

Oracle® Transportation Management

Integrating Oracle Transportation Management with Oracle
E-Business Suite

Release 11*i*

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Oracle Transportation Management Integrating Oracle Transportation Management with Oracle E-Business Suite, Release 11i

Part No. B31084-01

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Preface

Intended Audience

Welcome to Release 11i of the *Oracle Transportation Management Integrating Oracle Transportation Management with Oracle E-Business Suite*.

See Related Information Sources on page viii for more Oracle Applications product information.

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Structure

1 Introduction

- 2 BPEL Integration**
- 3 Order Management**
- 4 Shipping Execution**
- 5 Accounts Payables**
- 6 Purchasing**
- A XML Mapping**

Related Information Sources

- Oracle Order Management User's Guide*
- Oracle Order Management Implementation Guide*
- Oracle Shipping Execution User's Guide*
- Oracle Payables User's Guide*
- Oracle Purchasing User's Guide*
- Oracle BPEL Process Manager 2.0 Quick Guide*
- Oracle Applications User's Guide*

Do Not Use Database Tools to Modify Oracle Applications Data

Oracle **STRONGLY RECOMMENDS** that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle Applications data unless otherwise instructed.

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL*Plus to modify Oracle Applications data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle Applications tables are interrelated, any change you make using an Oracle Applications form can update many tables at once. But when you modify Oracle Applications data using anything other than Oracle Applications, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle Applications.

When you use Oracle Applications to modify your data, Oracle Applications automatically checks that your changes are valid. Oracle Applications also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.

Introduction

Overview of Oracle Transportation Management Integration with Oracle E-Business Suite

Oracle Transportation Management integrates with Oracle E-Business Suite to enable transportation features and functionality by adding to existing Oracle E-Business Suite products, including Oracle Order Management, Oracle Shipping Execution, Oracle Payables, Oracle Warehouse Management, and Oracle Purchasing.

Oracle Transportation Management combines transportation planning and execution with freight payment, inbound freight logistics, and freight rating and routing.

Oracle Transportation Management adds the following features and enhancements to Oracle E-Business Suite:

- Carrier selection and tender
- Freight rating and routing
- Actual ship quantities update and re-rate
- Freight payment, freight payment audit, and approval
- Visible in-transit statuses
- Inbound carrier selection
- Inbound in-transit statuses

Oracle Transportation Management and Oracle E-Business Suite Requirements

The initial release of Oracle Transportation Management is release 5.5. To use Oracle Transportation Management, you must first have Oracle Applications release 11.5.10.CU2 installed on Oracle Applications Server with BPEL 10.1.2.0.2. You must also have the following Oracle Applications installed:

- Oracle Order Management
- Oracle Shipping Execution
- Oracle Payables
- Oracle Purchasing

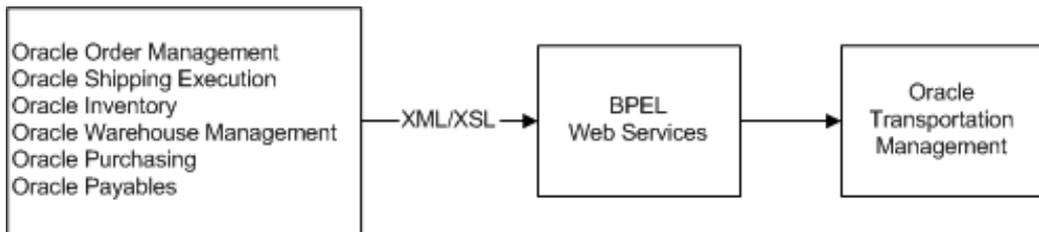
Other Oracle applications, such as Oracle Warehouse Management, can further enhance your supply chain management processes.

See:

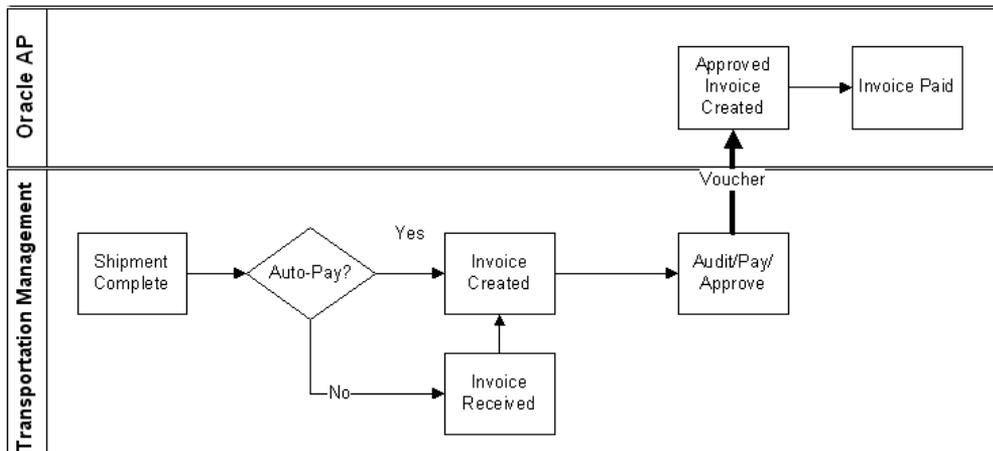
- *Oracle Purchasing User's Guide*
- *Oracle Shipping Execution User's Guide*
- *Oracle Order Management User's Guide*
- *Oracle Order Management Implementation Guide*
- *Oracle Payables User's Guide*
- *Oracle Applications User's Guide*
- *Oracle BPEL Process Manager 2.0 Quick Guide*

Note: The integration of Oracle E-Business Suite and Oracle Transportation Management replaces Oracle Transportation Execution and Oracle Transportation Planning. Once Oracle Transportation Management is enabled, you cannot use Oracle Transportation Execution and Oracle Transportation Planning.

