (P4205) and Inbound Transaction Processor (R42700) programs update the Sales Order Line Detail table (F4211) with the new order status and the Sales Order Detail File -

Secondary Tag table (F49T211) with the OTM State Flag equal to SC, indicating that the sales order line record is eligible for extraction by the Sales Order Confirmation Export (R49T30) program. The interactive Sales Order Confirmation application also allows you to populate Seal Numbers.

2. The Sales Order Confirmation Export program:
   - Determines whether all of the order lines in the Sales Order Line Tag table (F49T211) for the shipment are confirmed (State Flag = *SC*), which makes them eligible for extraction.
   - Extracts all sales order-lines for the shipment. This process includes inserting sales order lines shipment information to the Sales Order Confirmation Staging table (F49T30), updating order release information into the Order Release Staging table (F49T10), and updating locations information to the Order Release Locations Staging table (F49T50). The system then marks all processed records in the Sales Order Line Tag table (F49T211) as ship confirmed (State Flag = *SC* and SO Confirm Flag = *C*).
   - After writing all records to the staging tables, creates the XML files in the file structure defined in the processing option. The sales order confirmation XML files contain order release and actual shipment information.
   - After successfully creating the XML files, deletes the records from all the staging tables for the processed The staging tables are Order Release Staging (F49T10), Sales Order Confirmation Staging (F49T30), and Order Release Locations Staging (F49T50).
3. The HTTP Post Java program, which runs on the native operating system scheduler, picks up the XML files and sends them to the Oracle Transportation Management system.

Sales Order Confirmation Data Processing

The Sales Order Confirmation integration point is an outbound process whereby the JD Edwards EnterpriseOne system sends actual shipment data for sales order lines to Oracle Transportation Management. You use the Sales Order Confirmation Export program (R49T30) to extract transportation data for the confirmed sales order lines and place them in staging tables for transmission to Oracle Transportation Management.

Last Sales Order Line Confirmation

The Sales Order Confirmation Export program determines whether all of the sales order lines of the pickup stops on an Oracle Transportation Management shipment have been confirmed, back ordered, or canceled. The program then initiates the following processes for an Oracle Transportation Management shipment:

1. Order line data extraction:
   a. The system extracts and stages confirmed order lines, including any changed quantities, that are transmitted to Oracle Transportation Management.
   b. The system extracts and stages unshipped order lines, back ordered or canceled, that are transmitted to Oracle Transportation Management. The JD Edwards EnterpriseOne shipment number, Oracle Transportation Management shipment ID, and state flag related to any entire order lines left back ordered or canceled are not cleared to enable subsequent Freight Request of the unshipped back ordered order lines. The order lines are placed on hold status within the staging table until all of the sales order lines for all pickup stops on the Oracle Transportation Management shipment and the actual shipment have been staged, at which time all of the order lines and the Oracle Transportation Management shipment will be flagged for transformation and transport to Oracle Transportation Management.
   c. The JD Edwards EnterpriseOne shipment number that is associated with an order line and derived at Transportation Arranged will be extracted and mapped to the corresponding Oracle Transportation Management order release for transmittal to Oracle Transportation Management for Oracle Transportation Management customer-facing reports to include the JD Edwards EnterpriseOne Shipment Number.

      See Sales Order Confirmation Assumptions.

d. For Oracle Transportation Management reports to include the customer purchase order, the system extracts and maps the customer purchase order that is associated with an order line to the corresponding Oracle Transportation Management order release for transmittal.

See Sales Order Confirmation Assumptions

2. The system extracts and stages actual shipment volume and weight for transmission to the Oracle Transportation Management system. If the JD Edwards EnterpriseOne Warehouse Management system is activated, then the actual shipment weight and volume is calculated from the Sales Order Detail table (F4211); otherwise the actual shipment weight and volume is calculated from the Warehouse Suggestions table (F4611).
3. When the preceding processing finishes successfully, the system updates the Sales Order Detail Secondary Tag table sales order confirmation flag to an *S*.
4. The system advances the order to the next status based on the Next Order Status value that is specified in the processing option.

Report Output and Error Processing

These points apply to report output and error processing:

- If the system detects any errors within the preceding processing, it sends an error message to the work center and does not extract the sales order line.
- Upon failure of the Sales Order Confirmation process, the system publishes a work center message that identifies the order line key from which the error originated and lists the errors that are responsible for the failure.
- The system displays the order line key of the failed lines on the report output.
- The system displays a count of successfully processed lines on the report.

Running the Sales Order Confirmation Export Program

Select Sales Order Processing (G49T11), SO Confirmation.

Note. Prior to running the Sale Order Confirmation Export program, make sure that you have confirmed sales orders by using the Shipment Confirmation (P4205) program.

Setting Processing Options for Sales Confirmation Export (R49T30)

Processing options enable you to specify the default processing for programs and reports

Process

1. Sales Order Confirmation XML Directory Path	Indicate the path of the location to which the Sales Order Confirmation XML is stored.
2. Generate XML Files	Determine whether the system generates XML documents. Values are: Blank: Do not generate XML files. *1:* Generate XML files.

Domains

1. Transportation Planning Domain	Designate the domain in which transportation planning is planned.
	Note. A domain is a unique name that typically identifies a company. The purpose of a domain is to enable you to keep company data separate and secure from other company data in a shared, web-based environment.
2. Location Domain	Designate the domain in which transportation planning *locations* are stored.
3. Item Domain	Designate the domain in which *items* are stored.

Sales Transportation Confirmation

This section provides an overview of Sales Transportation Confirmation and discusses:

1. Sales Transportation Confirmation process flow.
2. Running the Transportation Confirmation Import program.
3. Setting processing options for Transportation Confirmation Import (R49T40).

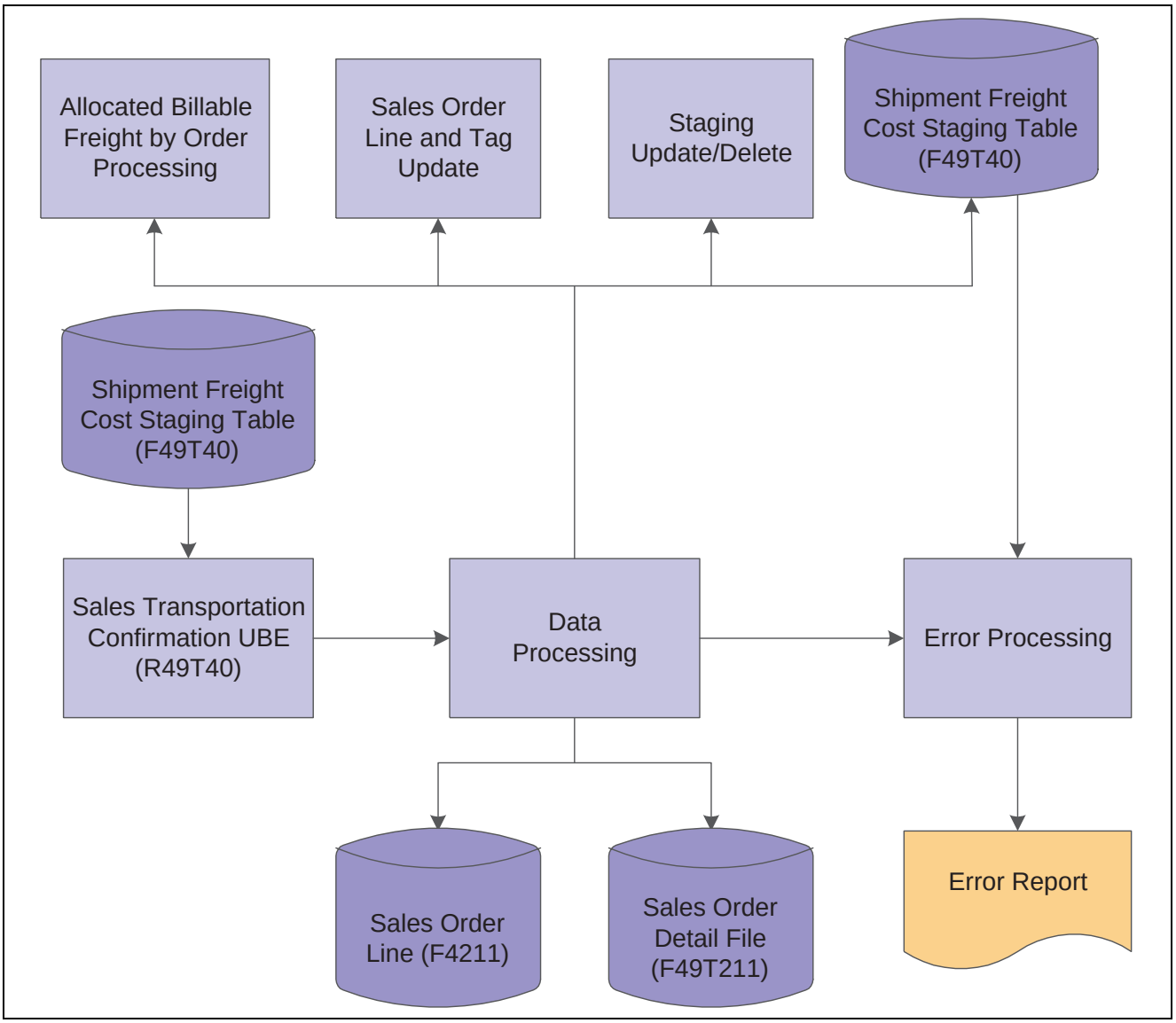
Understanding Sales Transportation Confirmation

The Sales Transportation Confirmation integration point is an inbound process wherein actual freight cost data, which has been returned from Oracle Transportation Management and staged in JD Edwards EnterpriseOne, is updated to the sales order and to general ledger records for which sales order confirmation has been previously sent. The Transportation Confirmation Import (R49T40) program:

1. Enables the extraction of the Oracle Transportation Management-transported data, which is stored in new staging tables.
2. Imports the latest delivery date to corresponding order lines.
3. Evaluates and creates a billable freight sales order line for each order release and sell-side shipment freight charge with currency code conversion from the carrier currency code to the sales order transaction currency code if applicable.
4. Updates, per processing option setup, all sales order line next statuses associated to the imported order release freight charges.

