JD Edwards EnterpriseOne Applications

Integration with Oracle Transportation Management Implementation Guide

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Preface

Welcome to the JD Edwards EnterpriseOne Applications Integration with Oracle Transportation Management Implementation Guide.

Audience

This guide is intended for implementers and end users who are integrating JD Edwards EnterpriseOne with the Oracle Transportation Management system.

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 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 Applications Financial Management Fundamentals Implementation Guide.
- JD Edwards EnterpriseOne Applications Human Capital Management Fundamentals Implementation Guide
- JD Edwards EnterpriseOne Applications Customer Relationship Management Fundamentals Implementation Guide.

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Related Documents

You can access related documents from the JD Edwards EnterpriseOne Release Documentation Overview pages on My Oracle Support. Access the main documentation overview page by searching for the document ID, which is 1308615.1, or by using this link:

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To navigate to this page from the My Oracle Support home page, click the Knowledge tab, and then click the Tools and Training menu, JD Edwards EnterpriseOne, Welcome Center, Release Information Overview.

Conventions and Screen Images

The following text conventions are used in this document:

Convention	Meaning
Bold	Indicates field values, important terms, and emphasis.
Italics	Indicates emphasis and JD Edwards EnterpriseOne or other book-length publication titles.
Monospace	Indicates a JD Edwards EnterpriseOne program, other code example, or URL.

Additionally, some screen images in this guide have been retained from the previous release to preserve the information represented in the screen images. As a result, some screen images might not reflect the most current user interface in the JD Edwards EnterpriseOne software.

Introduction to JD Edwards EnterpriseOne Integration with Oracle Transportation Management

This chapter contains the following topics:

Section 1.1, "JD Edwards EnterpriseOne Integration with Oracle Transportation Management Overview"

1.1 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.

1.1.1 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 simultaneously.

1.1.2 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.

1.1.3 Functional Interface

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

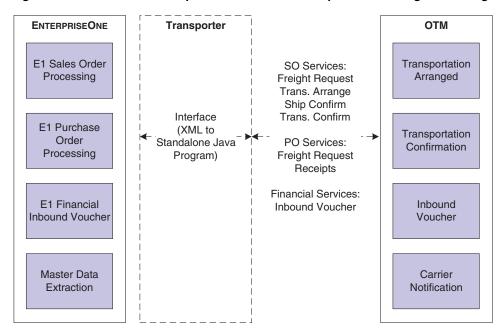
Functional Area	Description
Sales Order Management	You create sales orders in the JD Edwards EnterpriseOne Sales Order Management system. The JD Edwards EnterpriseOne system sends the sales order information to the Oracle Transportation Management system to arrange transportation for the sold inventory. 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.

Functional Area	Description
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.

1.1.4 Integrations

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

Figure 1–1 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 through HTTP post. The system transmits the data in XML format based on the Oracle Transportation Management Schema. The Schema name is GLogXML-v2001.xsd.

The sales order integration points include:

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

The purchase order integration points include:

- **1.** Purchase Order Freight Request.
- 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.

Integrating JD Edwards EnterpriseOne with **Oracle Transportation Management**

This chapter contains the following topics:

- Section 2.1, "Understanding the JD Edwards EnterpriseOne to Oracle Transportation Management Integration"
- Section 2.2, "Activating the JD Edwards EnterpriseOne Integration to Oracle Transportation Management"
- Section 2.3, "Setting Up Transportation Planning Integration Constants"
- Section 2.4, "Setting Up Cross Reference Data"
- Section 2.5, "Setting Up Shipping Document and Line Type Combinations"
- Section 2.6, "Executing Outbound Transmissions from JD Edwards EnterpriseOne to Oracle Transportation Management"
- Section 2.7, "Executing Inbound Transmissions from Oracle Transportation Management to JD Edwards EnterpriseOne"
- Section 2.8, "Extracting Master Data"
- Section 2.9, "Assumptions and Requirements of the Integration Process"

2.1 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:

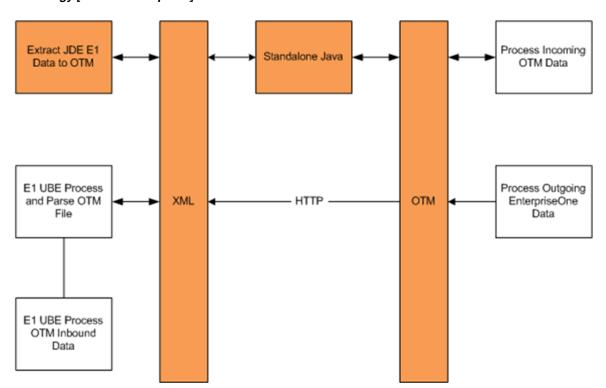


Figure 2–1 JD Edwards EnterpriseOne to Oracle Transportation Management Process Flow and Technology [Release 9.1 Update]

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.

2.2 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.

2.2.1 Understanding the JD Edwards EnterpriseOne Integration to Oracle **Transportation Management**

Before you can use the features of the ID 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.

2.2.2 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.

2.3 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.

2.3.1 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.

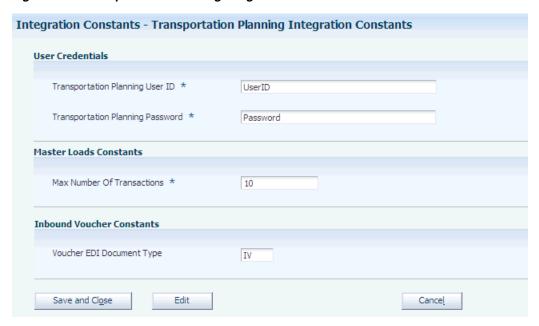
2.3.2 Form Used to Set Up Transportation Planning Integration Constants

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

2.3.3 Setting Up Transportation Planning Integration Constants

Access the Transportation Planning Integration Constants form.

Figure 2–2 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 equals 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.

2.4 Setting Up Cross Reference Data

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

2.4.1 Understanding Cross-Reference Data

Cross-referencing static data between JD Edwards EnterpriseOne and Oracle Transportation Management minimizes manual data configuration in both systems and is required for successful outbound data extraction and inbound data import. When JD Edwards EnterpriseOne extracts data to send to Oracle Transportation Management, the export UBE Sales Freight Request Export (R49T10), Procurement Freight Request export (R49T100), Sales Confirmation Export (R49T30), Corporation Extraction UBE (R49T70) and Locations Extraction UBE (R49T80) programs validate against the cross-referenced values. Similarly, when the Oracle Transportation

Management transmits shipment information to JD Edwards EnterpriseOne, the import UBE Sales Transportation Arranged Import (R49T20), Sales Transportation Confirmation Import (R49T40) and Inbound Transmission Master Router/Parser (R49T90) programs validate the cross-referenced values. You use the X-Ref Application (P49T01) program to enter cross-reference data. The cross-referenced static data types include:

- Country codes.
- Currency codes.
- Units of measure.
- Freight UDC.
- Mode of transport UDC.
- NMFC Class.
- Commodity.
- User defined commodity.
- Hazardous class.
- Packaging group.
- Temperature type.
- Hazard label.
- Freight handling code.
- Special handling code.

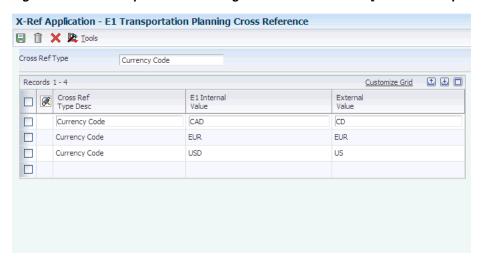
2.4.2 Form Used to Set Up Cross-Reference Data

Form Name	FormID	Navigation	Usage
E1 Transportation Planning Cross	W49T01A	Setup (G49T41), X-Ref Application.	To set up cross-reference data.
Reference		On the E1 Transportation Planning Cross Reference - Browse form, click Add.	

2.4.3 Setting Up Cross Reference Data

Access the E1 Transportation Planning Cross Reference form.

Figure 2–3 E1 Transportation Planning Cross Reference form [Release 9.1 Update]



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.

2.5 Setting Up Shipping Document and Line Type Combinations

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

2.5.1 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 enables shipment creation for 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.