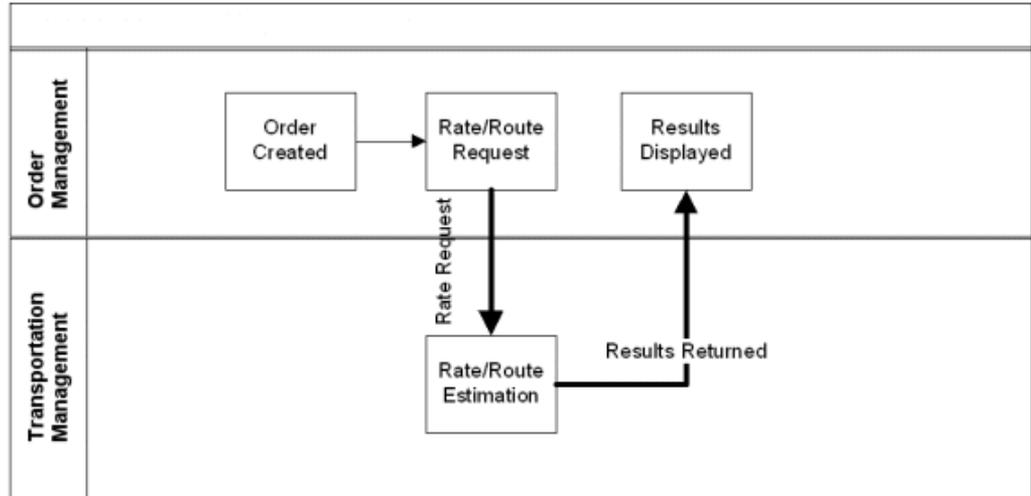
This figure shows the integration of Oracle Transportation Management with Oracle E-Business Suite Applications as well as the services used to transact the data between Oracle Transportation Management and Oracle E-Business Suite Applications:



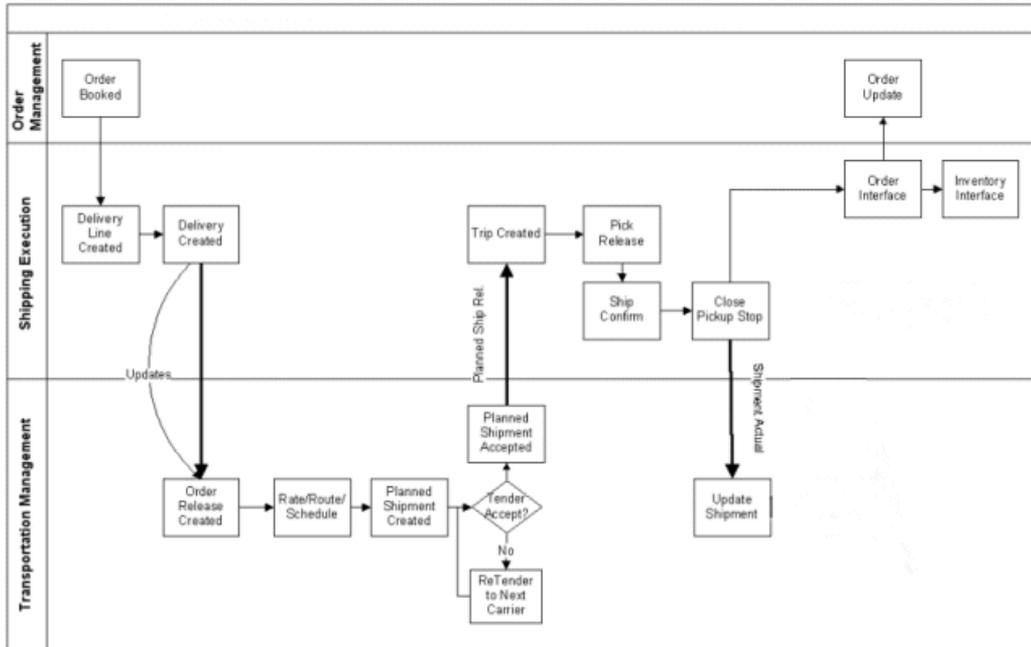
This figure shows the integration of Oracle Transportation Management with Oracle Payables, including audit/pay/approve and invoice paid:



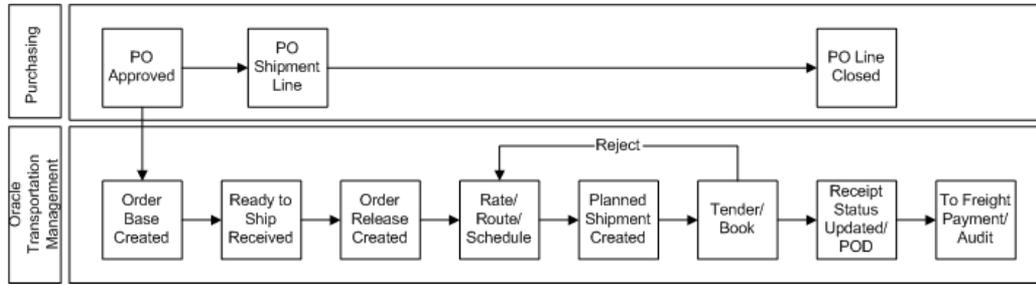
This figure shows the integration of Oracle Transportation Management with Oracle Order Management, including rate and route flow and estimation:



This figure shows the integration of Oracle Transportation Management with Oracle Shipping Execution, including trip creation, ship confirm, order interface, and inventory interface:



This figure shows the integration of Oracle Transportation Management with Oracle Purchasing, including PO creation and PO close:



BPEL Integration

Oracle BPEL Process

The Oracle BPEL (Business Process Execution Language) processes are delivered through Oracle *MetaLink* patches. Patch application does not deploy the .jar files into the BPEL middle-tier. You must manually deploy the BPEL processes. The patches create all BPEL .jar files in the \$WSH_TOP/bpel/jar directory.