Sales Transportation Confirmation Process Flow

The following diagram depicts the process flow for the JD Edwards EnterpriseOne to Oracle Transportation Management Sales Transportation Confirmation integration point:



Sales Transportation Confirmation Process Flow

The Transportation Confirmation Import (R49T40) program runs on a scheduler system or stand alone and upon execution imports all records associated to an Oracle Transportation Management shipment ID the staging table to determine whether or not the record has received confirmed transportation data from Oracle Transportation Management within a first leg buy-side shipment message. The system processes each staging record as follows:

1. Allocates billable freight by order. To determine allocated billable freight by order, the Transportation Confirmation Import program:
   - Imports the staged billable charge and currency codes by order release ID and sell-side shipment ID.
   - Converts currency codes to the sales orders's transactional currency code.
   - Creates a new freight line within each sales order on an Oracle Transportation Management shipment for the actual allocated freight charge allocated by order release ID.
2. Updates the promised delivery date and promised delivery time
3. Updates all sales order lines next statuses for which billable freight costs have been imported.

Running the Transportation Confirmation Import Program

SelectSales Order Processing (G49T11), Transportation Confirmation.

Setting Processing Options for Transportation Confirmation Import (R49T40)

Processing options enable you to specify the default processing for programs and reports

Process

1. Added Freight Line - Line Type for billable freight Sales Order line	Identify the line type for the addition of the sales order freight line.
2. Added Freight Line Next Status	Enter the override next status for freight lines added to sales orders during the Transportation Confirmation import process. If left blank, the system uses the Order Activity Rules to determine the next status.
3. Bypass Update of Sales Order Next Status	Indicate whether the system bypasses the update of next status for those order lines associated to the order release for which freight lines have been added to the sales order during the Transportation Confirmation import process. Values are: Blank: Update the Sales Order Next Status. *1:* Bypass the update of Sales Order Next Status
4. Override Next Status for Sales Order lines with Imported Freight Costs.	Enter the override the next status for those order lines associated to the order release for which freight lines have been added to the sales order during the Transportation Confirmation import process. If left blank, the system uses the Order Activity Rules to determine the value

CHAPTER 4

Integrating JD Edwards EnterpriseOne Procurement with Oracle Transportation Management

This chapter provides and overview and discusses:

- Procurement Freight Request.
- Purchase Order Close/Cancel.

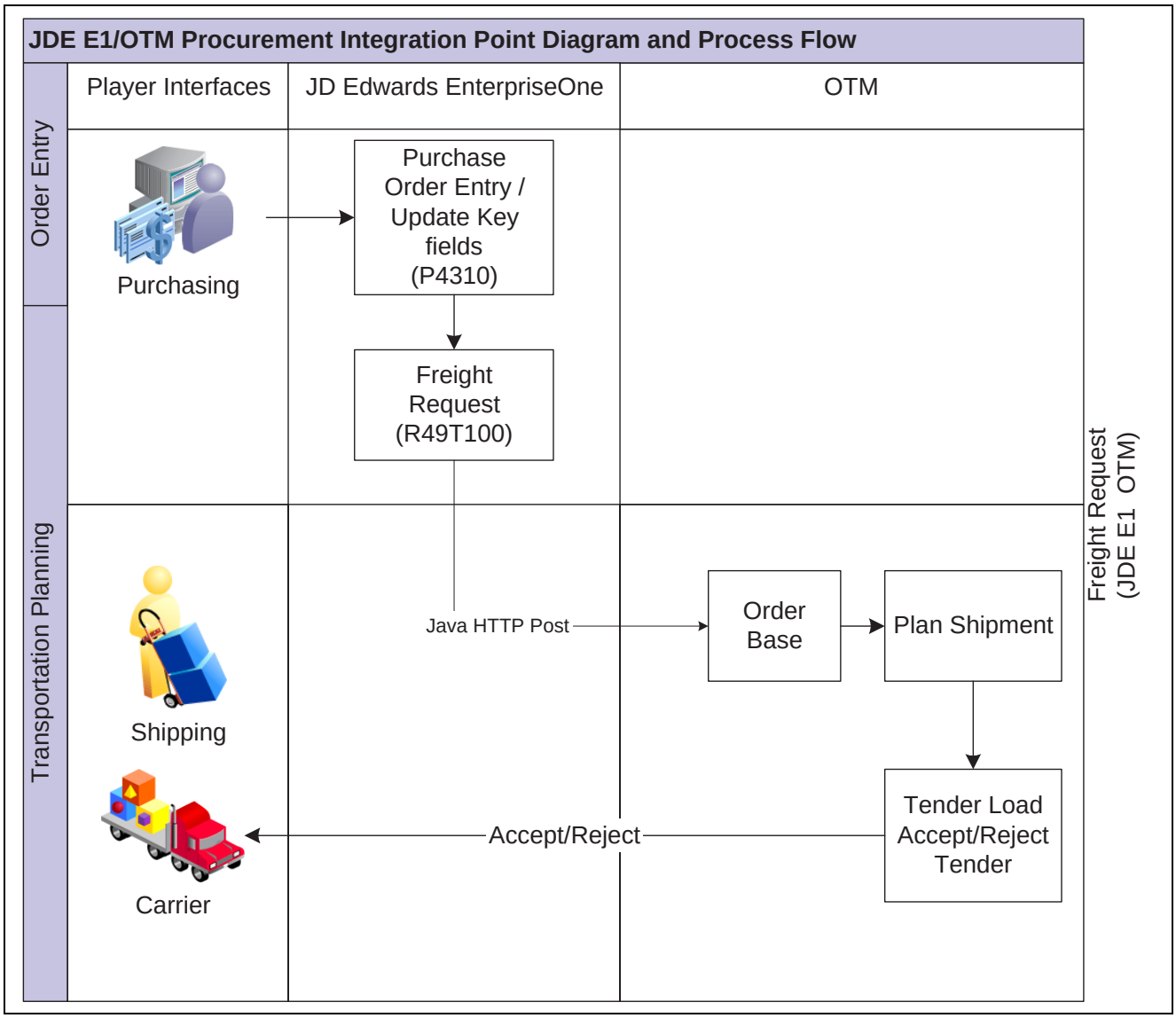
Understanding Integrating JD Edwards EnterpriseOne Procurement with Oracle Transportation Management

The Oracle Transportation Management system delivers robust transportation planning and execution capabilities for manufacturers, retailers, distributors, and third-party logistics providers. The JD Edwards EnterpriseOne Procurement system communicates with the Oracle Transportation Management through the Procurement Freight Request integration point:

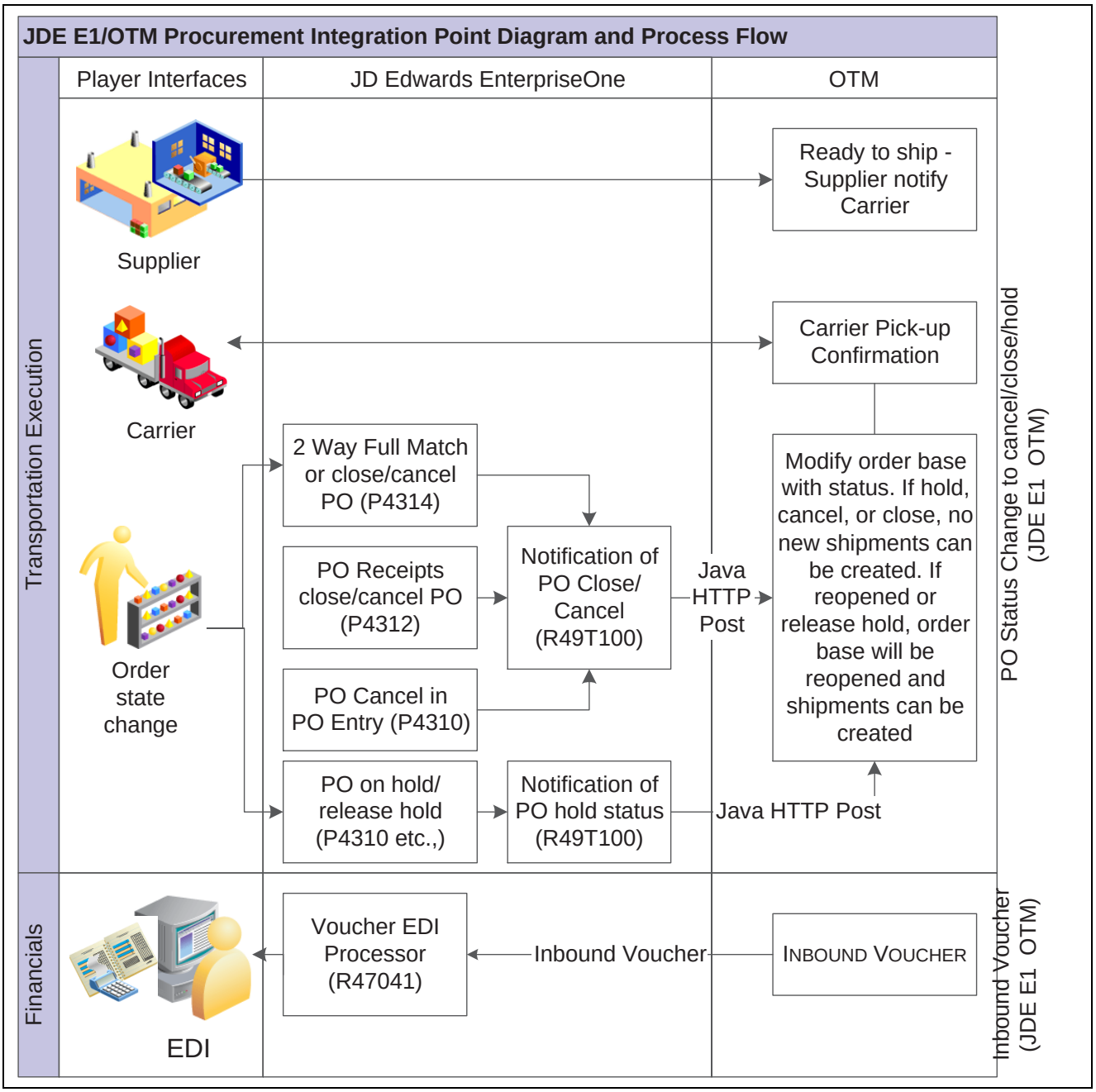
Integration Point	Description
Procurement Freight Request	1. You enter or update the purchase orders. 2. When you run the JD Edwards EnterpriseOne the (R49T100) program to extract the Oracle Transportation Management eligible order lines, the system extracts the purchase order, item, and location information; and generates an XML file which is then transmitted to Oracle Transportation Management when the HTTP post program runs. The system transmits a message to Oracle Transportation Management when a purchase order is entered or any of the key fields are updated on the purchase order. The key fields include: • Hold Status. The purchase order is placed on hold or released from hold status. • Transactional quantity. • Promised delivery date. • Requested date. • The purchase order is canceled, closed, or reopened. • Weight, volume, or unit of measure.