2.6 Executing Outbound Transmissions from JD Edwards EnterpriseOne to Oracle Transportation Management

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

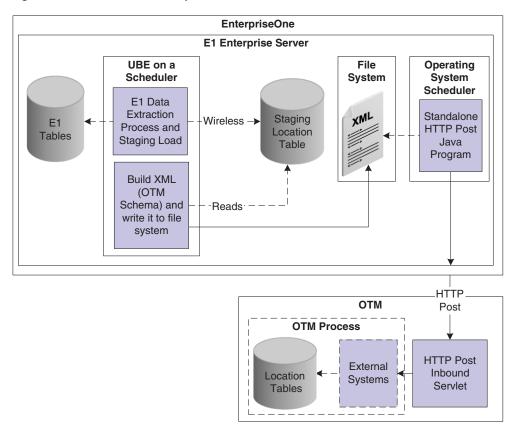
2.6.1 Understanding Outbound Transmissions from JD Edwards EnterpriseOne to **Oracle Transportation Management**

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 through HTTP Post.

2.6.2 The Outbound Transmissions Process

This diagram illustrates the outbound transmission process:

Figure 2-4 JD Edwards EnterpriseOne Outbound Transmissions



These specifications apply:

- The Java program sends XML formatted files to Oracle Transportation Management through HTTP Post sequentially based upon time.
- 2. There are no data validations performed against the XML file.
- 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.

2.7 Executing Inbound Transmissions from Oracle Transportation Management to JD Edwards EnterpriseOne

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

2.7.1 Understanding Inbound Transmissions from Oracle Transportation Management to JD Edwards EnterpriseOne

Oracle Transportation Management sends XML-formatted data to JD Edwards EnterpriseOne through 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).

2.7.2 The Inbound Transmissions Process

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

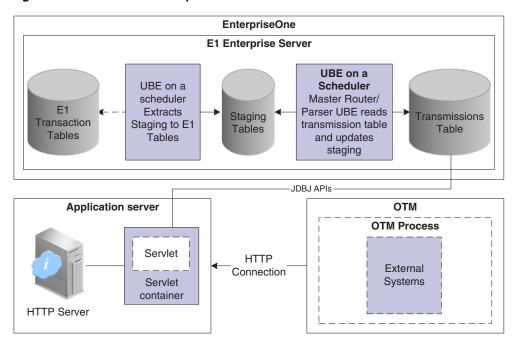


Figure 2–5 JD Edwards EnterpriseOne Inbound Transmissions

The inbound integration process has three stages:

- Stage 1: Oracle Transportation Management to Application Server. Oracle Transportation Management classifies shipment transmissions as either Transportation Arranged or Transportation Confirmation by the hard-coded transmission header remark of "TRANSPORTATION ARRANGED" or TRANS CONFIRMATION", respectively. The voucher transmission requires the hard-coded transmission header remark of 'VOUCHER'. Oracle Transportation Management uses HTTP Post to send the shipment and voucher transmissions to the JD Edwards EnterpriseOne system. The httpReceive servlet receives the HTTP Post, updates the Inbound Transmissions (F49T90) table and sends an acknowledgment 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 acknowledgment to Oracle Transportation Management (TransAck XML) document is based on GLogXML-v2001.xsd TransAck schema.
- 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:
 - Initializes XML DOM Parser and creates a document.
 - Parses the document, thereby locating the transaction types and calling the appropriate Parser function to process the elements.
 - Deletes the transmission records from the Inbound Transmissions table after successfully extracting records from the Inbound Transmissions table into the staging tables.

Caution: 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.

- **d.** Execution is required before the execution of import UBE Sales Transportation Arranged Import (R49T20) and Sales Transportation Confirmation Import (R49T40).
- 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.

2.8 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).

2.8.1 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:

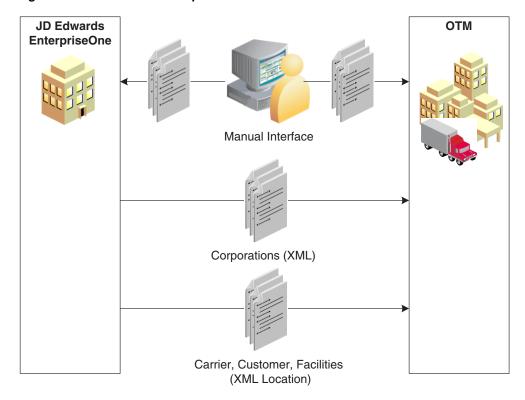


Figure 2–6 JD Edwards EnterpriseOne Master Data Extraction

The Master Data requirements:

- The order in which the Master Data synchronization occurs is as follows:
 - 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.

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

2.8.2 Running the Corporation Extraction Program.

Select Periodic Processing (G49T20), Corporations Upload

2.8.3 Setting the Processing Options for Corporation Extraction (R49T70).

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

2.8.3.1 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.

2.8.4 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

2.8.5 Setting the Processing Options for Locations Extraction (R49T80).

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

2.8.5.1 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.

2.9 Assumptions and Requirements of the Integration Process

This section discusses assumptions and requirements of the integration process:

2.9.1 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.

2.9.2 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 within the Oracle Transportation Management system.

2.9.3 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.

2.9.4 Freight Charges

Manually apply shipment level accessorial charges to shipments in the Oracle Transportation Management system before 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 before 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.

2.9.5 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.

2.9.6 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.

2.9.7 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.

2.9.8 Oracle Transportation Management Domains

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

2.9.9 Purging

When data becomes obsolete or you need more disk space, you can use purge programs to remove data. This improves system performance. The Purge Detail to History (R42996) program supports purging sales order detail data for this integration. Purging data consists of:

- Specifying information to delete.
- Running the purge program.
- Running the table reorganization program to rebuild the table structure.

The purge can be done through the sales update process or purge detail to history process.

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

This chapter contains the following topics:

- Section 3.1, "Understanding Integrating JD Edwards EnterpriseOne Sales Order Management with Oracle Transportation Management"
- Section 3.2, "Sales Freight Request"
- Section 3.3, "Sales Transportation Arranged"
- Section 3.4, "Sales Order Confirmation"
- Section 3.5, "Sales Transportation Confirmation,"

3.1 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:

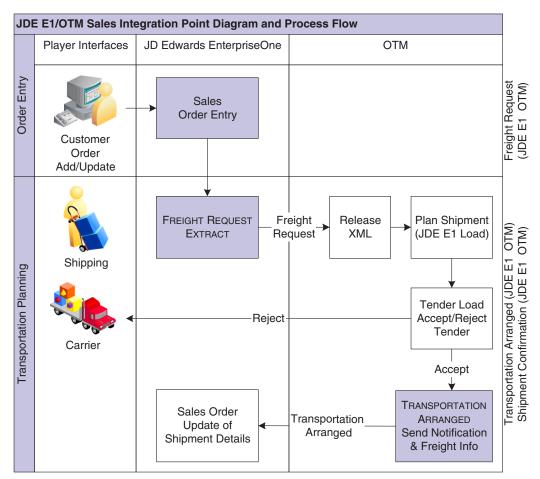
Integration Point	Description	
Sales Freight Request	1.	You enter and update the sales orders.
	2.	The JD Edwards EnterpriseOne system extracts the data and places it in an XML request file and sends it to Oracle Transportation Management.
	3.	The Oracle Transportation Management system creates shipments 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	De	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 release 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 release 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 promised delivery date, and updates the sales order status.	

3.1.1 Sales Integration Process Flow

This diagram illustrates the sales integration process flow:

Figure 3–1 JD Edwards EnterpriseOne Sales Integration to Oracle Transportation Management (1 of 2)



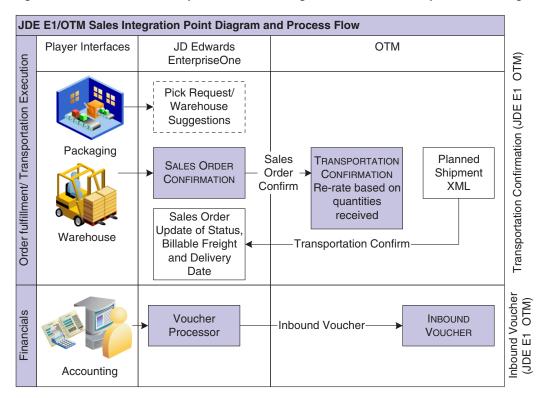


Figure 3–2 JD Edwards EnterpriseOne Sales Integration to Oracle Transportation Management (2 of 2)

3.1.2 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.

3.1.2.1 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 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.

3.1.2.2 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
- Backordered order lines that Oracle Transportation Management received before the order lines were backordered.
- Canceled order lines that Oracle Transportation Management received before cancellation.
- Held order lines that Oracle Transportation Management received before the order lines were placed on hold.
- 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.
- Backordered order lines.
- Canceled order lines.

Note: When orders lines are placed on hold, backordered, or canceled after freight request, JD Edwards EnterpriseOne Sales Order Management system flags the canceled, backordered, 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.

3.1.2.3 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.