- `bpel_WshSendRefDataStlToOtm_1_0.jar`: BPEL process to synchronize carrier and carrier site reference data.
- `bpel_WshSendDlvyToOtmService_1_0.jar`: Synchronous BPEL process to extract delivery and detail information and transform the data to Oracle Transportation Management format.
- `bpel_WshSendLocRefDataToOtm_1_0.jar`: BPEL process to extract organization, customer, customer site, carrier and carrier site information as part of the outbound interface as well as the reference data synchronization process.
- `bpel_WshSendItemRefDataToOtm_1_0.jar`: BPEL process to extract organization item information as part of the outbound interface.
- `bpel_WshSendTripToOtmService_1_0.jar`: Synchronous BPEL process to extract trip and stop information and transform the data to Oracle Transportation Management format.
- `bpel_WshSendTxnToOtmService_1_0.jar`: Synchronous BPEL process to initiate Outbound Release and ActualShipment operations to Oracle Transportation Management.
- `bpel_WshReceivePShipmentFromOtm_1_0.jar`: BPEL process to receive the PlannedShipment inbound message from Oracle Transportation Management.

Note: The BPEL process .jar files are shipped with names in the format: `<*>_1_0.jar`. Locate these files in `$WSH_TOP/bpel/jar` and rename them to conform to the BPEL naming convention i.e. `<*>_1.0.jar`.

There are two alternatives to deploying the BPEL .jar files into the BPEL Process Manager:

1. The Application Server system administrator can manually copy the renamed .jar files to the `orabpel/domains/default/deploy` directory on the BPEL Process Manager server.
2. BPEL System Administrator can deploy the .jar files through the BPEL console. Oracle recommends using this approach to deploy the .jar files. The following section describes how to perform these steps.

To deploy the BPEL .jar files:

1. Log into the BPEL Console.
2. Select the BPEL Processes tab.
3. Under Related Tasks, select Deploy New Process.

To deploy the GlogXML.xsd and GlogXML.wsdl:

1. Unzip \$WSH_TOP/bpel/util/GlogXML.zip to extract contents: GlogXML.wsdl and GlogXML.xsd
2. Edit GlogXML.wsdl to update the OTM Service (service name="GLogService") http endpoint URL to customer specific values.
3. Copy updated GlogXML.wsdl and GlogXML.xsd to orabpel/system/xmllib directory on the BPEL Process Manager server.

Order Management

Overview of Oracle Transportation Management Integration with Oracle Order Management

Oracle Transportation Management integrates with Oracle Order Management to enable transportation rating and routing at the time of order entry. Oracle Order Management also provides outbound data to Oracle Transportation Management that Oracle Transportation Management uses to plan shipments.

Rating and Routing at Order Booking

The implementation of Oracle Transportation Management enables you to offer an estimate of the shipping rate and route at the time of order entry. After you have entered the order line, you select the appropriate action as needed.

Oracle Transportation Management leverages the following Oracle Order Management actions, which are enhanced by the introduction of Oracle Transportation Management:

- Choose Ship Method: Enables you to select the ship method, costs, and transit times
- Get Ship Method: Returns the ship method
- Get Ship Method and Rates: Returns the ship method and rate
- Get Freight Rates: Returns the freight cost for the ship method returned

Each action returns the appropriate ship method and rate for the given order line.

Implementation of Oracle Transportation Management with Oracle Order Management

You must define the following profile options to enable the Oracle Order Management to Oracle Transportation Management integration:

- OTM: Integration Enabled
- OTM: Domain Name
- OTM: Domain User
- OTM: Domain Password
- OTM: Proxy Server
- OTM: Proxy Port
- OTM: Servlet URI

For information on Oracle Order Management XML mapping, see Oracle Order Management XML Mapping, page A-1

1. Delivery creation: When a delivery with contents is created as Include for Planning, it is marked as Creation Required.
2. Shipping-Transportation Outbound interface concurrent request runs with the appropriate interface action parameter (Create or All Except ActualShipment), it selects the creation-required deliveries and sends them to Oracle Transportation Management using the OTM XML release transaction. Order Releases are updated in Oracle Transportation Management based on these transactions.
3. Transportation planning activities then take place in Oracle Transportation Management for the new order releases, including carrier selection, rating, tendering, and so on, which results in the creation of shipments (equivalent to trips in Oracle Shipping Execution) to which the order releases are assigned.
4. After the shipment is created, Oracle Transportation Management triggers the PlannedShipment interface. This interface is used to transmit the shipments from Oracle Transportation Management to Oracle Shipping Execution to create the corresponding trips and trip stops and to assign the deliveries to them.
5. If the delivery is updated with changes that are relevant to transportation planning decisions (for example, change in delivery details weight), then the delivery is marked as Update Required.
6. The next run of the Shipping-Transportation Outbound interface concurrent request with the appropriate interface action parameter (Update or All Except ActualShipment) selects the update-required deliveries and sends them to Oracle Transportation Management using the OTM XML release transaction. Order Releases are updated in Oracle Transportation Management based on these transactions.
7. Update to order releases might provoke changes in the routing decision and therefore change in the shipments configuration. These changes trigger the PlannedShipment interface to update the corresponding trips in Oracle Shipping Execution.
8. Eventually, once deliveries of a trip are ship confirmed and all pick up stops of this trip are closed in Shipping Execution, the last pick up stop is marked as ActualShipment Required.
9. The next run of the Shipping-Transportation Outbound interface concurrent request with the appropriate interface action parameter (ActualShipment) selects the ActualShipment Required stops and sends their corresponding details to Oracle Transportation Management using the OTM XML ActualShipment transaction. Shipments are updated in Oracle Transportation Management based on these transactions (actual shipped quantities, vehicle information, and so on).

Ignore for Planning Trips and Deliveries

To allow “out of the cycle” expedited shipments, you create a delivery and set the status to Ignore for Planning, or set the status of an existing delivery to Ignore for Planning (for example, by unassigning the delivery from the Oracle Transportation Management issued trip).

Deliveries set to Ignore for Planning are not sent to Oracle Transportation Management for planning activities.

You can then create Ignore for Planning trips, assign deliveries to them, and ship confirm. After the pickup stops are closed, the deliveries are marked as Actual Shipment Required and are sent to Oracle Transportation Management through the next run of the Shipping-Transportation Outbound interface.

Visibility on Interface Activities Through Shipping Exceptions

For each interface operations (required or executed) information only shipping exceptions are logged against the delivery. For example, when a delivery is created in Shipping Execution, WSH_OTM_DEL_TRANSACTION_REQ is logged, indicating that creation is required in Oracle Transportation Management. Once the Shipping-Transportation Outbound interface concurrent has processed this delivery, the WSH_OTM_DEL_AWAITING_TRIP is logged against the delivery, indicating that the transaction has been transmitted and the delivery is now awaiting a planned trip from Oracle Transportation Management. Most exceptions are for user information only, however, and the interface processes are driven by delivery level and stops level interface flags, which are not visible to the user.