Procurement Integration Process Flow

The procurement integration process flow is represented by the following diagrams:



JD Edwards EnterpriseOne Procurement Integration to Oracle Transportation Management (1 of 2



JD Edwards EnterpriseOne Procurement Integration to Oracle Transportation Management (2 of 2)

Oracle Transportation Management Eligibility and Filter Criteria

This section discusses eligibility and filter criteria for:

- Purchase order types.
- Purchase order lines.
- Document type and line type combinations.
- Items.

Purchase Order Types

The JD Edwards EnterpriseOne purchase order types that are *eligible* for processing with Oracle Transportation Management include:

- Purchase orders.
- Credit orders.
- Direct ship orders.
- Transfer orders.

Note. For direct ship orders and transfer orders, it is a good practice to include only one order type in UDC table 49/TP. For example, enter sales transfer order type or procurement direct ship order type but not both. If you include both order types you will get two freight requests and two shipments for the same transportation movement of goods.

The JD Edwards EnterpriseOne purchase order types that are *ineligible* for processing with Oracle Transportation Management include:

- Requisition orders.
- Blanket orders.
- eRequisition orders.
- Purchase order quotes.

Purchase Order Lines

You determine JD Edwards EnterpriseOne purchase order lines as eligible for processing within Oracle Transportation Management by entering the document type and line type combination into the user-defined code UDC table 49/TP.

The purchase order lines that are *eligible* for processing within Oracle Transportation Management include:

- New order lines on purchase orders that are not already sent to Oracle Transportation Management for freight request.
- Transportation critical fields modified lines that may or may not have been sent to Oracle Transportation Management.
- Canceled, closed or reopened order lines that Oracle Transportation Management received prior to cancellation, closure, or reopened.
- Orders in which the order-line requested dates fall within a specified date and time period as designated by the Procurement Freight Request processing options.
- Order lines that include item number, quantity, weight, and volume.

The purchase order lines that are *ineligible* for processing within Oracle Transportation Management include:

- Those previously processed as procurement freight request, unless they are modified again.
- Service order lines without item numbers
- Lump sum lines without quantity.
- Bulk lines.
- Text lines.
- Kit children.

- Lines without weight and volume.
- Held order lines.

Items

Stock items, non stock items, and kit items are *eligible* for processing within Oracle Transportation Management. The JD Edwards EnterpriseOne system sends parent kit items to Oracle Transportation Management.

Procurement Freight Request

This section provides an overview of Procurement Freight Request and discusses:

- Procurement Freight Request prerequisites.
- Procurement Freight Request process flow.
- Procurement Freight Request data processing.
- Running the Procurement Freight Request Extract program.
- Setting processing options for Procurement Freight Request Extract (R49T100).

Understanding Procurement Freight Request

The Procurement Freight Request process enables the JD Edwards EnterpriseOne system to extract eligible purchase order lines and place them in the Procurement OTM Freight Request Staging table (F49T100), which then enables XML request for transportation planning to Oracle Transportation Management. This occurs when purchase orders have been added or updated within the JD Edwards EnterpriseOne Procurement system.

Apart from newly entered or modified purchase order lines, the JD Edwards EnterpriseOne system also extracts purchase order detail lines that were closed or canceled through other JD Edwards EnterpriseOne applications such as Purchase Order Entry (P4310), Purchase Order Receipts (P4312), and Voucher Match (P4314).

When Oracle Transportation Management receives the freight request lines it creates order base lines for transportation planning. When Oracle Transportation Management receives the closed or canceled status updates, it sets the order base line's release control status to RELEASE CONTROL_CLOSED or RELEASE CONTROL_CANCELED respectively. This means no further order releasing can be done on this order base line. However, the status change does not affect existing shipments or order releases. If the line is reopened, Oracle Transportation Management receives the transmission to update the release control status on the order base line's RELEASE CONTROL ALLOW_RELEASING. Oracle Transportation Management can then create order releases and shipments because the JD Edwards EnterpriseOne purchase order is reopened.

Note. When you use any of the JD Edwards EnterpriseOne programs to partial receive, two-way match, close, or cancel the Oracle Transportation Management eligible purchase order lines without the message from Oracle Transportation Management you must access Oracle Transportation Management to manually correct the order base. In other words, if the open quantity on purchase order and the order base differ in some exceptional cases (for example, when a partial purchase order is received without Oracle Transportation Management arranging shipments) Oracle Transportation Management's open quantities may be updated manually to match up with JD Edwards EnterpriseOne.

Prerequisites

These prerequisites apply for Procurement Freight Request. You must:

1. Set up the parent address book data for all suppliers that the JD Edwards EnterpriseOne Procurement system sends to Oracle Transportation Management.
2. Ensure that calendars in the JD Edwards EnterpriseOne system are set up such that they mirror the calendar setup in the Oracle Transportation Management system. This setup is based on the ship to and ship from combinations.

   Note. This is optional and only required if the Oracle Transportation Management calendaring system is preferred.

3. Set up the base weight and volume unit of measure conversions for all items.
4. Define the purchase order document type and line type combinations in UDC table 49/TP.
5. Enable system SY49T (Use Transportation Integration Module).

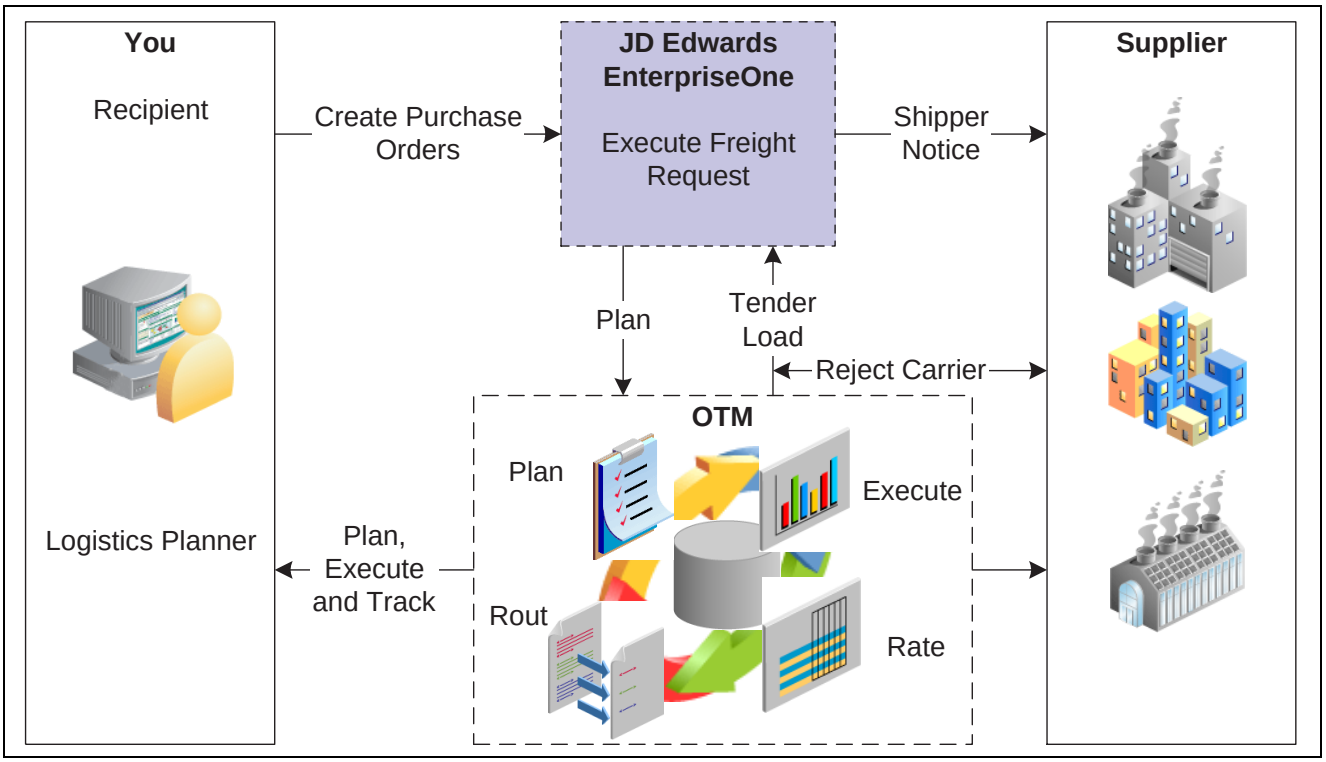
Procurement Freight Request Assumptions

These assumptions apply to the Freight Request integration point:

- When closing or canceling a line in JD Edwards EnterpriseOne, the release status for the remaining quantity only is updated in Oracle Transportation Management. If there are open shipments or order releases, you must cancel them manually before the purchase order line is closed or canceled.
- The cancel date transmitted to Oracle Transportation Management may not actually reflect the date of the closed or canceled order.
- The JD Edwards EnterpriseOne system extracts to Oracle Transportation Management units that are open on the purchase order. In some cases the open quantity in JD Edwards EnterpriseOne may differ from the open quantity in Oracle Transportation Management; especially when reversing an Oracle Transportation Management-eligible purchase order. Check Oracle Transportation Management to make sure the open quantities are correct.