3.2 Sales Freight Request

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

- Sales Freight Request prerequisites.
- Sales Freight Request assumptions.
- 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).

3.2.1 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.

3.2.2 Prerequisites

These prerequisites apply for Sales Freight Request. You must:

- Set up the parent address book data for all customers that the JD Edwards EnterpriseOne Sales Order Management system sends to Oracle Transportation Management.
- 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.

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

3.2.3 Sales Freight Request Assumptions

These assumptions apply to the function of Sales Freight Request:

- 1. Items are transmitted within the Freight Request integration point at the transaction level.
- 2. Since item information is transmitted at the transaction level, you must set up the options and equipment parameters within the Oracle Transportation Management system. After the ID Edwards EnterpriseOne system transmits the freight request transmission, you can apply any options and equipment rules from within the Oracle Transportation Management system.
- **3.** The JD Edwards EnterpriseOne system does not extract services or non-stock line type items that do not have weight or volume associated with the transaction. Thus, the ID Edwards EnterpriseOne system bypasses the sales order line during Freight Request and does not select it for extraction. However, if a weight and volume is associated with the transaction, the JD Edwards EnterpriseOne system extracts the non-stock or service item.
- 4. The JD Edwards EnterpriseOne system transmits the short item number concatenated with the transactional unit of measure and branch/plant to represent the Oracle Transportation Management object packaged_item
- The JD Edwards EnterpriseOne system extracts the sales order override address upon entry of the sales order and update of transportation critical values at sales order update. However, the JD Edwards EnterpriseOne system does not detect updates to the override address unless accompanied by a simultaneous change in a transportation critical field. Accordingly, you should complete isolated changes to the override address information in the Oracle Transportation Management system.
- **6.** Order quantities can be expressed in fractional numbers in the JD Edwards EnterpriseOne system; whereas in the Oracle Transportation Management system, order quantities are always expressed as whole numbers. Therefore, the JD Edwards EnterpriseOne system extracts order quantities into the packaged item count as a round up whole number at the time the Freight Request Order Release XML is built.
- **7.** Warehouse pick requests are prevented during sales order entry.
- 8. Configured and kit items are processed as discrete (parent) end items. The kit parent item weight and volume are calculated by accumulating the weight and volume of all shippable components.
- **9.** If a sales order is created with foreign currency, the staged amount contains unconverted decimals. The XML builder converts the decimals.
- 10. The JD Edwards EnterpriseOne system transmits the extended price on the sales order line to the Oracle Transportation Management system by data mapping to the Declared Value element in the Oracle Transportation Management system.

3.2.4 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:

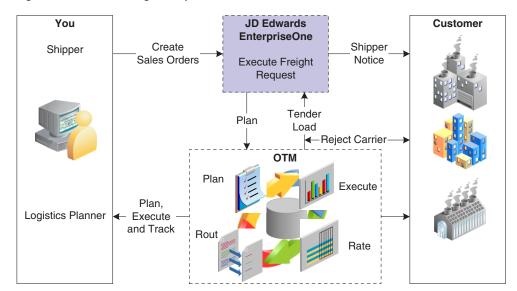


Figure 3–3 Sales Freight Request Process Flow

The process is threefold:

- 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.
- 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.
- 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.

3.2.5 Sales Freight Request Data Processing

This section discusses data mapping clarifications and data processing:

3.2.5.1 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.

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.
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.

3.2.5.2 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 bypasses 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 <i>No Data Selected</i> if the data selection fails.					

3.2.6 Running the Sales Freight Request Export Program

Select Sales Order Processing (G49T11), Freight Request.

3.2.7 Setting Processing Options for Sales Freight Request Export (R49T10)

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

3.2.7.1 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.

3.2.7.2 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.

3.3 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.

3.3.1 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.

3.3.2 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.
- Order changes are made within ID Edwards EnterpriseOne Sales Order Management and any changes originating in Oracle Transportation Management may create data integrity issues.
- The freight handling code is required in the sales order header for billable freight-charge availability work center processing.
- The Oracle Transportation Management system generates the interim and final delivery date.
- Oracle Transportation Management shipment planning calculations are based on weight and volume. For non-decimal and non-split decimal quantities, if the imported Oracle Transportation Management weight or volume associated to a sales order line is not equivalent to the actual JD Edwards EnterpriseOne sales order line's extended weight or volume within a tolerance of one transactional weight or volume unit then the JD Edwards EnterpriseOne system bypasses the transmitted shipment and flags all staged records for the current transmission, shipment, or domain as erred in the staging table. For split decimal quantities, the ID Edwards EnterpriseOne system validates that the Oracle Transportation Management planned shipment weight or volume is within one transactional unit (for example, each, box, case) of the actual weight or volume of the associated EnterpriseOne sales order line. If not, the same error processing above for non-decimal and non-split decimal quantity discrepancies occurs. The user must manually replan the shipment to prevent the weight or volume discrepancy within the JD Edwards EnterpriseOne system and send the Transportation Arrangement message from Oracle Transportation Management to JD Edwards EnterpriseOne again.
- If you cancel an entire order release within the JD Edwards EnterpriseOne system and it is the only order release which exists on the Oracle Transportation Management shipment after transportation arranged, the Oracle Transportation Management system releases the shipment tender and deletes the shipment through the ORDER-RELEASE DELETE agent in the Oracle Transportation Management system.

3.3.3 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:

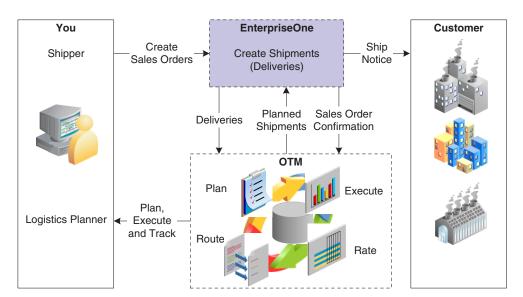


Figure 3–4 Sales Transportation Arranged Process Flow

3.3.4 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:

3.3.4.1 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.

3.3.4.2 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).

3.3.4.3 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).

3.3.4.4 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.

3.3.4.5 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.

3.3.4.6 Sales Order Line Update

For all sales order lines that are received from Oracle Transportation Management, the ID 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.

3.3.4.7 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.

3.3.4.8 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.

3.3.5 Running the Sales Transportation Arranged Program

Select Sales Order Processing (G49T11), Transportation Arranged.

3.3.6 Setting Processing Options for Sales Transportation Arranged (R49T20)

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

3.3.6.1 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. The system uses a pick request 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.

3.4 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).

3.4.1 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 a Release and 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.

3.4.2 Sales Order Confirmation Assumptions

These assumptions apply to the Sales Order Confirmation integration point:

1. If the Ship Confirm (P4205) program processing option is set to *not* relieve inventory, the system functions to execute pack confirm and the Oracle Transportation Management state flag does not update to SC (ship confirm). The status remains at TA (transportation arranged). Upon quantity change to the order line when the Ship Confirm program is executed, the JD Edwards EnterpriseOne system does not transmit the quantity difference to the Oracle Transportation Management system. Thus the quantity within JD Edwards EnterpriseOne and Oracle differs between the execution of pack confirmation and ship confirmation. The Oracle Transportation Management system is updated with the JD Edwards EnterpriseOne quantity at the time of sales order confirmation.

If the Ship Confirm program processing option is set to relieve inventory, the JD Edwards EnterpriseOne system executes ship confirm and the Oracle Transportation Management state flag updates to reflect the sales order confirmation (SC) state at the time of sales order confirmation.

Note: The Inventory Relief flag processing option is located on the Process tab of the Ship Confirm program.

- 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.
- The Ship Confirm processing option that overrides line types is disabled. This prevents anyone from overriding sales order lines that are set up for interface to the Oracle Transportation Management system.
- 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 JD Edwards EnterpriseOne system transmits the staging table records to Oracle Transportation Management as an actual shipment message and request for transportation confirmation.
- For transportation document reference, the JD Edwards EnterpriseOne system transmits the JD Edwards EnterpriseOne shipment number to the Oracle Transportation Management system at sales order confirmation.
- Dual Unit of Measure:
 - For dual unit of measure items with the DPPO flag turned on and you ship confirm by a secondary quantity that is less than the primary quantity, you must cancel the remaining secondary quantity to transmit it to the Oracle Transportation Management system.
 - For dual unit of measure items with the DPPO flag turned on, the actual weight may not be equal to the weight transmitted to the Oracle Transportation Management system during shipment confirmation.