Changes for Allowed Actions and Updates to Shipping Entities

- Trips and trips stops: With the integration Oracle Transportation Management can be considered the “master system” for Include for Planning trips. Therefore, certain actions or updates to trips are not allowed in Shipping Execution when they are marked as Include for Planning (issued from Oracle Transportation Management). For example, it is not possible to add new stops or change their sequence.
- Deliveries and delivery details: Conversely, Shipping Execution is the “master system” for deliveries. Therefore, the majority of actions and updates are allowed. Certain actions have been disabled (for example Select Carrier and Get freight Costs) or function differently (assigning a delivery line with non-null weights to delivery marks the delivery as Update Required) or are prevented on Include for Planning deliveries, such as Assign to Trip.

Delivery Splitting

Oracle Transportation Management includes algorithms that split large deliveries across multiple parallel shipments or assign multiple equipments to the same trip. To avoid this, the integration avoids sending large deliveries to Oracle Transportation Management. Instead, integration:

1. Splits delivery lines with a net weight exceeding a defined net weight limit, ensuring that once packed, the delivery does not exceed the gross weight limit. This split is performed at delivery line import from Order Management or other sources.
2. Splits deliveries that exceed a defined gross weight limit. This split is performed during the Shipping-Transportation Outbound interface concurrent request on deliveries sent to the interface for creation or update.

Both weight limits are part of the shipping parameter setup.

Reference Data Integration

Certain data must be synchronized between to the two systems using one of the following three methods:

1. Manual synchronization: This data must be set and synchronized manually between the two systems:
 - Freight terms, FOB codes
 - UOMs: Weight UOM, Dimensions UOM, Distance UOM, Volume UOM, Quantity UOM
 - Currency codes

- Service levels, Transport modes
- Vehicle items
- LPN types
- Country codes
- Freight classes
- Freight classification of item

The ID entered in Oracle Transportation Management and code entered in Oracle Shipping Execution must match exactly.

2. Carrier and carrier sites: The carrier must be primarily set in Oracle E-Business Suite. A stand alone interface enables the interface to create the carriers in Oracle Transportation Management.
3. Ship from ship to location customers; organizations; and items: No separate synchronization is needed for this information. Information needed by Oracle Transportation Management for these entities is sent along with the operational transactions (XML Release and ActualShipment).

Note: You must define item weights and volumes as well as item container weights, volumes, and dimensions in Oracle E-Business Suite. The accuracy of Oracle Transportation Management planning is decreased if these attributes are not properly defined.

XML Messages

The following XML messages are used to pass order information to and from Oracle Transportation Management:

- Location transaction: Location XML transaction is used to send carrier information to Oracle Transportation Management. This is achieved by running the Shipping-Transportation Carriers synchronization.
- Release transaction: Release XML transaction is used to send delivery information to Oracle Transportation Management by running the Shipping-Transportation Outbound Interface. After the interface has run, the XML can be viewed in the BPEL Process Manager.
- PlannedShipment transaction: PlannedShipment XML is used to send confirmation to Oracle Shipping Execution when a delivery or group of deliveries has been planned by Oracle Transportation Management and is ready to ship. This transaction is used to create trips, stops, and delivery legs in Shipping Execution based on the shipments created in Transportation Management. After the interface has run, the incoming PlannedShipment XML message is viewable in the BPEL Process Manager.
- ActualShipment transaction: ActualShipment XML is used to send ship confirmation information to Oracle Transportation Management when the pickup trip-stops of a trip are closed. The Shipping-Transportation Outbound Interface delivers the information. After you run the interface, you can view the XML in the BPEL Process Manager.

Related Topics

Oracle Shipping Execution XML Mapping, page A-5

Functional Changes with Oracle Transportation Management Installed

Delivery Splitting

Delivery splitting occurs after a delivery has been created in Oracle Shipping Execution and before the delivery information is sent to Oracle Transportation Management. This timing ensures that Oracle Transportation Management does not split the delivery.

Delivery Splitting does not occur when delivery lines are packed, even if the packed line exceeds the weight limit. You must manually unpack and split these lines before sending to Oracle Transportation Management.

Delivery Splitting Example:

Delivery Name (Child Delivery)	Weight	Max Gross Weight Parameter	Split Weight
DL4451	35 LBS	20 LBS	NA
(DL4460)	NA	NA	20 LBS
(DL4461)	NA	NA	15 LBS

Three shipping parameters (located on the Delivery tab) are used to determine when a delivery or delivery line must be split to accommodate a carrier's capacity. See Shipping Parameters, page 4-18

Delivery Splitting Rules

Only Include for Planning deliveries are considered for splitting. LPNs are not split, instead, LPNs are added to child deliveries after the split takes place. Splitting cannot take place if:

- The delivery is assigned to a trip
- The delivery has Released to Warehouse or Staged lines
- The delivery's weights have been manually overridden
- The split cannot be performed without splitting an LPN
- The split cannot be performed without splitting delivery details
- Delivery is Content Firm

Delivery Line Splitting Rules

Delivery lines are split when the net weight of a line exceeds the Net Weight field on the Shipping Parameters window. The line is split to be equal to the Net Weight limit. If the split fails (due to an indivisible quantity), then the WSH_OTM_DET_SPLIT_FAILED exception is logged.

Shipping Transactions Form Actions

When Oracle Transportation Management is implemented, some actions available on the Shipping Transactions Form function differently than they do without Oracle Transportation Management installed for Include for Planning deliveries and

trips. Certain delivery actions, however, are disabled, prevented, or will function differently.

All Include for Planning deliveries that have been interfaced to Oracle Transportation Management are controlled by Oracle E-Business Suite; you can update them until ship confirmation.