Procurement Freight Request Process Flow

The following diagram depicts the process flow for the JD Edwards EnterpriseOne to Oracle Transportation Management Procurement Freight Request integration point:



Procurement Freight Request Process Flow

The process is twofold:

1. The system filters purchase order header and detail data. This includes purchase order document types, line types, item types, date and time, and a new integration state indicating the state of the order line within the integration process.
2. Data processing. This includes the retrieval of required data to be mapped to Oracle Transportation Management data, evaluation of suppliers sets to determine ship-to, override address consideration, date/time evaluation, shipping unit of measure processing, item-level shipment compatible consolidation, and credit order processing.

Procurement Freight Request Data Processing

This section discusses data mapping clarifications and data processing:

Data Mapping Clarifications

The JD Edwards EnterpriseOne system transmits some data to Oracle Transportation Management at the transactional level, which is freight request execution. This data is not provided as initial master data and includes:

Data	Description
Item Master Data	Oracle Transportation Management receives item descriptions.

Data	Description
Address Book Data	The JD Edwards EnterpriseOne system overrides address book information based upon the override order address information (F4006) or address book effective date (F0116) and sends it to Oracle Transportation Management. The system determines the ship-to address book based on customer sets and sends it to Oracle Transportation Management.
Oracle Transportation Management Calendar ID	The system extracts the Oracle Transportation Management ID for the ship-from and ship-to address book from the new workday calendar setup application.

Data Processing

Data processing occurs in these functional areas:

Functional Area	Comments
Destination (ship to) Address Book Determination	The destination (ship to) address book number is derived from the purchase order detail business unit (MCU) value.
Override Addresses	If the JD Edwards EnterpriseOne system has designated an override ship-to or deliver-to address in the Order Address Information table (F4006), then the system sends the override address information to the Oracle Transportation Management system. The system also takes the valid address book information from the Address by Date table (F0116) and stages it for transport to the Oracle Transportation Management system.
Bypassing Order Lines	The JD Edwards EnterpriseOne system performs bypass processing of order lines with line types that are not eligible to process using the Oracle Transportation Management system or are defined as text.
Date and Time	To qualify for processing, the JD Edwards EnterpriseOne request date on the purchase order line must fall within a specified Oracle Transportation Management date and time window that is designated in the Procurement Freight Request processing options. The purchase order line also qualifies for processing if the request date is changed to a date and time that falls outside the parameters of the Oracle Transportation Management date and time window and the Oracle Transportation Management system state flag indicates a previously freight-request processed order line.
Shipping Information	The JD Edwards EnterpriseOne system assumes standard unit of measure (UOM) conversions for volume and weight on each order line. The JD Edwards EnterpriseOne system sends this information to the Oracle Transportation Management system. If extended weight and volume are missing, the system will bypass processing the record and send an error message to the work center. The JD Edwards EnterpriseOne system concatenates the item with the transaction UOM to enable a package item designation in Oracle Transportation Management and sends this information to Oracle Transportation Management.
Currency Code	The JD Edwards EnterpriseOne system sends the declared value (purchase order extended cost) of the goods to Oracle Transportation Management in the supplier's currency.

Functional Area	Comments
Credit Order	Credit order quantities and ship from becomes ship to and vice versa are reversed upon extraction.
Report Output and Error Processing	Each system, JD Edwards EnterpriseOne and Oracle Transportation Management, is the source by which to review errors generated from each system. Errors from the respective systems are not sent to or received by the other system. However, when JD Edwards EnterpriseOne receives an HTTP post from Oracle Transportation Management and the transmission fails to write to the JD Edwards EnterpriseOne Inbound Transmissions table (F49T90), JD Edwards EnterpriseOne sends the exception information back to Oracle Transportation Management. If the Oracle Transportation Management report indicates that Oracle Transportation Management did not process the data received from JD Edwards EnterpriseOne, you must make corrections in JD Edwards EnterpriseOne and submit the data again. The purchase order lines are not extracted when errors are detected during processing. The freight request process ensures that Oracle Transportation Management-required values are supplied. The system sends an error message to the work center if any values are missing. Upon failure of the freight request process, the system publishes a work center message that identifies the order line key from which the error originated along with the errors responsible for the failure. This report displays: • Keys of the failed lines. • A count of successfully processed lines. • The message *(0) records processed* if none of the selected lines were eligible for processing. • The message *No Data Selected* if the data selection fails.

Running the Procurement Freight Request Extract Program

Select Purchase Order Processing (G49T12), Freight Request.

Setting Processing Options for Procurement Freight Request Extract (R49T100)

Processing options enable you to specify the default processing for programs and reports.

Process

1. Transportation Planning Date Range Factor

Indicate the number of days the that system looks forward from the date of procurement freight request execution. The system uses this number to determine the latest requested date that the system exports.

2. Freight Request XML Directory Path

Indicate the path to the location where the release XML document is stored when the system executes Procurement Freight Request.

3. Generate XML files

Specify whether to generate XML documents. Values are:

Blank: Do not generate XML files.

1: Generate XML files.

Domains

1. Transportation Planning Domain

Designate the domain in which transportation planning is planned.

Note. A domain is a unique name that typically identifies a company. The purpose of a domain is to enable you to keep company data separate and secure from other company data in a shared, web-based environment.

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2. Location Domain

Designate the domain in which transportation planning *locations* are stored.

3. Item Domain

Designate the domain in which *items* are stored.

CHAPTER 5

Understanding Inbound Voucher

This chapter discusses the inbound voucher integration point.

Inbound Voucher

This section provides an overview and discusses:

- Inbound voucher assumptions.
- Voucher ID cross reference.
- Inquiring on voucher ID cross reference.
- Running the Inbound Transmissions Master Program.
- Setting processing options for Inbound Transmissions Master (R49T90).

Understanding Inbound Voucher

The Inbound Voucher integration point serves as the trigger to create vouchers for freight in the JD Edwards EnterpriseOne system. It is an approved, matched invoice sent from Oracle Transportation Management to JD Edwards EnterpriseOne to create vouchers for shipments. After receiving the message, the JD Edwards EnterpriseOne system:

- Extracts he basic voucher information such as company, service provider and so on, received from Oracle Transportation Management. The system does not perform data validation at this point. If the service provider is not valid within the JD Edwards EnterpriseOne system, this is edited only in the voucher process.
- Converts the data types to fit into JD Edwards EnterpriseOne as needed.
- Generates an EDI document number and gets the EDI document type from the Transportation Planning Integration Constants (F49T00) table.
- Updates the EDI Invoice Header (F47041), EDI Invoice Detail (F47042), and the EDI Invoice Summary (F47044) tables.
- Creates a cross reference in the Inbound Voucher Cross Reference table (F49T60).

After these things occur, you can run the Inbound EDI Voucher Edit/Create (R47041) program to create vouchers in the JD Edwards EnterpriseOne system.

Taxes

The Oracle Transportation Management system can send either or both the pre tax and the post tax (gross) amount. In the JD Edwards EnterpriseOne system, you must set up the service provider to whom the voucher is paid with tax information. If service-provider tax information does not exist in the JD Edwards EnterpriseOne system, the Oracle Transportation Management system transmits the gross. The tax logic is executed as follows:

- If Oracle Transportation Management sends only the gross amount (invoice amount after tax), JD Edwards EnterpriseOne updates the EDI tables with this amount as the gross. The accounts payable information from the service provider and the taxable and tax are back calculated from the Gross. If the Oracle Transportation Management system performs tax calculations, the results x may be different from what the JD Edwards EnterpriseOne system calculates.
- If Oracle Transportation Management sends only taxable (transaction amount with no tax), JD Edwards EnterpriseOne updates the EDI tables with this amount as taxable. The system uses the accounts payable tax information from the service provider to calculate tax on this taxable amount.
- If Oracle Transportation Management sends both gross and taxable amounts, JD Edwards EnterpriseOne updates the EDI tables with the gross amount.

Voucher Company and Account

The JD Edwards EnterpriseOne system receives inbound voucher information from Oracle Transportation Management. This information may contain one or more shipments which may have multiple order lines (sales and procurement). Furthermore, these order lines may also come from multiple companies.

This voucher integration point does not allocate the voucher costs to multiple companies. The system creates one voucher for the first shipment's first order line's ship from location's company. The system also retrieves the expense account for the voucher from the service provider address book setup.

Inbound Voucher Assumptions

These assumptions apply to the Inbound Voucher integration point:

- There are no freight allocations.
- Taxes are calculated by JD Edwards EnterpriseOne. The system uses the Tax Rate/Area and explanation information that is stored in the address book of the service provider.
- The supplier for the voucher (service provider from Oracle Transportation Management) is sent in the reference field in the XML and hence R47041's processing options (default tab, option 3 to use reference field) must be set up accordingly.
- There is no separation of freight charges between multiple companies involved in the shipment for which the voucher is sent. In other words, one company (from the branch plant of the first ship from location) pays all freight charges for a ship from location, unless manually overridden. If the shipment voucher involves multiple order lines from multiple companies, there is a manual intervention needed to correct the expense journal entry and voucher. This is the same logic for both sales orders and purchase orders. There is no distinction between these two orders
- You must set up a default expense account for the service provider in JD Edwards EnterpriseOne or the Oracle Transportation Management ship from location in order to expense freight. All Freight expenses incurred from this service provider or from a ship from location are booked to this account, unless manually changed using the P0411Z1 application.