Kit Items:

- The JD Edwards EnterpriseOne system transmits the kit parent information only to the Oracle Transportation Management system.
- The only association between the kit component lines and the Oracle Transportation Management shipment is through the kit parent.
- The Sales Order Confirmation integration point calculates the weight and volume of the kit parent by accumulating the weight and volume of all shipped components.
- For kits a kit parent item has passed through Freight Request, Transportation Arranged, and shipped entirely at Ship Confirmation. The Sales Order Ship Confirmation integration point confirms the parent kit item and not each component line. The Oracle Transportation Management system only updates the parent item as being shipped.
- For kits, when line splits occur due to serialized items or multiple shipping locations, the JD Edwards EnterpriseOne system does not disassociate the kit

- parent and its components. The system accumulates the weight and volume of the components to calculate the weight of the kit parent.
- 10. During sales order confirmation components may become orphan from the kit parent.

3.4.3 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:

Ship Sales Order Confirmation Confirmation **Application Extraction UBE** Confirmation **New Seals** Evaluation Application Processing SO Confirmation Confirm Sales Orderline of Sales Extraction Post (Java **OTM** Orderlines **HTTP** Sales Post) Orderline Actual Detail Sales Order Actual Shipment Staging Status Shipment Update Processing **Tables New Sales** Ready for **OTM State** Orderline Transport Flag Update Tag Processing Order Release & Actual

Figure 3-5 Sales Order Confirm

Bypass E1

TMS Processing

The sales confirmation process includes three steps:

Error Processing

The Shipment Confirmation (P4205) and Inbound Transaction Processor (R47500) 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 enables you to populate OTM Seal Numbers (P49T380).

Shipment XML

Error Report

- **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.

3.4.4 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.

3.4.4.1 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:

- Order line data extraction:
 - a. The JD Edwards EnterpriseOne system extracts and stages confirmed order lines, including any changed quantities, for transmission to Oracle Transportation Management.
 - **b.** The JD Edwards EnterpriseOne system extracts and stages unshipped back ordered or canceled order lines for transmission 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 cleared to enable subsequent Freight Request of the unshipped back ordered order lines.
 - The JD Edwards EnterpriseOne shipment number that is associated with an order line and derived at Transportation Arranged is 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. To enable Oracle Transportation Management reports to include the customer purchase order, the JD Edwards EnterpriseOne 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 as a reference value qualified as "CUST_PO".

See Sales Order Confirmation Assumptions.

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

3.4.4.2 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.

3.4.5 Running the Sales Order Confirmation Export Program

Select Sales Order Processing (G49T11), SO Confirmation.

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

3.4.6 Setting Processing Options for Sales Confirmation Export (R49T30)

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

3.4.6.1 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.

3.5 Sales Transportation Confirmation

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

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

3.5.1 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:

- Enables the extraction of the Oracle Transportation Management-transported data, which is stored in new staging tables.
- 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.

3.5.2 Sales Transportation Confirmation Assumptions

These assumptions apply to the Sales Transportation Confirmation integration point:

- Users must set up sell-side shipments in the Oracle Transportation Management system to transmit billable freight charges back into the JD Edwards EnterpriseOne system.
- The JD Edwards EnterpriseOne system consolidates freight charges (base, accessorial, and miscellaneous) per order release. Allocated charges, both billable and payable, are stored in and accessed from the Oracle Transportation Management system.

3.5.3 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:

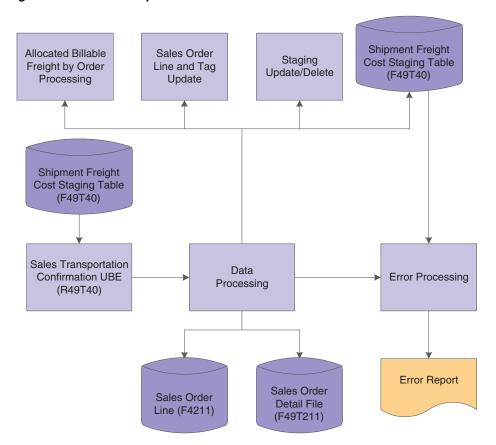


Figure 3–6 Sales Transportation Confirmation Process Flow

The Transportation Confirmation Import (R49T40) program runs on a scheduler system or standalone and upon execution imports all records associated to an Oracle Transportation Management shipment ID the staging table to determine whether 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:

- Allocates billable freight by order release. 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.
- Updates the promised delivery date and promised delivery time
- Updates all sales order lines next statuses for which billable freight costs have been imported.

3.5.4 Running the Transportation Confirmation Import Program

Select Sales Order Processing (G49T11), Transportation Confirmation.

3.5.5 Setting Processing Options for Transportation Confirmation Import (R49T40)

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

3.5.5.1 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 by passes 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 on the Imported Shipment.

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

Integrating JD Edwards EnterpriseOne **Procurement with Oracle Transportation** Management

This chapter contains the following topics:

- Section 4.1, "Understanding Integrating JD Edwards EnterpriseOne Procurement with Oracle Transportation Management"
- Section 4.2, "Procurement Freight Request"

4.1 Understanding Integrating JD Edwards EnterpriseOne Procurement with Oracle Transportation Management

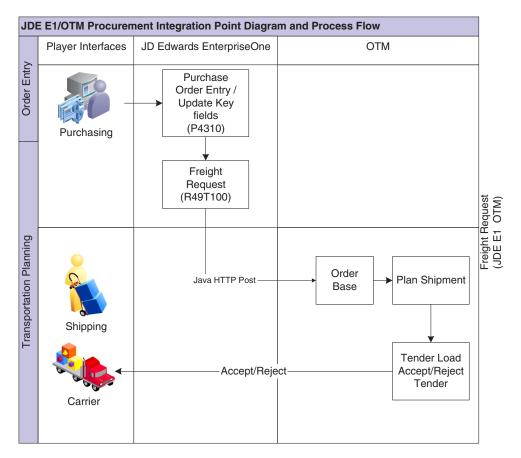
The Oracle Transportation Management system delivers robust transportation planning and execution capabilities for manufacturers, retailers, distributors, and third-party logistics providers. The JD Edwards EnterpriseOne Procurement system communicates with the Oracle Transportation Management through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

Integration Point	De	scription					
Procurement Freight Request	1.	You enter or update the purchase orders.					
		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 ke fields include: — Hold Status. The purchase order is placed or					
		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. 					

4.1.1 Procurement Integration Process Flow

This diagram illustrates the procurement integration process flow:

Figure 4–1 JD Edwards EnterpriseOne Procurement Integration to Oracle Transportation Management (1 of



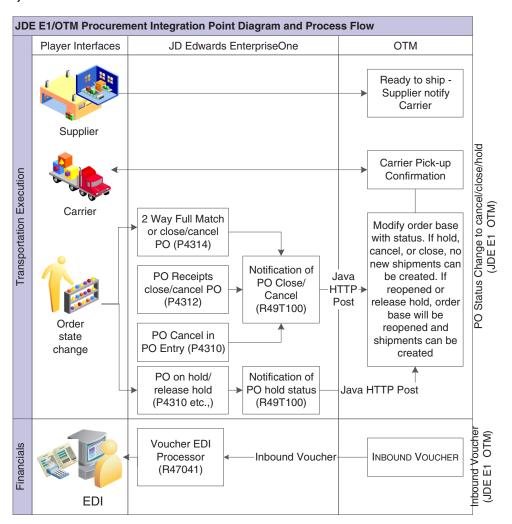


Figure 4–2 JD Edwards EnterpriseOne Procurement Integration to Oracle Transportation Management (2 of

4.1.2 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.

4.1.2.1 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 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.

4.1.2.2 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 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 before 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.

4.1.2.3 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.

4.2 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).

4.2.1 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. 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.

4.2.2 Prerequisites

These prerequisites apply for Procurement Freight Request. You must:

- Set up the parent address book data for all suppliers that the JD Edwards EnterpriseOne Procurement system sends to Oracle Transportation Management.
- 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.