All Include for Planning trips are controlled by Oracle Transportation Management until ship confirmation is run. All delivery assignments to trips are performed in Oracle Transportation Management; therefore, restrictions to what modifications you can make to trips within Oracle E-Business Suite will occur. These restrictions include the following:

- You cannot delete or cancel Include for Planning trips
- You cannot remove or add from/in trip stops Include for Planning trips
- You cannot change Trip stop sequences in Include for Planning trips
- Trips cannot be Firm or Firm Routing.
- All trips created in Oracle E-Business Suite are Ignore for Planning
- You cannot change Ignore for Planning trips to Include for Planning
- You cannot change Include for Planning trips to Ignore for Planning

The following tables describes (by trip, trip stop, delivery, and delivery details) how the Actions function with Oracle Transportation Management implemented. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite)

Include for Planning Trips Changed Actions

Action	Delivery Created Not Assigned to Trip (Sent to OTM or Not)	Delivery Assigned to Trip, Not Current	Delivery Assigned to Trip, Current
Firm Routing	NA	Not Allowed	Not Allowed
Firm Routing and Contents	NA	Not Allowed	Not Allowed
Ignore for Planning	NA	Not Allowed	Not Allowed
Ship Confirm	NA	Not Allowed	Allowed
Unfirm	NA	Not Allowed	Not Allowed

Include for Planning Trips Allowed for Maintenance Attributes

Attribute
Trip Name
Seal Code
Routing instruction, operator
Vehicle information (organization code, item name, prefix, vehicle number)
Flex Fields

Include for Planning Trip Stops Changed Actions

Action	Delivery Created Not Assigned to Trip (Sent to OTM or Not)	Delivery Assigned to Trip, Not Current	Delivery Assigned to Trip, Current
Delete	NA	Not Allowed	Not Allowed
Insert New Stops	NA	Not Allowed	Not Allowed

Include for Planning Trip Stops Allowed for Maintenance Attributes**Attribute**

Weight / Volume

Actual arrival / departure date

Departure fill %

Departure seal code

Unloading start end time

Flex fields

Include for Planning Deliveries Changed Actions

Action	Delivery Created Not Assigned to Trip (Sent to OTM or Not)	Delivery Assigned to Non-Current Trip (Waiting for OTM Re-Planning)	Delivery Assigned to Current Trip (Trip from OTM Up to Date)
Assign to Trip	Not Allowed	Not Allowed	Not Allowed
Auto-create Trip	Not Allowed	Not Allowed	Not Allowed
Cancel Ship Method	Disabled (Not available in role definition when OTM is installed).	Disabled	Disabled
Get Freight Costs	Disabled (Not available in role definition when OTM is installed).	Disabled	Disabled
Ignore for Planning	Allowed	Allowed	Delivery will be Ignore for Planning if unassigned from the OTM trip.
Pick Release Form	Allowed	Allowed	Allowed
Pick and Ship	Allowed (Delivery details will be staged but delivery will not be shipped).	Allowed (Delivery details will be staged but delivery will not be shipped).	Allowed

Pick, Pack, and Ship	Allowed (Delivery details will be staged but delivery will not be shipped).	Allowed (Delivery details will be staged but delivery will not be shipped).	Allowed (Delivery details will be staged and packed but not delivery will not be shipped).
Select Carrier	Disabled (Action is not available in role definition when OTM is installed).	Disabled	Disabled
Send Outbound Message	Allowed for Third Party Warehouse. Disabled for Carrier Manifesting	Allowed for Third Party Warehouse. Disabled for Carrier Manifesting	Allowed for Third Party Warehouse. Disabled for Carrier Manifesting
Ship Confirm	Not Allowed	Not Allowed	Allowed
Unassign from Trip	NA	Allowed. Will set the delivery to Ignore for Planning	Allowed. Will set the delivery to Ignore for Planning
UPS Address Validation	Disabled. (Action is not available in role definition when OTM is installed).	Disabled	Disabled
UPS Rate and Service	Disabled. (Action is not available in role definition when OTM is installed).	Disabled	Disabled
UPS Time in Transit	Disabled. (Action is not available in role definition when OTM is installed).	Disabled	Disabled

Include for Planning Deliveries Allowed for Maintenance Attributes

Attribute	Allowed / Disallowed
Delivery name	Allowed
Freight term code	Allowed
Weights / volume	Allowed
Reason of transport	Allowed
Description	Allowed
Ship method	Allowed if delivery is not assigned to a trip. Disabled if assigned to a trip.
Carrier ID	Allowed if delivery is not assigned to a trip. Disabled if assigned to a trip.
Service level	Allowed if delivery is not assigned to a trip. Disabled if assigned to a trip.
Mode of transport	Allowed
Number of LPNs	Allowed
Earliest / latest pickup dates	Allowed
Earliest / latest drop off dates	Allowed
Flex field update	Allowed

Include for Planning Delivery Lines (Details) Changed Actions

Action	Delivery Detail Not Assigned to Delivery	Delivery Created Not Assigned to Trip (Sent to OTM or Not)	Delivery Assigned to Trip, Not Current	Delivery Assigned to Trip, Current
Auto-create Trip	Not Allowed	Not Allowed	Not Allowed	Not Allowed
Pick and Ship	Allowed (Delivery details will be changed to Ignore for Planning).	Not Allowed	Not Allowed	Not Allowed
Pick, Pack, and Ship	Allowed (Delivery details will be changed to Ignore for Planning).	Not Allowed	Not Allowed	Not Allowed
UPS Address Validation	Disabled (Action is not available in role definition when OTM is installed).	Disabled	Disabled	Disabled
UPS Rate and Service	Disabled (Action is not available in role definition when OTM is installed).	Disabled	Disabled	Disabled
UPS Time in Transit	Disabled (Action is not available in role definition when OTM is installed).	Disabled	Disabled	Disabled

Include for Planning Delivery Details Allowed for Maintenance Attributes

Attribute	Allowed / Disallowed
Requested Quantity	Allowed from Order Management
Cancelled Quantity	Allowed from Order Management
Shipped Quantity	Allowed
Secondary Quantities	Allowed from Order Management
Lot Number	Allowed
Serial Number / to Serial Number	Allowed
Weights and Volumes	Allowed
Requested / Schedule Ship Date	Allowed from Order Management
Customer PO	Allowed from Order Management

Delivery Interface Statuses

The following interface statuses are used by Oracle Shipping Execution to track the required actions for Oracle Transportation Management integration. These interface statuses are internal and not visible through the user interface.