Voucher ID Cross Reference

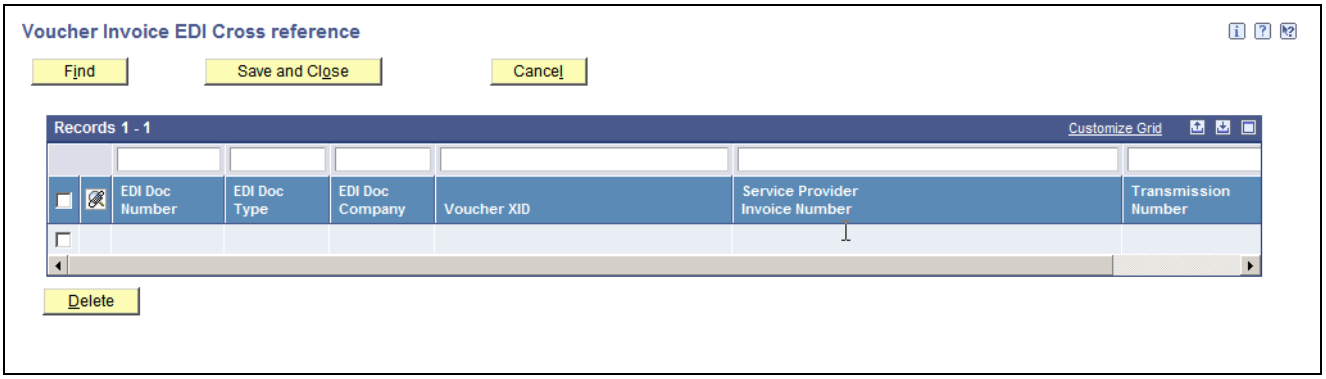
You use the Voucher ID Cross Reference (P49T60) application to inquire on and track cross referenced information between the EDI document and the Oracle Transportation management voucher, invoice, and transmission. For example if the R47041 program fails to create an EDI document, you access the Voucher ID Cross Reference program to aid with troubleshooting the failure.

Form Used to Inquire on Voucher ID Cross Reference

Form Name	FormID	Navigation	Usage
Voucher Invoice EDI Cross reference	W49T60F	Periodic Processing (G49T20), EDI to External Voucher ID Cross Reference.	Inquire on voucher invoice EDI cross references.

Inquiring on Voucher ID Cross Reference

Access the Voucher Invoice EDI Cross Reference form.



Voucher Invoice EDI Cross Reference form

EDI Doc Number Enter the ending document number for the range of numbers you want to display.

EDI Doc Type The document type that is assigned by the transmitter in an EDI transaction. In a non EDI environment, this is consistent with the order type (DCTO) assigned at order entry time, an invoice document type, a voucher document type, and so on.

EDI Doc Company Displays the Company - Key (EDI - Document Key Co)

Voucher XID Displays the voucher ID in a transportation system external to JD Edwards EnterpriseOne.

Service Provider Invoice Number Displays the service provider's invoice number.

Transmission Number This is the unique identifier for the set of transactions that JD Edwards EnterpriseOne receives in an XML file for processing.

Transportation Planning Domain A unique domain name that identifies a company. The purpose of a domain is to provide the ability to keep company data separate and secure from other company data in a shared, web-based environment. The value designates the domain in which transportation planning occurs.

Running the Inbound Transmissions Master Program

Select Sales Order Processing (G49T11), Inbound Processor.

Select Purchase Order Processing (G49T12), Inbound Processor.

Setting Processing Options for Inbound Transmissions Master (R49T90)

Processing options enable you to specify the default processing for programs and reports.

Process

1. Parse Transportation Arranged

Indicate whether to parse the Transportation Arranged Shipment XML into the Shipment Staging table (F49T20). Values are:

Blank: Do not parse XML.

*1:*Parse XML.

2. Parse Transportation Confirmation

Indicate whether to parse the Transportation Confirmation Shipment XML into the Shipment Freight Cost Staging table (F49T40). Values are:

Blank: Do not parse XML.

*1:*Parse XML.

3. Parse Voucher

Indicate whether to parse the voucher XML into the voucher EDI tables. Values are:

Blank: Do not parse XML.

1: Parse XML.

4. R47041 EDI Voucher Edit/Create

Specify whether the system runs the EDI Voucher Edit/Create (R47041) UBE. Values are:

Blank: Do not run the program.

1: Run the program.

5. R49T20 Sales Transportation Arranged Import

Specify whether the system runs the Sales Transportation Arranged Import (R49T20) UBE. Values are:

Blank: Do not run the program.

1: Run the program.

6. R49T40 Sales Transportation Confirmation Import

Specify whether the system runs the Sales Transportation Confirmation Import (R49T40) UBE. Values are:

Blank: Do not run the program.

1: Run the program.

Versions

1. Version of R47041 Inbound EDI Voucher Edit/Create

Specify the version of the EDI Voucher Edit/Create (R47041) UBE that you want the system to run. If left blank, the system runs version ZJDE0001

2. Version of R49T20 Sales Transportation Arranged Import UBE	Specify the version of the Sales Transportation Arranged Import (R49T20) UBE that you want the system to run. If left blank, the system runs version ZJDE0001.
3. Version of R49T40 Sales Transportation Confirmation Import UBE	Specify the version of the Sales Transportation Confirmation Import (R49T40) UBE that you want the system to run. If left blank, the system runs version XJDE000.

Glossary of JD Edwards EnterpriseOne Terms

Accessor Methods/Assessors Java methods to "get" and "set" the elements of a value object or other source file.

activity rule The criteria by which an object progresses from one given point to the next in a flow.

add mode A condition of a form that enables users to input data.

Advanced Planning Agent (APAg) A JD Edwards EnterpriseOne tool that can be used to extract, transform, and load enterprise data. APAg supports access to data sources in the form of rational databases, flat file format, and other data or message encoding, such as XML.

alternate currency A currency that is different from the domestic currency (when dealing with a domestic-only transaction) or the domestic and foreign currency of a transaction.

In JD Edwards EnterpriseOne Financial Management, alternate currency processing enables you to enter receipts and payments in a currency other than the one in which they were issued.

Application Server Software that provides the business logic for an application program in a distributed environment. The servers can be Oracle Application Server (OAS) or WebSphere Application Server (WAS).

as if processing A process that enables you to view currency amounts as if they were entered in a currency different from the domestic and foreign currency of the transaction.

as of processing A process that is run as of a specific point in time to summarize transactions up to that date. For example, you can run various JD Edwards EnterpriseOne reports as of a specific date to determine balances and amounts of accounts, units, and so on as of that date.

Auto Commit Transaction A database connection through which all database operations are immediately written to the database.

back-to-back process A process in JD Edwards EnterpriseOne Supply Management that contains the same keys that are used in another process.

batch processing A process of transferring records from a third-party system to JD Edwards EnterpriseOne.

In JD Edwards EnterpriseOne Financial Management, batch processing enables you to transfer invoices and vouchers that are entered in a system other than JD Edwards EnterpriseOne to JD Edwards EnterpriseOne Accounts Receivable and JD Edwards EnterpriseOne Accounts Payable, respectively. In addition, you can transfer address book information, including customer and supplier records, to JD Edwards EnterpriseOne.

batch server A server that is designated for running batch processing requests. A batch server typically does not contain a database nor does it run interactive applications.

batch-of-one immediate A transaction method that enables a client application to perform work on a client workstation, then submit the work all at once to a server application for further processing. As a batch process is running on the server, the client application can continue performing other tasks.

See also direct connect and store-and-forward.

best practices Non-mandatory guidelines that help the developer make better design decisions.

BPEL Abbreviation for *Business Process Execution Language*, a standard web services orchestration language, which enables you to assemble discrete services into an end-to-end process flow.

BPEL PM Abbreviation for *Business Process Execution Language Process Manager*, a comprehensive infrastructure for creating, deploying, and managing BPEL business processes.

Build Configuration File Configurable settings in a text file that are used by a build program to generate ANT scripts. ANT is a software tool used for automating build processes. These scripts build published business services.

build engineer An actor that is responsible for building, mastering, and packaging artifacts. Some build engineers are responsible for building application artifacts, and some are responsible for building foundation artifacts.

Build Program A WIN32 executable that reads build configuration files and generates an ANT script for building published business services.

business analyst An actor that determines if and why an EnterpriseOne business service needs to be developed.

business function A named set of user-created, reusable business rules and logs that can be called through event rules. Business functions can run a transaction or a subset of a transaction (check inventory, issue work orders, and so on). Business functions also contain the application programming interfaces (APIs) that enable them to be called from a form, a database trigger, or a non-JD Edwards EnterpriseOne application. Business functions can be combined with other business functions, forms, event rules, and other components to make up an application. Business functions can be created through event rules or third-generation languages, such as C. Examples of business functions include Credit Check and Item Availability.

business function event rule See named event rule (NER).

business service EnterpriseOne business logic written in Java. A business service is a collection of one or more artifacts. Unless specified otherwise, a business service implies both a published business service and business service.

business service artifacts Source files, descriptors, and so on that are managed for business service development and are needed for the business service build process.

business service class method A method that accesses resources provided by the business service framework.

business service configuration files Configuration files include, but are not limited to, interop.ini, JDBj.ini, and jdelog.properties.

business service cross reference A key and value data pair used during orchestration. Collectively refers to both the code and the key cross reference in the WSG/XPI based system.

business service cross-reference utilities Utility services installed in a BPEL/ESB environment that are used to access JD Edwards EnterpriseOne orchestration cross-reference data.

business service development environment A framework needed by an integration developer to develop and manage business services.

business services development tool Otherwise known as JDeveloper.

business service EnterpriseOne object A collection of artifacts managed by EnterpriseOne LCM tools. Named and represented within EnterpriseOne LCM similarly to other EnterpriseOne objects like tables, views, forms, and so on.

business service framework Parts of the business service foundation that are specifically for supporting business service development.

business service payload An object that is passed between an enterprise server and a business services server. The business service payload contains the input to the business service when passed to the business services server. The business service payload contains the results from the business service when passed to the Enterprise Server. In the case of notifications, the return business service payload contains the acknowledgement.

business service property Key value data pairs used to control the behavior or functionality of business services.