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

4.2.3 Procurement Freight Request Assumptions

These assumptions apply to the Freight Request integration point:

- When closing or canceling a line in ID 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.
- The JD Edwards EnterpriseOne system calculates the weight and volume of the parent kit item by accumulating the weight and volume of all shippable components.
- The JD Edwards EnterpriseOne system does not extract services or non-stock line type items that do not have weight or volume associated with the transaction. Thus, the JD Edwards EnterpriseOne system bypasses the purchase order line during Freight Request and does not select it for extraction. However, if a weight and volume is associated with the transaction, the JD Edwards EnterpriseOne system extracts the non-stock or service item.
- Order quantities can be expressed in fractional numbers in the JD Edwards EnterpriseOne system; whereas in the Oracle Transportation Management system, order quantities are always expressed as whole numbers. Therefore, the JD Edwards EnterpriseOne system extracts order quantities into the packaged item count as a round up whole number at the time the Freight Request Order Release XML is built.
- If the JD Edwards EnterpriseOne system places a purchase order on hold or cancels it after transmitting the freight request, orders are not removed from the

- order base in Oracle Transportation Management but instead the status is changed to "Hold Releasing" or "Cancel Releasing."
- **8.** If an order line is eligible for extraction to the Oracle Transportation Management system, the shipment details in the purchase order grid are disabled in the inquiry mode. In the Add mode, if the user enters shipment details such as carrier or mode of transport, the system blanks out those details and, after issuing a warning, disables the grid columns.
- **9.** In some exceptional cases such as a partial receipt reversal upon over receipts, the quantities may differ between the Oracle Transportation Management and JD Edwards EnterpriseOne systems. Thus, whenever a receipt is reversed, it is necessary to manually check the quantities in both systems to ensure that both systems are synchronized.
- **10.** The JD Edwards EnterpriseOne system does not receive message transmissions from the Oracle Transportation Management system, except voucher information.
- 11. The JD Edwards EnterpriseOne system transmits short item number along with its assigned Branch/Plant to the Oracle Transportation Management system.
 - You should complete procurement order entry override address changes within the Oracle Transportation Management system after the initial freight request.
- **12.** There is no programmatic process which prevents the Freight Request program from selecting JD Edwards EnterpriseOne transportation orders or blanket orders. Customers must set up valid UDC values in the UDC 49/TP table to exclude these types of orders.
- **13.** If a procurement order is created with foreign currency, the staged amount contains unconverted decimals. The XML builder converts the decimals.
- **14.** The JD Edwards EnterpriseOne system transmits the extended price on the purchase order line to the Oracle Transportation Management system by data mapping to the Declared Value element in the Oracle Transportation Management system.

4.2.4 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:

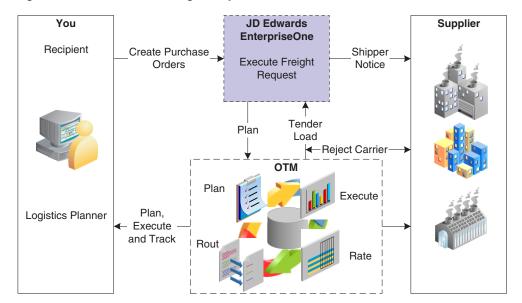


Figure 4–3 Procurement Freight Request Process Flow

The process is twofold:

- 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.
- 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.

4.2.5 Procurement Freight Request Data Processing

This section discusses data mapping clarifications and data processing:

4.2.5.1 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.				
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.				

Data	Description
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.

4.2.5.2 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 bypasses 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.
Credit Order	Credit order quantities and ship from becomes ship to and vice versa are reversed upon extraction.

Functional Area

Comments

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.

4.2.6 Running the Procurement Freight Request Extract Program

Select Purchase Order Processing (G49T12), Freight Request.

4.2.7 Setting Processing Options for Procurement Freight Request Extract (R49T100)

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

4.2.7.1 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.

4.2.7.2 **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.

Understanding Inbound Voucher

This chapter contains the following topics:

Section 5.1, "Inbound Voucher"

5.1 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).

5.1.1 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 the 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.

5.1.1.1 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.

5.1.1.2 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.

5.1.2 Inbound Voucher Assumptions

These assumptions apply to the Inbound Voucher integration point:

- There are no freight allocations.
- Taxes are calculated by the JD Edwards EnterpriseOne system. 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 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.

5.1.3 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.

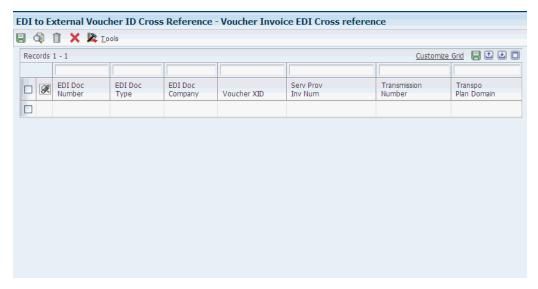
5.1.4 Form Used to Inquire on Voucher ID Cross Reference

Form Name	FormID	Navigation	Usage			
Voucher Invoice EDI Cross reference	oucher Invoice EDI W49T60F		Inquire on voucher invoice EDI cross-references.			

5.1.5 Inquiring on Voucher ID Cross Reference

Access the Voucher Invoice EDI Cross Reference form.

Figure 5–1 Voucher Invoice EDI Cross Reference form [Release 9.1 Update]



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.

5.1.6 Running the Inbound Transmissions Master Program

Select Sales Order Processing (G49T11), Inbound Processor.

Select Purchase Order Processing (G49T12), Inbound Processor.

5.1.7 Setting Processing Options for Inbound Transmissions Master (R49T90)

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

5.1.7.1 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.

5.1.7.2 Versions

1. Version of R47041 Inbound EDI Voucher Edit/Create

Specify the version of the EDI Voucher Edit/Create (R47041) UBE the system runs. 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 the system runs. 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 the system runs. If left blank, the system runs version XJDE000.

Integrating JD Edwards EnterpriseOne Kit **Processing with Oracle Transportation** Management

This chapter contains the following topics:

Section 6.1, "Understanding Integrating JD Edwards EnterpriseOne Kit Processing with Oracle Transportation Management"

6.1 Understanding Integrating JD Edwards EnterpriseOne Kit Processing with Oracle Transportation Management

The JD Edwards EnterpriseOne system provides accurate kit information in the outbound messages sent in the Freight Request and Sales Order Confirmation integration points. The JD Edwards EnterpriseOne system totals the weight and volume of all kit components to reflect the weight and volume of the kit parent item.

When the system processes a component apart from the kit parent, the system processes the component as a regular sales order line. For example, if the system releases the component from back order without the kit parent, the line becomes eligible to have a freight request created. Likewise, if a component is shipped without the kit parent, the system adds the component to the current shipment and sends it outbound in the Order Release and Actual Shipment XML produced at the Sales Order Confirmation integration point.

6.1.1 Sales Freight Request Export (R49T10) Program

The Sales Freight Request Export (R49T10) program calls a function to accumulate the weight and volume of all components associated with a kit parent and updates the associated sales order detail record (F4211).

6.1.2 Sales Order Confirmation Export (R49T30) Program

The Sales Order Confirmation Export (R49T30) program calls a function to accumulate the weight and volume of all components associated with a kit parent and updates the associated cache and sales order detail records (F4211).

6.1.3 Procurement Freight Request Export (R49T100) Program

The Procurement Freight Request Export (R49T100) program calls a function to accumulate the weight and volume of all components associated with a kit parent and updates the associated purchase order detail record (F4311).

6.1.4 Back Order Release (P42117) Program

The Back Order Release (P42117) program inserts a record into the Sales Order Detail file — Secondary Tag File (F49T211) table when a component line is released from back order without the parent line or left on back order when the parent is released.

During Back order Release the release of the sales order line from back order and the hard commitment of inventory occur in separate phases of the process. This two phase approach may lead to orphaned component and kit parent lines that are both on back order. This occurs when the system releases a component from back order; causing the component to be orphaned from the kit parent. Furthermore, if inventory is insufficient the system places the released line on back order again during the hard commit process.

Note: The JD Edwards EnterpriseOne system inserts a record into the F49T211 table only if the order type and line type combination has been updated into the 49/TP UDC table.

6.1.5 Shipment Confirmation (P4205) Program

The Shipment Confirmation (P4205) program inserts a record into the F49T211 table when the JD Edwards EnterpriseOne system:

- Fully or partially confirms component lines without confirming the kit parent.
- Fully or partially back order component lines without back ordering the kit parent.
- Leaves partial component lines shippable without leaving the kit parent shippable.
- Back orders partial component lines without back ordering the kit parent.