Delivery Interface Statuses:

- CREATION_REQUIRED (CR): Delivery must be created in Oracle Transportation Management
- UPDATE_REQUIRED (UR): Delivery has been updated and must be sent to Oracle Transportation Management
- DELETE_REQUIRED (DR): Delivery has been emptied or has been ignored for planning (no delivery lines or delivery lines with empty LPNs only) and must be deleted in Oracle Transportation Management
- AWAITING_ANSWER (AW): Create or Update has taken place on a delivery and an answer is expected from Oracle Transportation Management
- ANSWER_RECEIVED (AR): An answer has been received from Oracle Transportation Management
- NOT_TO_BE_SENT(NS): Delivery is either Ignore for Planning or has no delivery lines (or has delivery lines empty LPNs)
- COMPLETED(CMP): Delivery has been ship confirmed and pick up trip stops are closed
- CREATE_IN_PROCESS (CP): Creation is in process
- UPDATE_IN_PROCESS(UP): Update is in process
- DELETE_IN_PROCESS (DP): Deletion is in process

Trip Stops Interface Statuses:

- ACTUAL_SHIP_REQUIRED (ASR): Last pickup trip stop is set to this status after it is closed
- COMPLETED. (CMP): Last pickup trip stop is set to this status once the ActualShipment transaction has been sent to Oracle Transportation Management
- Shipment in Process (ASP): The trip and stop is in the process of being sent to Oracle Transportation Management.

PlannedShipment Interface Message Corrections

You view and correct interface errors on the Shipment Message Corrections window. Any Oracle Transportation Management interface error corrections are viewed and corrected in Oracle Shipping Execution Interface Message Corrections window. The integration of Oracle Transportation Management PlannedShipment includes changes to the Shipment Message Corrections window. The Trip tab includes the following new fields:

- Freight Terms
- Vehicle Item Name
- Mode of Transport
- Service Level

The Trip Stops tab includes the new field Time Zone Code.

Viewing Oracle Transportation Applied Freight Costs

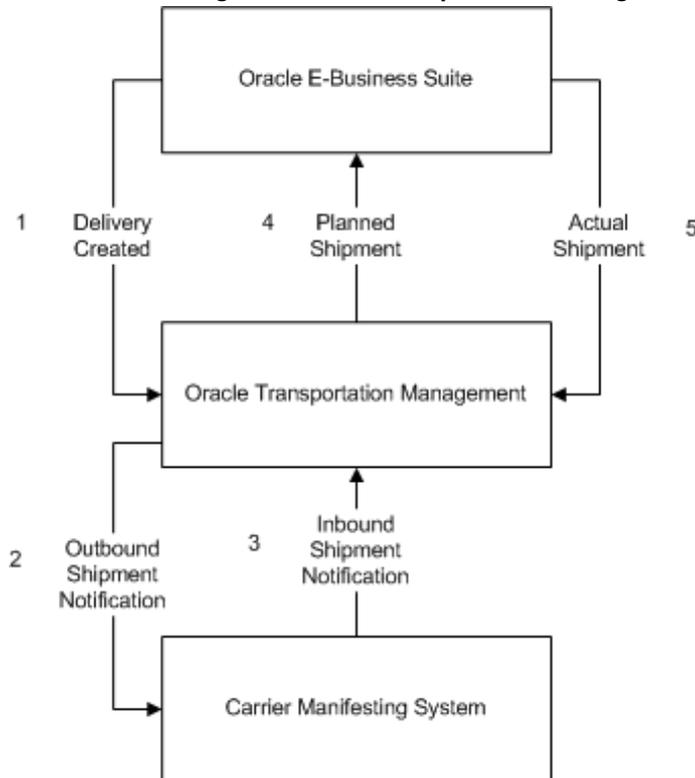
Oracle Transportation Execution applied freight costs are viewed on the Freight Costs window within Oracle Shipping Execution. (From the Shipping Transactions form, find your delivery and invoke the Action Assign Freight Costs). After the PlannedShipment message has been received, the freight costs are viewable at the delivery level as OTM Freight Cost.

Applied freight costs are allocated to order lines through the use of the Order Management interface.

Carrier Manifesting

When Oracle Transportation Management is integrated, all Oracle E-Business Suite enabled carrier manifest features are disabled. All carrier manifest deliveries are sent to Oracle Transportation Management as non-carrier manifesting deliveries. Oracle Transportation Management manages the carrier manifest system outside of the Oracle E-Business Suite.

Carrier Manifesting with Oracle Transportation Management



Third Party Warehousing

Third party warehousing functionality remains the same in Oracle E-Business Suite with or without Oracle Transportation Management integrated. Oracle Transportation Execution is not required to use Third Party Warehousing.

Note: Deliveries created by the third party warehouse instance, when Oracle E-Business Suite is used to manage the third party warehouse) are communicated to Oracle Transportation Management for planning.

See: *Oracle Transportation Execution User's Guide*

Oracle Warehouse Management

Oracle Warehouse Management supports several methods to ship, also called mobile ship confirm, the deliveries using radio frequency (RF) devices. The methods include the following:

- Quick Ship
- LPN Ship
- Dock Door Ship
- Direct Ship

If the delivery lines and deliveries are created with Include for Planning, but are not sent to Oracle Transportation Management for planning yet, Oracle Warehouse Management will allow ship confirmation using any of the above methods after changing the deliveries and delivery lines to Ignore for Planning.

If the deliveries are awaiting an updated plan from Oracle Transportation Management, none of the above shipping methods will allow such deliveries to be confirmed.

Any pack or unpack operation in an Oracle Warehouse Management enabled organization does not affect an already planned delivery, (that is, no update in the plan is required from Oracle Transportation Management). Overpick and underpick in a pick-pack-ship flow requires an updated plan from Oracle Transportation Management before these deliveries can be ship confirmed.