Business Service Property Admin Tool An EnterpriseOne application for developers and administrators to manage business service property records.

business service property business service group A classification for business service property at the business service level. This is generally a business service name. A business service level contains one or more business service property groups. Each business service property group may contain zero or more business service property records.

business service property categorization A way to categorize business service properties. These properties are categorized by business service.

business service property key A unique name that identifies the business service property globally in the system.

business service property utilities A utility API used in business service development to access EnterpriseOne business service property data.

business service property value A value for a business service property.

business service repository A source management system, for example ClearCase, where business service artifacts and build files are stored. Or, a physical directory in network.

business services server The physical machine where the business services are located. Business services are run on an application server instance.

business services source file or business service class One type of business service artifact. A text file with the .java file type written to be compiled by a Java compiler.

business service value object template The structural representation of a business service value object used in a C-business function.

Business Service Value Object Template Utility A utility used to create a business service value object template from a business service value object.

business services server artifact The object to be deployed to the business services server.

business view A means for selecting specific columns from one or more JD Edwards EnterpriseOne application tables whose data is used in an application or report. A business view does not select specific rows, nor does it contain any actual data. It is strictly a view through which you can manipulate data.

central objects merge A process that blends a customer's modifications to the objects in a current release with objects in a new release.

central server A server that has been designated to contain the originally installed version of the software (central objects) for deployment to client computers. In a typical JD Edwards EnterpriseOne installation, the software is loaded on to one machine—the central server. Then, copies of the software are pushed out or downloaded to various workstations attached to it. That way, if the software is altered or corrupted through its use on workstations, an original set of objects (central objects) is always available on the central server.

charts Tables of information in JD Edwards EnterpriseOne that appear on forms in the software.

check-in repository A repository for developers to check in and check out business service artifacts. There are multiple check-in repositories. Each can be used for a different purpose (for example, development, production, testing, and so on).

connector Component-based interoperability model that enables third-party applications and JD Edwards EnterpriseOne to share logic and data. The JD Edwards EnterpriseOne connector architecture includes Java and COM connectors.

contra/clearing account A general ledger account in JD Edwards EnterpriseOne Financial Management that is used by the system to offset (balance) journal entries. For example, you can use a contra/clearing account to balance the entries created by allocations in JD Edwards EnterpriseOne Financial Management.

Control Table Workbench An application that, during the Installation Workbench processing, runs the batch applications for the planned merges that update the data dictionary, user-defined codes, menus, and user override tables.

control tables merge A process that blends a customer's modifications to the control tables with the data that accompanies a new release.

correlation data The data used to tie HTTP responses with requests that consist of business service name and method.

cost assignment The process in JD Edwards EnterpriseOne Advanced Cost Accounting of tracing or allocating resources to activities or cost objects.

cost component In JD Edwards EnterpriseOne Manufacturing, an element of an item's cost (for example, material, labor, or overhead).

credentials A valid set of JD Edwards EnterpriseOne username/password/environment/role, EnterpriseOne session, or EnterpriseOne token.

cross-reference utility services Utility services installed in a BPEL/ESB environment that access EnterpriseOne cross-reference data.

cross segment edit A logic statement that establishes the relationship between configured item segments. Cross segment edits are used to prevent ordering of configurations that cannot be produced.

currency restatement The process of converting amounts from one currency into another currency, generally for reporting purposes. You can use the currency restatement process, for example, when many currencies must be restated into a single currency for consolidated reporting.

cXML A protocol used to facilitate communication between business documents and procurement applications, and between e-commerce hubs and suppliers.

database credentials A valid database username/password.

database server A server in a local area network that maintains a database and performs searches for client computers.

Data Source Workbench An application that, during the Installation Workbench process, copies all data sources that are defined in the installation plan from the Data Source Master and Table and Data Source Sizing tables in the Planner data source to the system-release number data source. It also updates the Data Source Plan detail record to reflect completion.

date pattern A calendar that represents the beginning date for the fiscal year and the ending date for each period in that year in standard and 52-period accounting.

denominated-in currency The company currency in which financial reports are based.

deployment artifacts Artifacts that are needed for the deployment process, such as servers, ports, and such.

deployment server A server that is used to install, maintain, and distribute software to one or more enterprise servers and client workstations.

detail information Information that relates to individual lines in JD Edwards EnterpriseOne transactions (for example, voucher pay items and sales order detail lines).

direct connect A transaction method in which a client application communicates interactively and directly with a server application.

See also batch-of-one immediate and store-and-forward.

Do Not Translate (DNT) A type of data source that must exist on the iSeries because of BLOB restrictions.

dual pricing The process of providing prices for goods and services in two currencies.

duplicate published business services authorization records Two published business services authorization records with the same user identification information and published business services identification information.

embedded application server instance An OC4J instance started by and running wholly within JDeveloper.

edit code A code that indicates how a specific value for a report or a form should appear or be formatted. The default edit codes that pertain to reporting require particular attention because they account for a substantial amount of information.

edit mode A condition of a form that enables users to change data.

edit rule A method used for formatting and validating user entries against a predefined rule or set of rules.

Electronic Data Interchange (EDI) An interoperability model that enables paperless computer-to-computer exchange of business transactions between JD Edwards EnterpriseOne and third-party systems. Companies that use EDI must have translator software to convert data from the EDI standard format to the formats of their computer systems.

embedded event rule An event rule that is specific to a particular table or application. Examples include form-to-form calls, hiding a field based on a processing option value, and calling a business function. Contrast with the business function event rule.

Employee Work Center A central location for sending and receiving all JD Edwards EnterpriseOne messages (system and user generated), regardless of the originating application or user. Each user has a mailbox that contains workflow and other messages, including Active Messages.

enterprise server A server that contains the database and the logic for JD Edwards EnterpriseOne.

Enterprise Service Bus (ESB) Middleware infrastructure products or technologies based on web services standards that enable a service-oriented architecture using an event-driven and XML-based messaging framework (the bus).

EnterpriseOne administrator An actor responsible for the EnterpriseOne administration system.

EnterpriseOne credentials A user ID, password, environment, and role used to validate a user of EnterpriseOne.

EnterpriseOne object A reusable piece of code that is used to build applications. Object types include tables, forms, business functions, data dictionary items, batch processes, business views, event rules, versions, data structures, and media objects.

EnterpriseOne development client Historically called "fat client," a collection of installed EnterpriseOne components required to develop EnterpriseOne artifacts, including the Microsoft Windows client and design tools.

EnterpriseOne extension A JDeveloper component (plug-in) specific to EnterpriseOne. A JDeveloper wizard is a specific example of an extension.

EnterpriseOne process A software process that enables JD Edwards EnterpriseOne clients and servers to handle processing requests and run transactions. A client runs one process, and servers can have multiple instances of a process. JD Edwards EnterpriseOne processes can also be dedicated to specific tasks (for example, workflow messages and data replication) to ensure that critical processes don't have to wait if the server is particularly busy.

EnterpriseOne resource Any EnterpriseOne table, metadata, business function, dictionary information, or other information restricted to authorized users.

Environment Workbench An application that, during the Installation Workbench process, copies the environment information and Object Configuration Manager tables for each environment from the Planner data source to the system-release number data source. It also updates the Environment Plan detail record to reflect completion.

escalation monitor A batch process that monitors pending requests or activities and restarts or forwards them to the next step or user after they have been inactive for a specified amount of time.

event rule A logic statement that instructs the system to perform one or more operations based on an activity that can occur in a specific application, such as entering a form or exiting a field.

explicit transaction Transaction used by a business service developer to explicitly control the type (auto or manual) and the scope of transaction boundaries within a business service.

exposed method or value object Published business service source files or parts of published business service source files that are part of the published interface. These are part of the contract with the customer.

facility An entity within a business for which you want to track costs. For example, a facility might be a warehouse location, job, project, work center, or branch/plant. A facility is sometimes referred to as a "business unit."

fast path A command prompt that enables the user to move quickly among menus and applications by using specific commands.

file server A server that stores files to be accessed by other computers on the network. Unlike a disk server, which appears to the user as a remote disk drive, a file server is a sophisticated device that not only stores files, but also manages them and maintains order as network users request files and make changes to these files.

final mode The report processing mode of a processing mode of a program that updates or creates data records.

foundation A framework that must be accessible for execution of business services at runtime. This includes, but is not limited to, the Java Connector and JDBj.

FTP server A server that responds to requests for files via file transfer protocol.

header information Information at the beginning of a table or form. Header information is used to identify or provide control information for the group of records that follows.

HTTP Adapter A generic set of services that are used to do the basic HTTP operations, such as GET, POST, PUT, DELETE, TRACE, HEAD, and OPTIONS with the provided URL.

instantiate A Java term meaning "to create." When a class is instantiated, a new instance is created.

integration developer The user of the system who develops, runs, and debugs the EnterpriseOne business services. The integration developer uses the EnterpriseOne business services to develop these components.

integration point (IP) The business logic in previous implementations of EnterpriseOne that exposes a document level interface. This type of logic used to be called XBPs. In EnterpriseOne 8.11, IPs are implemented in Web Services Gateway powered by webMethods.

integration server A server that facilitates interaction between diverse operating systems and applications across internal and external networked computer systems.

integrity test A process used to supplement a company's internal balancing procedures by locating and reporting balancing problems and data inconsistencies.

interface table See Z table.

internal method or value object Business service source files or parts of business service source files that are not part of the published interface. These could be private or protected methods. These could be value objects not used in published methods.

interoperability model A method for third-party systems to connect to or access JD Edwards EnterpriseOne.

in-your-face-error In JD Edwards EnterpriseOne, a form-level property which, when enabled, causes the text of application errors to appear on the form.

IServer service This internet server service resides on the web server and is used to speed up delivery of the Java class files from the database to the client.

jargon An alternative data dictionary item description that JD Edwards EnterpriseOne appears based on the product code of the current object.

Java application server A component-based server that resides in the middle-tier of a server-centric architecture. This server provides middleware services for security and state maintenance, along with data access and persistence.