Based upon the insertion of the F49T211 records, the JD Edwards EnterpriseOne system functions according to the following conditions:

- When the Shipment Confirmation program inserts F49T211 records for kit components converted to shipped lines, the JD Edwards EnterpriseOne system flags the F49T211 records with a state flag value of "SC" for subsequent creation of the corresponding Order Release and Actual Shipment messages through the Sales Order Confirmation Export program to transmit the shipped lines to the Oracle Transportation Management system.
- When the Shipment Confirmation program inserts F49T211 records for kit components converted to packed lines, the JD Edwards EnterpriseOne system flags the F49T211 records with a state flag value of "TA" for subsequent shipment confirmation of the packed line.
- If the Shipment Confirmation program inserts F49T211 records for back ordered lines, the JD Edwards EnterpriseOne system flags the F49T211 records with a blank state flag value indicating eligibility of the order line for Sales Freight Request program processing upon back order release. The JD Edwards EnterpriseOne system subsequently creates the corresponding Order Release message through the Sale Freight Request Export program to transmit the back order released lines to the Oracle Transportation Management system.
- If the Shipment Confirmation program inserts F49T211 records for left shippable lines, the JD Edwards EnterpriseOne system flags the F49T211 records with a blank state flag value indicating eligibility of the order line for Sales Freight Request program processing. The JD Edwards EnterpriseOne system subsequently creates the corresponding Order Release message through the Sales Freight

- Request Export program to transmit these lines to the Oracle Transportation Management system.
- If a kit parent is unshipped, unpacked, back ordered, canceled, or no longer associated with any of its components, the JD Edwards EnterpriseOne system updates the F49T211 table to enable creation of a message to the Oracle Transportation Management system to delete the kit parent through the Sale Freight Request Export program.
- If a kit parent is changed by updating the quantity of any component or by not shipping an associated component, the JD Edwards EnterpriseOne system updates the F49T211 table to enable the Sales Order Confirmation Export program to recalculate the kit parent weight and volume.

Note: The JD Edwards EnterpriseOne system inserts a record into the F49T211 table only if the order type and line type combination has been updated into the 49/TP UDC table.

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Rate Shopping

This chapter contains the following topics:

- Section 7.1, "Rate Inquiry"
- Section 7.2, "Rate Shopping Interface"
- Section 7.3, "Rate Inquiry Process Using Web Services Callout"

7.1 Rate Inquiry

This section provides and overview and discusses:

- Forms used to rate shop shipments.
- Shopping available rates for shipments.

7.1.1 Understanding the Rate Inquiry Program (P49T10)

Real time rate inquiry allows customer service representatives (CSR) to interactively request shipping rates for sales order lines and groups of lines within the JD Edwards EnterpriseOne system. Rate shopping is provided relative to the current requested date on the order and mode of transport and carrier are retained from the rate shopping selections. All other information displayed during the rate shopping process such as cost, transit time, ship date, and delivery date, are for viewing only and are not saved. The CSR has the option to revisit any sales order lines and review the shipping rate selections made during the real time rate inquiry process. There are two basic use cases defined for rate shopping:

Punchout:

The system punches out to the Oracle Transportation Management system to request rate options for the sales order detail Lines. The system displays a set of rates based upon the origin address, destination address, and requested delivery date. The carrier and mode of transport for the selected rate option is saved on the sales order. The user can request rates for the entire order or for an individual detail line on an order.

Re-punchout:

The system can re-punchout to the Oracle Transportation Management system to query new rates after a rate selection has been updated to the sales order. After you select a new carrier or mode of transport, the system updates the sales order with the new information. Also, the system enables you to re-punchout for the entire order or for an individual detail line

After shopping for and selecting the rate, the system stores the carrier and mode of transportation in the Sales Order Detail file (F4211). You run the Sales Freight Request Export (R49T10) program to transmit the F49T211 table and corresponding rate

information to the Oracle Transportation Management system. If you modify the sales order by selecting a new rate after the system transmits the freight request, the systems marks the F49T211 table for reprocessing.

7.2 Rate Shopping Interface

The Rate Shopping Interface (P49T15) program provides a standardized interface to the Oracle Transportation Management system for rate shopping integration. This interface shields the complexity of the rate shopping integration from the calling program and reduces the maintenance complexity of existing applications dependency upon ESUs.

This application contains all of the logic necessary to invoke the rate shopping integration to Oracle Transportation Management and return any errors that it may encounter. Errors include:

ERROR 49T228 "Error Occurred Creating the Rate Inquiry"

An error occurred creating the rate inquiry. Please inspect the description in the error description grid on the P49T10 (Select Rate Inquiry Results) form, correct the problem, and take the rate inquiry exit again.

ERROR 49T230 "Rate Results Could Not Be Interpreted."

The rate inquiry was successful, but there was a problem interpreting the results. Please inspect the description in the error description grid on the P49T10 (Select Rate Inquiry Results) form, correct the problem, and take the rate inquiry exit again.

ERROR 49T229 "No Rate Results were Found."

The rate inquiry was successful, but no rate offerings were returned.

ERROR 49T234 "Rate Shopping Business Service Failure"

(Release 9.1 Update) The Rate Shopping Business Service has failed. Contact your system administrator to conduct the following tasks:

- 1. Verify that the business services server is running.
- **2.** Verify the server type and business services type that you want to run.
- **3.** Verify that the Object Configuration Manager program (P986011) is set up to point to the correct business services server listening port and the ping test row exit is successful.
- 4. Inspect the J49T0000_APP_SERVER business services system property value, which is located in the Work with Business Service Properties program (P951000). If necessary, use the Work with Soft Coding Records program (P95400) to include additional soft coding records.
- **5.** Verify that the business services properties setup is correct for the business service.

7.3 Rate Inquiry Process Using Web Services Callout

This section provides an overview and discusses:

- Sales order query process.
- Rate Shopping Configuration.
- Forms used to integrate and process Rate Shopping.

- Setting up business service property.
- Setting up soft coding templates.
- Setting up web service soft coding records.
- Shopping available rates for shipments.

7.3.1 Understanding Web Services (WSC) Callout

The Web Services Callout integration uses the Rate Shopping Processor (J49T0010), the Rate Shopping WLS Processor (J49T0015), or the Rate Shopping JAXWS Processor (JC49T020) business services to consume the Rate Inquiry web service of the Oracle Transportation Management system. When accessing rate shopping from the Sale Order programs, P4210 or P42101, the applicable business service converts the requested date, quantity, weight, and volume information into the XML format required by the Oracle Transportation Management rate inquiry web service.

7.3.2 Sales Order Query Process

These actions are associated with the process of EnterpriseOne events involved in sales order queries:

- The customer service representative initiates the Rate Inquiry (P49T15) program from the Form or Row menu of the P4210 program or the P42101 program. The business service (J49T0010), (J49T0015), or (JC49T020) is evoked and the rate inquiry results are displayed on the P49T10 application. if an error occurs, the error and its description is displayed on the errors tab.
- 2. The P49T15 application displays the results or errors. If multiple requested dates were provided in the query then the multiple rate inquiries are displayed in the rate inquiries grid. The grid entitled Rate Inquiry Results is pertinent to the selected rate inquiry. This grid may display errors for the particular rate inquiry if it is unsuccessful in constructing the rate inquiry or interpreting its results. The sales order grid represents the sales order which the operation is applied to. The representative can either select a valid rate by pressing the select button, or close the form without selecting a rate.
- After selecting rates for each inquiry, the customer service representative returns to the corresponding sales order revision form and commits the sales order.

7.3.3 Rate Shopping Configuration (Release 9.1 Update)

Rate Shopping functionality runs on three supported applications servers -- Weblogic Server (WLS), Websphere Application Server (WAS), and Oracle Application Server (OAS). The type of business service build that you are using or that you wish to use with this service determines which business service object you must configure. The following table provides information related to the business service objects. You must add the J49T000_APP_SERVER value to the Rate Shopping system level business server property:

Server	Build Type	Business Service	J49T0000_APP_ Server Value
WLS	JAX-WS with JDeveloper 11g	JC49T020	JAXWS
	(Tools release 9.1.2 or later.)		

Server	Build Type	Business Service	J49T0000_APP_ Server Value
WLS	JAX-RPC with JDeveloper 11g	J49T0015	JAXRPC
WAS	JAX-WS with JDeveloper 11g	JC49T020	JAXWS
	(Tools release 9.1.2 or later.)		
WAS	JAX-RPC with JDeverloper 10g and RAD	J49T0010	blank
OAS	JAX-RPC with JDeveloper 10g	J49T0010	blank

7.3.3.1 Rate Shopping Processor Business Service (J49T0010)

The Rate Shopping Processor business service (J49T0010) runs on the Oracle Application Server (OAS) platform or the Websphere Application Server (WAS) platform and receives the data that is passed from the Rate Shopping application (P49T10) through the call to the J49T0010 method getRateShopping. The data is transformed into an XML message. The Rate Shopping Processor business service consumes Oracle Transportation Management Rate Inquiry Query (RIQ) web service with the XML message and in turn receives the RIQ Response from the Oracle Transportation Management web service. The Rate Shopping Processor business service converts the response and returns the data to the Rate Shopping application.