Overpick and underpick in direct ship do not require replanning of the delivery, before you can ship confirm. Unloading a part of an already loaded delivery, using direct ship, requires replanning of the delivery.

The behavior of the Oracle Mobile Supply Chain Applications ship confirm, for Oracle Inventory enabled organizations, is the same as ship confirm using the Shipping Transactions Form.

Automated Shipping (Oracle Shipping Execution)

Oracle Shipping Execution enables automated shipping flows to speed the various shipping processes. The automated flows are available through actions on the Shipping Transactions Form. See: *Oracle Shipping Execution User's Guide* for information on One Step Shipping.

The automated flows are enabled with the integration of Oracle Transportation Management; however, in some cases the functionality of the flows changes with the integration of Oracle Transportation Management, including the following:

Action	Delivery – Ignore for Planning	Delivery not on a Trip Waiting for OTM Planning	Delivery on a Trip Waiting for OTM Re-Planning	Delivery on a Trip Planned by OTM	Delivery Details
Auto Ship Confirm	Allowed Note: Auto Ship Confirm will fail Include for Planning deliveries if a ship confirm rule is used, and that ship confirm rule specifies a ship method different from the Oracle Transportation Management trip.	Not Allowed	Not Allowed	Allowed	NA
Process Deliveries SRS	Allowed and creates Ignore for Planning Trip	Not Allowed	Not Allowed	Not Allowed	Allowed

Implementation of Oracle Transportation Management with Oracle Shipping Execution

Profile Options and Parameters

During implementation, you set a value for each user profile option to specify how Shipping Execution controls access to and processes data. Generally, the system administrator sets and updates profile values. See: *Setting User Profile Options, Oracle Applications System Administrator's Guide*.

The following table indicates whether you (the user) can view or update profile options and at which System Administrator level that profile options updated. The System Administrator level includes User, Responsibility, Application, and Site levels. Profile options are considered either optional or required:

- **Optional:** An optional profile option indicates that a value is not mandatory. You can either provide a value or leave the default value as is.
- **Required:** A required profile option indicates that a value is mandatory.

Note: If you are using a multi-organization structure, your system administrator must change the OM Item Validation Organization profile option to be visible and updatable at the responsibility level. This change enables Shipping Execution to apply the default tax code and revenue account information correctly. See: *Setting Up, Multiple Organizations in Oracle Applications*.

The following terms are used in the table to identify if you can view or update profile option information:

- **Updatable:** You can update the profile option
- **View Only:** You can view the profile option value but you cannot change it
- **No Update or View:** You cannot view or change the profile option value

Profile Option	User	Resp	App	Site	Required?	Default Value
OTM: Integration Enabled				Updatable	Yes	Niether
OTM: Domain Name				Updatable	Yes	Blank/Empty
OTM: Domain User				Updatable	Yes	Blank/Empty
OTM: Domain Password				Updatable	Yes	Blank/Empty
OTM: Proxy Server				Updatable	Yes	Blank/Empty
OTM: Proxy Port				Updatable	Yes	Blank/Empty
OTM: Servlet URI				Updatable	Yes	Blank/Empty
OTM: Corporation Country Code				Updatable	Yes	Blank/Empty
WSH: BPEL Webservice URI for OTM				Updatable	Yes	Blank/Empty
WSH: Default Shipping User for OTM				Updatable	Yes	Blank/Empty
WSH: De-fault Shipping Responsibility for OTM				Updatable	Yes	Blank/Empty

Profile Option	Used By
OTM: Integration Enabled	All outbound (Sales Order Integration, Outbound Deliveries Integration, and Ref Data) and Purchasing Integration
OTM: Domain Name	All outbound (Sales Order Integration, Outbound Deliveries Integration, and Ref Data) and Purchasing Integration
OTM: Domain User	All outbound (Sales Order Integration, Outbound Deliveries Integration, and Ref Data) and Purchasing Integration
OTM: Domain Password	All outbound (Sales Order Integration, Outbound Deliveries Integration, and Ref Data) and Purchasing Integration
OTM: Proxy Server	All outbound (Sales Order Integration, Outbound Deliveries Integration, and Ref Data)
OTM: Proxy Port	All outbound (Sales Order Integration, Outbound Deliveries Integration, and Ref Data)
OTM: Servlet URI	Outbound (Sales Order Integration)
OTM: Corporation Country Code	Outbound (Ref Data)
WSH: BPEL Webservice URI for OTM	All outbound (Sales Order Integration, Outbound Deliveries Integration, and Ref Data)
WSH: Default Shipping User for OTM	Only for inbound from OTM to WSH integration
WSH: Default Shipping Responsibility for OTM	Only for inbound from OTM to WSH integration

OTM: Integration Enabled

Oracle Shipping Execution and Oracle Purchasing use this profile to determine which components of the Oracle Transportation Management integration are enabled.

Valid Values include:

- Neither: Oracle Transportation Management integration with Order Management and Purchasing is not enabled.
- Order Management Only: Only the sales order outbound flow is integrated with Oracle Transportation Management; inbound purchasing flow is not.
- Purchasing Only: Only the purchase order flow is integrated with Oracle Transportation Management; outbound sales orders are not.
- Both Order Management and Purchasing: Both Order Management and Purchasing transactions integrations are enabled with Oracle Transportation Management.

OTM: Domain Name

Oracle Shipping Execution and Oracle Purchasing use this profile. It is communicated on the outbound messages from Oracle E-Business Suite Applications and used by Oracle Transportation Management to identify an instance of Oracle E-Business Suite. The profile must be a valid domain name defined in Oracle Transportation Management.

OTM: Domain User

Oracle Shipping Execution and Oracle Purchasing use this profile. It must be a valid user in Oracle Transportation Management and is not case sensitive.

OTM: Domain Password

This profile contains the password for the Oracle Transportation Management domain user name used by Oracle Shipping Execution and Oracle Purchasing. This profile is case sensitive.

OTM: Proxy Server

This profile is used to store the HTTP proxy server on the Oracle E-Business Suite instance. Oracle Shipping Execution uses this profile to make a connection to an Oracle Transportation Management instance.