JDBNET A database driver that enables heterogeneous servers to access each other's data.

JDEBASE Database Middleware A JD Edwards EnterpriseOne proprietary database middleware package that provides platform-independent APIs, along with client-to-server access.

JDECallObject An API used by business functions to invoke other business functions.

jde.ini A JD Edwards EnterpriseOne file (or member for iSeries) that provides the runtime settings required for JD Edwards EnterpriseOne initialization. Specific versions of the file or member must reside on every machine running JD Edwards EnterpriseOne. This includes workstations and servers.

JDEIPC Communications programming tools used by server code to regulate access to the same data in multiprocess environments, communicate and coordinate between processes, and create new processes.

jde.log The main diagnostic log file of JD Edwards EnterpriseOne. This file is always located in the root directory on the primary drive and contains status and error messages from the startup and operation of JD Edwards EnterpriseOne.

JDENET A JD Edwards EnterpriseOne proprietary communications middleware package. This package is a peer-to-peer, message-based, socket-based, multiprocess communications middleware solution. It handles client-to-server and server-to-server communications for all JD Edwards EnterpriseOne supported platforms.

JDeveloper Project An artifact that JDeveloper uses to categorize and compile source files.

JDeveloper Workspace An artifact that JDeveloper uses to organize project files. It contains one or more project files.

JMS Queue A Java Messaging service queue used for point-to-point messaging.

listener service A listener that listens for XML messages over HTTP.

local repository A developer's local development environment that is used to store business service artifacts.

local standalone BPEL/ESB server A standalone BPEL/ESB server that is not installed within an application server.

Location Workbench An application that, during the Installation Workbench process, copies all locations that are defined in the installation plan from the Location Master table in the Planner data source to the system data source.

logic server A server in a distributed network that provides the business logic for an application program. In a typical configuration, pristine objects are replicated on to the logic server from the central server. The logic server, in conjunction with workstations, actually performs the processing required when JD Edwards EnterpriseOne software runs.

MailMerge Workbench An application that merges Microsoft Word 6.0 (or higher) word-processing documents with JD Edwards EnterpriseOne records to automatically print business documents. You can use MailMerge Workbench to print documents, such as form letters about verification of employment.

Manual Commit transaction A database connection where all database operations delay writing to the database until a call to commit is made.

master business function (MBF) An interactive master file that serves as a central location for adding, changing, and updating information in a database. Master business functions pass information between data entry forms and the appropriate tables. These master functions provide a common set of functions that contain all of the necessary default and editing rules for related programs. MBFs contain logic that ensures the integrity of adding, updating, and deleting information from databases.

master table See published table.

matching document A document associated with an original document to complete or change a transaction. For example, in JD Edwards EnterpriseOne Financial Management, a receipt is the matching document of an invoice, and a payment is the matching document of a voucher.

media storage object Files that use one of the following naming conventions that are not organized into table format: Gxxx, xxxGT, or GTxxx.

message center A central location for sending and receiving all JD Edwards EnterpriseOne messages (system and user generated), regardless of the originating application or user.

messaging adapter An interoperability model that enables third-party systems to connect to JD Edwards EnterpriseOne to exchange information through the use of messaging queues.

messaging server A server that handles messages that are sent for use by other programs using a messaging API. Messaging servers typically employ a middleware program to perform their functions.

Middle-Tier BPEL/ESB Server A BPEL/ESB server that is installed within an application server.

Monitoring Application An EnterpriseOne tool provided for an administrator to get statistical information for various EntepriseOne servers, reset statistics, and set notifications.

named event rule (NER)

Encapsulated, reusable business logic created using event rules, rather that C programming. NERs are also called business function event rules. NERs can be reused in multiple places by multiple programs. This modularity lends itself to streamlining, reusability of code, and less work.

nota fiscal

In Brazil, a legal document that must accompany all commercial transactions for tax purposes and that must contain information required by tax regulations.

nota fiscal factura

In Brazil, a nota fiscal with invoice information.

See also *nota fiscal.*

Object Configuration Manager (OCM)

In JD Edwards EnterpriseOne, the object request broker and control center for the runtime environment. OCM keeps track of the runtime locations for business functions, data, and batch applications. When one of these objects is called, OCM directs access to it using defaults and overrides for a given environment and user.

Object Librarian

A repository of all versions, applications, and business functions reusable in building applications. Object Librarian provides check-out and check-in capabilities for developers, and it controls the creation, modification, and use of JD Edwards EnterpriseOne objects. Object Librarian supports multiple environments (such as production and development) and enables objects to be easily moved from one environment to another.

Object Librarian merge

A process that blends any modifications to the Object Librarian in a previous release into the Object Librarian in a new release.

Open Data Access (ODA)

An interoperability model that enables you to use SQL statements to extract JD Edwards EnterpriseOne data for summarization and report generation.

Output Stream Access (OSA)

An interoperability model that enables you to set up an interface for JD Edwards EnterpriseOne to pass data to another software package, such as Microsoft Excel, for processing.

package

JD Edwards EnterpriseOne objects are installed to workstations in packages from the deployment server. A package can be compared to a bill of material or kit that indicates the necessary objects for that workstation and where on the deployment server the installation program can find them. It is point-in-time snapshot of the central objects on the deployment server.

package build

A software application that facilitates the deployment of software changes and new applications to existing users. Additionally, in JD Edwards EnterpriseOne, a package build can be a compiled version of the software. When you upgrade your version of the ERP software, for example, you are said to take a package build.

Consider the following context: “Also, do not transfer business functions into the production path code until you are ready to deploy, because a global build of business functions done during a package build will automatically include the new functions.” The process of creating a package build is often referred to, as it is in this example, simply as “a package build.”

package location

The directory structure location for the package and its set of replicated objects. This is usually \\deployment server\release\path_code\package\package name. The subdirectories under this path are where the replicated objects for the package are placed. This is also referred to as where the package is built or stored.

Package Workbench

An application that, during the Installation Workbench process, transfers the package information tables from the Planner data source to the system-release number data source. It also updates the Package Plan detail record to reflect completion.

Pathcode Directory

The specific portion of the file system on the EnterpriseOne development client where EnterpriseOne development artifacts are stored.

patterns
General repeatable solutions to a commonly occurring problem in software design. For business service development, the focus is on the object relationships and interactions. For orchestrations, the focus is on the integration patterns (for example, synchronous and asynchronous request/response, publish, notify, and receive/reply).

planning family
A means of grouping end items whose similarity of design and manufacture facilitates being planned in aggregate.

preference profile
The ability to define default values for specified fields for a user-defined hierarchy of items, item groups, customers, and customer groups.

print server
The interface between a printer and a network that enables network clients to connect to the printer and send their print jobs to it. A print server can be a computer, separate hardware device, or even hardware that resides inside of the printer itself.

pristine environment
A JD Edwards EnterpriseOne environment used to test unaltered objects with JD Edwards EnterpriseOne demonstration data or for training classes. You must have this environment so that you can compare pristine objects that you modify.

processing option
A data structure that enables users to supply parameters that regulate the running of a batch program or report. For example, you can use processing options to specify default values for certain fields, to determine how information appears or is printed, to specify date ranges, to supply runtime values that regulate program execution, and so on.

production environment
A JD Edwards EnterpriseOne environment in which users operate EnterpriseOne software.

production-grade file server
A file server that has been quality assurance tested and commercialized and that is usually provided in conjunction with user support services.

Production Published Business Services Web Service
Published business services web service deployed to a production application server.

program temporary fix (PTF)
A representation of changes to JD Edwards EnterpriseOne software that your organization receives on magnetic tapes or disks.

project
In JD Edwards EnterpriseOne, a virtual container for objects being developed in Object Management Workbench.

promotion path
The designated path for advancing objects or projects in a workflow. The following is the normal promotion cycle (path):

11>21>26>28>38>01

In this path, *11* equals new project pending review, *21* equals programming, *26* equals QA test/review, *28* equals QA test/review complete, *38* equals in production, *01* equals complete. During the normal project promotion cycle, developers check objects out of and into the development path code and then promote them to the prototype path code. The objects are then moved to the productions path code before declaring them complete.

proxy server
A server that acts as a barrier between a workstation and the internet so that the enterprise can ensure security, administrative control, and caching service.

published business service
EnterpriseOne service level logic and interface. A classification of a published business service indicating the intention to be exposed to external (non-EnterpriseOne) systems.

published business service identification information
Information about a published business service used to determine relevant authorization records. Published business services + method name, published business services, or *ALL.

published business service web service
Published business services components packaged as J2EE Web Service (namely, a J2EE EAR file that contains business service classes, business service foundation, configuration files, and web service artifacts).

published table
Also called a master table, this is the central copy to be replicated to other machines. Residing on the publisher machine, the F98DRPUB table identifies all of the published tables and their associated publishers in the enterprise.

publisher
The server that is responsible for the published table. The F98DRPUB table identifies all of the published tables and their associated publishers in the enterprise.

pull replication
One of the JD Edwards EnterpriseOne methods for replicating data to individual workstations. Such machines are set up as pull subscribers using JD Edwards EnterpriseOne data replication tools. The only time that pull subscribers are notified of changes, updates, and deletions is when they request such information. The request is in the form of a message that is sent, usually at startup, from the pull subscriber to the server machine that stores the F98DRPCN table.

QBE
An abbreviation for *query by example*. In JD Edwards EnterpriseOne, the QBE line is the top line on a detail area that is used for filtering data.

real-time event
A message triggered from EnterpriseOne application logic that is intended for external systems to consume.

refresh
A function used to modify JD Edwards EnterpriseOne software, or subset of it, such as a table or business data, so that it functions at a new release or cumulative update level, such as B73.2 or B73.2.1.

replication server
A server that is responsible for replicating central objects to client machines.

Rt-Addressing
Unique data identifying a browser session that initiates the business services call request host/port user session.

rules
Mandatory guidelines that are not enforced by tooling, but must be followed in order to accomplish the desired results and to meet specified standards.

quote order
In JD Edwards Procurement and Subcontract Management, a request from a supplier for item and price information from which you can create a purchase order.