Before you use J49T0010, you can set business service properties, which the system uses to process user authentication information. You must set up these properties before you can use the business service. This table describes each of the properties that are associated with this business service:

Group	Key	Description	Value
J49T0010	J49T0010_KEY_XREF_ COUNTRY	Use this business service property to indicate the value of the 49/XR UDC associated with the country cross-reference. You should not modify this business service property.	001
J49T0010	J49T0010_KEY_XREF_ CURRENCY	Use this business service property to indicate the value of the 49/XR UDC associated with the currency cross-reference. You should not modify this business service property.	002
J49T0010	J49T0010_KEY_XREF_ VOLUMEUOM	Use this business service property to indicate the value of the 49/XR UDC associated with the volume unit of measure cross-reference. You should not modify this business service property.	013

Group	Key	Description	Value
J49T0010	J49T0010_KEY_XREF_MODE_ OF_TRAN	Use this business service property to indicate the value of the 49/XR UDC associated with the mode of transport. You should not modify this business service property.	015
J49T0010	J49T0010_KEY_XREF_ WEIGHTUOM	Use this business service property to indicate the value of the 49/XR UDC associated with the weight unit of measure cross-reference. You should not modify this business service property.	012
J49T0010	J49T0010_OTM_ENDPT	Use this business service property to indicate the value of the URL for the rate inquiry web service.	
		The url should be in the format as illustrated in the P953000 Soft Coding Template E1_J49T0010.	
J49T0010	J49T0010_OTM_PWD	Use this business service property to indicate the value of the password that gains access to the Oracle Transportation Management system.	
J49T0010	J49T0010_OTM_USER	Use this business service property to indicate the value of the user identification that gains access to the Oracle Transportation Management system.	

7.3.3.2 Rate Shopping WLS Processor Business Service (J49T490015)

The Rate Shopping WLS Processor business service (J49T0015) runs on the Web Logic Server platform and receives the data that is passed from the Rate Shopping application (P49T10) through the call to the J49T0015 method getRateShoppingWLS. The data is loaded into the proxy classes generated from the Oracle Transportation Management WLS wsdl to build an XML message. The RateShoppingWLSProcessor business service consumes Oracle Transportation Management Rate Inquiry Query (RIQ) web service with the XML message and in turn receives the RIQ response from the Oracle Transportation Management web service. The RateShoppingWLSProcessor business service converts the response received through the Oracle Transportation Management web services proxy generated classes and returns the data to the Rate Shopping application.

Before you use J49T0015, you can set business service properties, which the system uses to process user authentication information. You must set up these properties before you can use the business service. This table describes each of the properties that are associated with this business service:

Group	Key	Description	Value
J49T0015	J49T0015_KEY_ XREF_COUNTRY	Use this business service property to indicate the value of the 49/XR UDC associated with the country cross-reference. You should not modify this business service property.	001
J49T0015	J49T0015_KEY_ XREF_CURRENCY	Use this business service property to indicate the value of the 49/XR UDC associated with the currency cross-reference. You should not modify this business service property.	002
J49T0015	J49T0015_KEY_ XREF_MODE_OF_ TRAN	Use this business service property to indicate the value of the 49/XR UDC associated with the mode of transport. You should not modify this business service property.	015
J49T0015	J49T0015_KEY_ XREF_ VOLUMEUOM	Use this business service property to indicate the value of the 49/XR UDC associated with the volume unit of measure cross-reference. You should not modify this business service property.	013
J49T0015	J49T0015_KEY_ XREF_WEIGHTUOM	Use this business service property to indicate the value of the 49/XR UDC associated with the weight unit of measure cross-reference. You should not modify this business service property.	012

7.3.3.3 Rate Shopping JAXWS Processor Business Service (JC49T020) (Release 9.1 Update)

The Rate Shopping JAXWS Processor business service (JC49T020) runs on the Web Logic Server, or Websphere platform and receives the data that is passed from the Rate Shopping program (P49T10) through the call to the JC49T020 method getRateShoppingJAXWS. The data is loaded into the proxy classes generated from the

Oracle Transportation Management WLS wsdl to build an XML message. The RateShoppingJAXWSProcessor business service consumes Oracle Transportation Management Rate Inquiry Query (RIQ) web service with the XML message and in turn receives the RIQ response from the Oracle Transportation Management web service. The RateShoppingJAXWSProcessor business service converts the response received through the Oracle Transportation Management web services proxy generated classes and returns the data to the Rate Shopping program.

Before you use JC49T020, you can set business service properties, which the system uses to process user authentication information. You must set up these properties before you can use the business service. This table describes each of the properties that are associated with this business service:

Group	Key	Description	Value
JC49T020	JC49T020_KEY_ XREF_COUNTRY	Use this business service property to indicate the value of the 49/XR UDC associated with the country cross-reference. You should not modify this business service property.	001
JC49T020	JC49T020_KEY_ XREF_CURRENCY	Use this business service property to indicate the value of the 49/XR UDC associated with the currency cross-reference. You should not modify this business service property.	002
JC49T020	JC49T020_KEY_ XREF_MODE_OF_ TRAN	Use this business service property to indicate the value of the 49/XR UDC associated with the mode of transport. You should not modify this business service property.	015
JC49T020	JC49T020_KEY_ XREF_ VOLUMEUOM	Use this business service property to indicate the value of the 49/XR UDC associated with the volume unit of measure cross-reference. You should not modify this business service property.	013

Group	Key	Description	Value
JC49T020	JC49T020_KEY_ XREF_WEIGHTUOM	Use this business service property to indicate the value of the 49/XR UDC associated with the weight unit of measure cross-reference. You should not modify this business service property.	012

7.3.4 Forms Used to Integrate and Process Rate Shopping

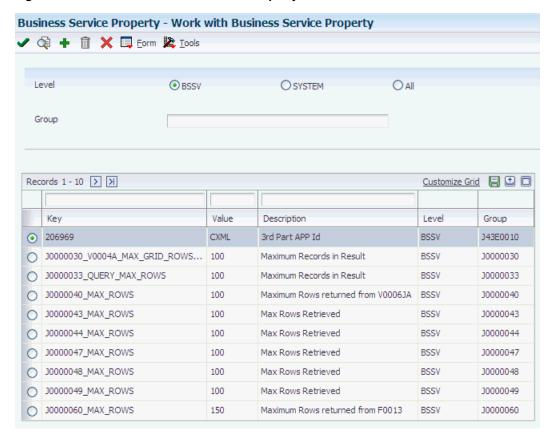
Form Name	Form ID	Navigation	Usage
Work With Business Service Property	W951000F	From the Business Service Property and Business Service Cross Reference Administration menu (GH9095), select Business Service Property.	Locate, modify, or delete business service properties.
Modify Business Service Property	W951000C	On the Work With Business Service Property form, select a business property to modify.	Create a new business service property or modify the value of an existing business service property.
Work With Soft Coding Templates	W953000A	From the Soft Coding Administration menu (GH9096), select Soft Coding Template.	Locate and review soft coding templates.
Update Soft Coding Template	W953000C	On the Work with Soft Coding Templates form, select a record to update.	Update a soft coding template.
Work with Web Service Soft Coding Records	W954000A	From the Soft Coding Administration menu (GH9096), select Soft Coding Records.	Locate and review web service soft coding records.
Update Web Service Soft Coding Record	W954000B	On the Work with Web Service Soft Coding Records form, select a record to update.	Update soft coding record information.
Select Rate Inquiry Results	W49T10AF	Sales Order Processing (G49T11), Sales Order Entry.	Shop available rates for shipments.
		Inquire on sales order and select Rate Shopping from the Row menu.	

7.3.5 Setting Up Business Service Property

Access the Work with Business Service Property form.

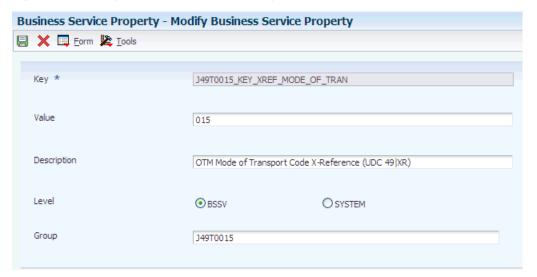
See, JD Edwards EnterpriseOne Tools Business Services Development Guide

Figure 7–1 Work with Business Service Property form



Access the Modify Business Service Property form.

Figure 7-2 Modify Business Service Property form



Key

A name that identifies the business service property globally in the system. The length of the business service property cannot exceed 255 characters.

Value

Enter a value that represents a business service property key.

Description

Enter a brief description of the business service property.

Group

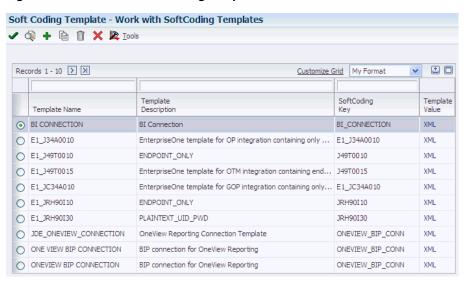
Enter a value that represents a classification for a business service property at the business service level. This is generally a business service name.

7.3.6 Setting Up Soft Coding Templates

Access the Work with Soft Coding Templates form.

See JD Edwards EnterpriseOne Tools Business Services Development Guide

Figure 7–3 Work with Soft Coding Templates form



Access the Update Soft Coding Template form.

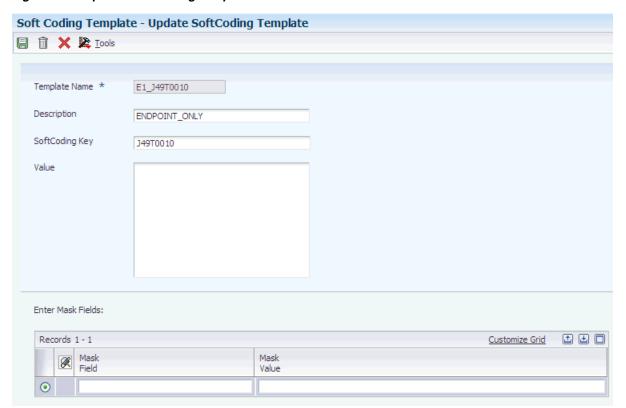


Figure 7-4 Update Soft Coding Template form: J49T0010

{port-info}

{stub-property}

{name}javax.xml.rpc.service.endpoint.address{/name}

{value}http://{OTMhost}:{OTMport}/GC3Services/IntXmlService/w ebservice{/value}

{/stub-property}

{/port-info}

Soft Coding Template - Update SoftCoding Template 🗐 📋 🗶 🥦 Tools Template Name * E1_J49T0015 Description EnterpriseOne template for OTM integration SoftCoding Key J49T0015 Enter Mask Fields: Customize Grid 🗘 보 🗖 Records 1 - 2 Mask Field Value _||_password_|| 0

Figure 7–5 Update Soft Coding Template form: J49T0015

{scwls} {endpoint}http://{OTMhost}:{OTMport}/GC3Services/IntXmlService /call{/endpoint} {username}E1TEST.ADMIN{/username} {password}_||_password_||_{/password} {/scwls}

Value

The template value or soft coding value is an XML string. The XML string may contain an element with the following dynamic variables:

- \$e1user
- \$e1environment
- \$e1role
- \$ps_token

During run time actual values replace the dynamic variable values.

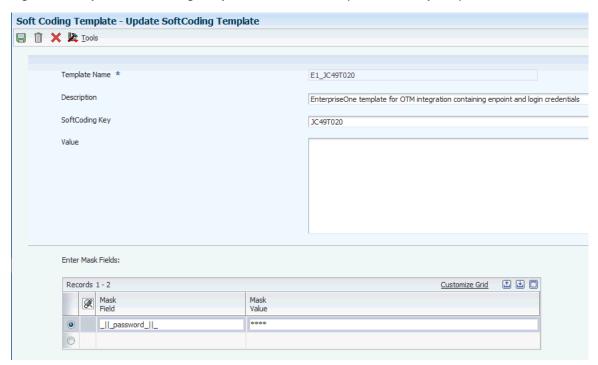


Figure 7-6 Update Soft Coding Template form: JC49T020 (Release 9.1 Update)

7.3.7 Setting Up Web Service Soft Coding Records

Access the Work with Web Service Soft Coding Records form.

See JD Edwards EnterpriseOne Tools Business Services Development Guide

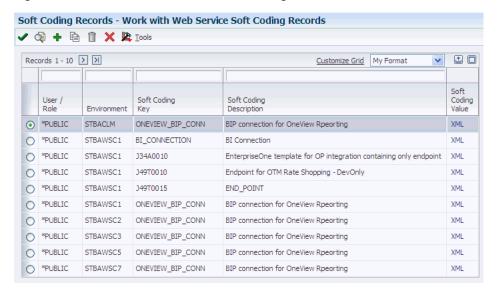


Figure 7-7 Work with Web Service Soft Coding Records

Access the Update Web Services Soft Coding Records form.

Soft Coding Records - Update Web Service Soft Coding Record 📙 🍳 📋 🗶 Iools *PUBLIC User / Role * Environment Name * STBAWSC1 Template Name J49T0010 Soft Coding Description Endpoint for OTM Rate Shopping - DevOnly Soft Coding Value Enter Mask Fields: Records 1 - 1 Customize Grid 🗈 🖭 🗀 Mask Field

Figure 7–8 Update Web Services Soft Coding Record form: J49T0010

{port-info}

{stub-property}

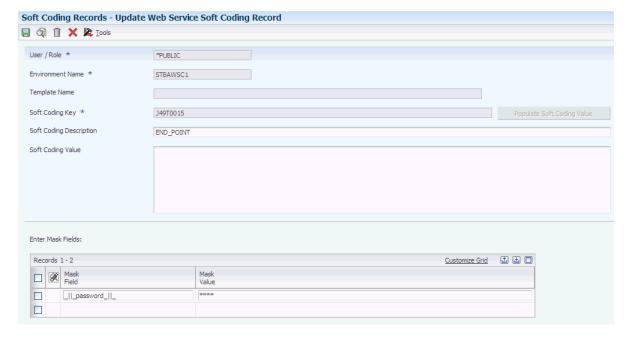
{name}javax.xml.rpc.service.endpoint.address{/name}

{value}http://{OTMhost}:{OTMport}/GC3Services/IntXmlService/w ebservice{/value}

{/stub-property}

{/port-info}

Figure 7–9 Update Web Services Soft Coding Record form: J49T0015



{scwls}

{endpoint}http://{OTMhost}:{OTMport}/GC3Services/IntXmlService /call{/endpoint}

{username}E1TEST.ADMIN{/username}

{password}_||_password_||_{/password}

{/scwls}

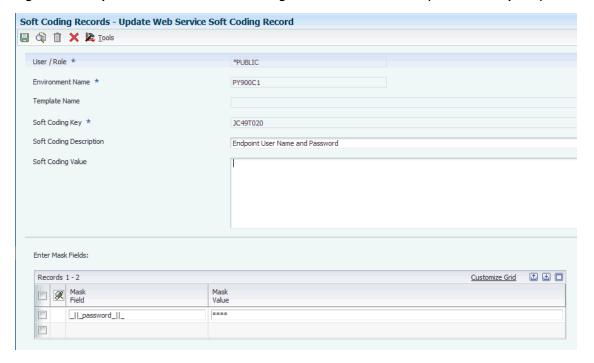
Value

The template value or soft coding value is an XML string. The XML string may contain an element with the following dynamic variables:

- \$e1user
- \$e1environment
- \$e1role
- \$ps_token

During run time actual values replace the dynamic variable values.

Figure 7-10 Update Web Services Soft Coding Record form: JC49T020 (Release 9.1 Update)



{scwls}

{endpoint}http://{OTMhost}:{OTMport}/GC3Services/IntXmlService /call{/endpoint}

{username}E1TEST.ADMIN{/username}

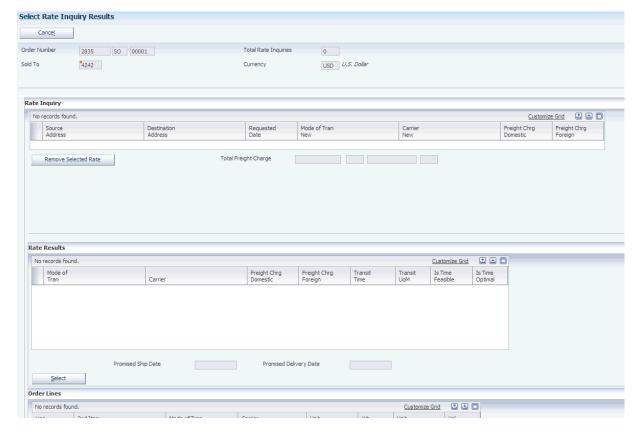
{password}_||_password_||_{/password}

{/scwls}

7.3.8 Shopping Available Rates for Shipments

Access the Select Rate Inquiry Results form.

Figure 7-11 Select Rate Inquiry Results form



Total Rate Inquiries

Denotes the total number of successful transmissions to the Oracle Transportation Management system.

Is Time Feasible

Denotes whether the time is feasible within the criteria given for this route.

Is Time Optimal

Denotes whether this rate is the cheapest rate available for this rate inquiry.

Line Number

A number that identifies multiple occurrences, such as line numbers on a sales order document. Generally, the system assigns this number, but in some cases you can override it.

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