In JD Edwards Sales Order Management, item and price information for a customer who has not yet committed to a sales order.

secure by default
A security model that assumes that a user does not have permission to execute an object unless there is a specific record indicating such permissions.

Secure Socket Layer (SSL)
A security protocol that provides communication privacy. SSL enables client and server applications to communicate in a way that is designed to prevent eavesdropping, tampering, and message forgery.

SEI implementation
A Java class that implements the methods that declare in a Service Endpoint Interface (SEI).

selection
Found on JD Edwards EnterpriseOne menus, a selection represents functions that you can access from a menu. To make a selection, type the associated number in the Selection field and press Enter.

serialize
The process of converting an object or data into a format for storage or transmission across a network connection link with the ability to reconstruct the original data or objects when needed.

Server Workbench
An application that, during the Installation Workbench process, copies the server configuration files from the Planner data source to the system-release number

data source. The application also updates the Server Plan detail record to reflect completion.

Service Endpoint Interface (SEI) A Java interface that declares the methods that a client can invoke on the service.

SOA Abbreviation for *Service Oriented Architecture*.

softcoding A coding technique that enables an administrator to manipulate site-specific variables that affect the execution of a given process.

source repository A repository for HTTP adapter and listener service development environment artifacts.

spot rate An exchange rate entered at the transaction level. This rate overrides the exchange rate that is set up between two currencies.

Specification merge A merge that comprises three merges: Object Librarian merge, Versions List merge, and Central Objects merge. The merges blend customer modifications with data that accompanies a new release.

specification A complete description of a JD Edwards EnterpriseOne object. Each object has its own specification, or name, which is used to build applications.

Specification Table Merge Workbench An application that, during the Installation Workbench process, runs the batch applications that update the specification tables.

SSL Certificate A special message signed by a certificate authority that contains the name of a user and that user's public key in such a way that anyone can "verify" that the message was signed by no one other than the certification authority and thereby develop trust in the user's public key.

store-and-forward The mode of processing that enables users who are disconnected from a server to enter transactions and then later connect to the server to upload those transactions.

subscriber table Table F98DRSUB, which is stored on the publisher server with the F98DRPUB table and identifies all of the subscriber machines for each published table.

superclass An inheritance concept of the Java language where a class is an instance of something, but is also more specific. "Tree" might be the superclass of "Oak" and "Elm," for example.

supplemental data Any type of information that is not maintained in a master file. Supplemental data is usually additional information about employees, applicants, requisitions, and jobs (such as an employee's job skills, degrees, or foreign languages spoken). You can track virtually any type of information that your organization needs.

For example, in addition to the data in the standard master tables (the Address Book Master, Customer Master, and Supplier Master tables), you can maintain other kinds of data in separate, generic databases. These generic databases enable a standard approach to entering and maintaining supplemental data across JD Edwards EnterpriseOne systems.

table access management (TAM) The JD Edwards EnterpriseOne component that handles the storage and retrieval of use-defined data. TAM stores information, such as data dictionary definitions; application and report specifications; event rules; table definitions; business function input parameters and library information; and data structure definitions for running applications, reports, and business functions.

Table Conversion Workbench An interoperability model that enables the exchange of information between JD Edwards EnterpriseOne and third-party systems using non-JD Edwards EnterpriseOne tables.

table conversion An interoperability model that enables the exchange of information between JD Edwards EnterpriseOne and third-party systems using non-JD Edwards EnterpriseOne tables.

table event rules Logic that is attached to database triggers that runs whenever the action specified by the trigger occurs against the table. Although JD Edwards EnterpriseOne enables event rules to be attached to application events, this functionality is application specific. Table event rules provide embedded logic at the table level.

terminal server A server that enables terminals, microcomputers, and other devices to connect to a network or host computer or to devices attached to that particular computer.

three-tier processing The task of entering, reviewing and approving, and posting batches of transactions in JD Edwards EnterpriseOne.

three-way voucher match In JD Edwards Procurement and Subcontract Management, the process of comparing receipt information to supplier's invoices to create vouchers. In a three-way match, you use the receipt records to create vouchers.

transaction processing (TP) monitor A monitor that controls data transfer between local and remote terminals and the applications that originated them. TP monitors also protect data integrity in the distributed environment and may include programs that validate data and format terminal screens.

transaction processing method A method related to the management of a manual commit transaction boundary (for example, start, commit, rollback, and cancel).

transaction set An electronic business transaction (electronic data interchange standard document) made up of segments.

trigger One of several events specific to data dictionary items. You can attach logic to a data dictionary item that the system processes automatically when the event occurs.

triggering event A specific workflow event that requires special action or has defined consequences or resulting actions.

two-way authentication An authentication mechanism in which both client and server authenticate themselves by providing the SSL certificates to each other.

two-way voucher match In JD Edwards Procurement and Subcontract Management, the process of comparing purchase order detail lines to the suppliers' invoices to create vouchers. You do not record receipt information.

user identification information User ID, role, or *public.

User Overrides merge Adds new user override records into a customer's user override table.

value object A specific type of source file that holds input or output data, much like a data structure passes data. Value objects can be exposed (used in a published business service) or internal, and input or output. They are comprised of simple and complex elements and accessories to those elements.

variance In JD Edwards Capital Asset Management, the difference between revenue generated by a piece of equipment and costs incurred by the equipment.

In JD Edwards EnterpriseOne Project Costing and JD Edwards EnterpriseOne Manufacturing, the difference between two methods of costing the same item (for example, the difference between the frozen standard cost and the current cost is an engineering variance). Frozen standard costs come from the Cost Components table, and the current costs are calculated using the current bill of material, routing, and overhead rates.

versioning a published business service Adding additional functionality/interfaces to the published business services without modifying the existing functionality/interfaces.

Version List merge The Versions List merge preserves any non-XJDE and non-ZJDE version specifications for objects that are valid in the new release, as well as their processing options data.

visual assist Forms that can be invoked from a control via a trigger to assist the user in determining what data belongs in the control.

vocabulary override An alternate description for a data dictionary item that appears on a specific JD Edwards EnterpriseOne form or report.

wchar_t An internal type of a wide character. It is used for writing portable programs for international markets.

web application server A web server that enables web applications to exchange data with the back-end systems and databases used in eBusiness transactions.

web server A server that sends information as requested by a browser, using the TCP/IP set of protocols. A web server can do more than just coordination of requests from browsers; it can do anything a normal server can do, such as house applications or data. Any computer can be turned into a web server by installing server software and connecting the machine to the internet.

Web Service Description Language (WSDL) An XML format for describing network services.

Web Service Inspection Language (WSIL) An XML format for assisting in the inspection of a site for available services and a set of rules for how inspection-related information should be made.

web service proxy foundation Foundation classes for web service proxy that must be included in a business service server artifact for web service consumption on WAS.

web service softcoding record An XML document that contains values that are used to configure a web service proxy. This document identifies the endpoint and conditionally includes security information.

web service softcoding template An XML document that provides the structure for a soft coded record.

Where clause The portion of a database operation that specifies which records the database operation will affect.

Windows terminal server A multiuser server that enables terminals and minimally configured computers to display Windows applications even if they are not capable of running Windows software themselves. All client processing is performed centrally at the Windows terminal server and only display, keystroke, and mouse commands are transmitted over the network to the client terminal device.

wizard A type of JDeveloper extension used to walk the user through a series of steps.

workbench A program that enables users to access a group of related programs from a single entry point. Typically, the programs that you access from a workbench are used to complete a large business process. For example, you use the JD Edwards EnterpriseOne Payroll Cycle Workbench (P07210) to access all of the programs that the system uses to process payroll, print payments, create payroll reports, create journal entries, and update payroll history. Examples of JD Edwards EnterpriseOne workbenches include Service Management Workbench (P90CD020), Line Scheduling Workbench (P3153), Planning Workbench (P13700), Auditor's Workbench (P09E115), and Payroll Cycle Workbench.

work day calendar In JD Edwards EnterpriseOne Manufacturing, a calendar that is used in planning functions that consecutively lists only working days so that component and work order scheduling can be done based on the actual number of work days available. A work

day calendar is sometimes referred to as planning calendar, manufacturing calendar, or shop floor calendar.

workflow The automation of a business process, in whole or in part, during which documents, information, or tasks are passed from one participant to another for action, according to a set of procedural rules.

workgroup server A server that usually contains subsets of data replicated from a master network server. A workgroup server does not perform application or batch processing.

XAPI events A service that uses system calls to capture JD Edwards EnterpriseOne transactions as they occur and then calls third-party software, end users, and other JD Edwards EnterpriseOne systems that have requested notification when the specified transactions occur to return a response.

XML CallObject An interoperability capability that enables you to call business functions.

XML Dispatch An interoperability capability that provides a single point of entry for all XML documents coming into JD Edwards EnterpriseOne for responses.

XML List An interoperability capability that enables you to request and receive JD Edwards EnterpriseOne database information in chunks.

XML Service An interoperability capability that enables you to request events from one JD Edwards EnterpriseOne system and receive a response from another JD Edwards EnterpriseOne system.

XML Transaction An interoperability capability that enables you to use a predefined transaction type to send information to or request information from JD Edwards EnterpriseOne. XML transaction uses interface table functionality.

XML Transaction Service (XTS) Transforms an XML document that is not in the JD Edwards EnterpriseOne format into an XML document that can be processed by JD Edwards EnterpriseOne. XTS then transforms the response back to the request originator XML format.

Z event A service that uses interface table functionality to capture JD Edwards EnterpriseOne transactions and provide notification to third-party software, end users, and other JD Edwards EnterpriseOne systems that have requested to be notified when certain transactions occur.

Z table A working table where non-JD Edwards EnterpriseOne information can be stored and then processed into JD Edwards EnterpriseOne. Z tables also can be used to retrieve JD Edwards EnterpriseOne data. Z tables are also known as interface tables.

Z transaction Third-party data that is properly formatted in interface tables for updating to the JD Edwards EnterpriseOne database.

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