OTM: Proxy Port

This profile is used to store the port number for the HTTP proxy server on Oracle E-Business Suite instance. Oracle Shipping Execution uses this profile to make a connection to an Oracle Transportation Management instance.

OTM: Corporation Country Code

This profile is used by Oracle Shipping Execution for customer and carrier synchronization. The code in this profile identifies the default country code of the headquarters' carriers and customers.

OTM: Servlet URI

This profile is used to store Oracle Transportation Management Servlet URI for the Oracle E-Business Suite instance to connect to Oracle Transportation Management. This is used for freight estimation at sales order integration only.

WSH: BPEL Web Service URI for OTM

This profile is used by freight estimation at sales order, outbound orders, and reference data integration. It stores the HTTP location of the BPEL Process Manager and tells the concurrent request where the BPEL outbound processes are located.

WSH: Default Shipping User for OTM

OTM: Default Shipping User for OTM determines the default user that receives the inbound messages from Oracle Transportation Management. The BPEL process sends the inbound message to the Oracle E-Business Suite user identified by this profile. This profile option is required and there is no default value.

WSH: Default Shipping Responsibility for OTM

This profile determines the user responsibility required to receive inbound messages from Oracle Transportation Management. The BPEL process sends the inbound message to the default Oracle E-Business Suite user with the responsibility defined by this profile. This profile option is required and there is no default value.

Shipping Parameters

The Shipping Parameters window is modified for the installation of Oracle Transportation Management. The modifications are as follows:

- The Transportation tab is disabled.
- The Delivery Size Limitation region is added to the Delivery tab, which contains the following new parameters:
 - **Max Net Weight:** The Max Net Weight is compared to the weight of a delivery line to ensure that the delivery line weight is not greater than the Max Net Weight, and that splitting is done at delivery line import. This field is not mandatory, and the default value is null; however, if a Max Gross Weight is entered, then the Max Net Weight becomes a required field (and vice versa). The Max Net Weight must be less than or equal to the Max Gross Weight.
 - **Max Gross Weight:** This weight is compared to the total weight of the delivery lines within a delivery to ensure that it is not greater than the Max Gross Weight. This field is not mandatory and the default value is null; however, if a Max Net Weight is entered, then the Max Gross Weight becomes a required field (and vice versa). The Max Gross Weight must be greater than or equal to the Max Net Weight.
 - **UOM:** This field is automatically populated from the Global Shipping Parameters window, if specified. This field cannot be updated in the Shipping Parameters window.

Note: The Global Parameters UOM is not a mandatory field in the Global Shipping Parameters window. Therefore, the user will have to enter it manually in Global Parameters window.

Global Shipping Parameters

The Global Shipping Parameters window is modified by the installation of Oracle Transportation Management. The modifications are as follows:

- The Transportation tab is completely disabled. This tab is used with the installation of Oracle Transportation Execution only.
- The Delivery Date Calculation Method field is moved from the Transportation tab to the General tab.

Shipping Exceptions

During the shipping and transportation of goods, unforeseen shipping exceptions can occur that conflict with the actual requirements of the shipper, transportation carrier, or customer. Tracking exceptions can also be helpful to identify and correct defects in the business process. Seeded exceptions are logged automatically against delivery lines, LPNs, deliveries, and trip stops when specific events occur. The following exceptions are seeded with the integration of Oracle Transportation Management:

- **Oracle Transportation Management Interface Exceptions:**
 - **WSH_OTM_DEL_TRANSACTION_REQ:** This exception is a delivery level exception that is logged when a Create, Update, or Delete transaction must be sent to Oracle Transportation Management.

- WSH_OTM_DEL_AWAIT_TRIP: This exception is a delivery level exception that is logged when a Create or Update transaction has been sent to Oracle Transportation Management.
- WSH_OTM_DEL_DELETED: This exception is logged when the delivery is set to Ignore for Planning or the delivery has no associated delivery lines and has been deleted in OTM.
- WSH_OTM_UOM_SETUP: This exception is logged when the trip fails the ActualShipment interface because the Shipping Parameter weight or volume UOM Class or because corresponding inventory base UOMs were not set up.
- WSH_OTM_SHIPMENT_ERROR: This exception is logged when an error occurs while processing data from Oracle Transportation Management.
- WSH_OTM_SHIPMENT_REC: This exception is logged when a response message has been received from Oracle Transportation Management.
- WSH_OTM_INVALID_LOC_ERROR: This exception is logged when the response message from Oracle Transportation Management includes an invalid stop location.
- **Delivery Detail Import Splitting Exception:**
WSH_OTM_DET_OVERSIZED: This exception is logged when the delivery detail failed to be split at delivery detail import.
- **OTM Interface Splitting Exceptions:**
 - WSH_OTM_DEL_SPLIT_FAIL: This exception is logged when Oracle Shipping Execution failed to split a delivery
 - WSH_OTM_DEL_SPLIT: This exception is logged when Oracle Shipping Execution has successfully split a delivery. This exception is used when the delivery is split into five or less child deliveries. The exception is logged against the parent delivery.
 - WSH_OTM_DEL_SPLIT_LARGE: This exception is logged when Oracle Shipping Execution has successfully split a delivery. This exception is used when the delivery is split into six or more child delivery lines. The exception is logged against the parent delivery.
 - WSH_OTM_DEL_SPLIT_CHILD: This exception is logged when Oracle Shipping Execution has created the child delivery after the split. The exception is logged against the child delivery.
 - WSH_OTM_DEL_OVERSIZED: This exception is logged when Oracle Shipping Execution transportation interface rejects a delivery that exceeds the gross weight limit, while the interface parameter Auto Split Deliveries is set to No.

Concurrent Programs

Oracle Transportation Management introduces new concurrent programs to Oracle E-Business Suite. The following list details each new concurrent program:

- Shipping - Transportation Carrier Synchronization
- Shipping - Transportation Outbound Interface
- Shipping - Transportation PlannedShipment Interface

Shipping - Transportation Carrier Synchronization

Carriers and carrier sites are defined in Oracle Shipping Execution; however the implementation of Oracle Transportation Management includes changes to the Carrier form. The following changes are part of the integration of Oracle Transportation Management:

- When Oracle Transportation Management is not installed, all fields on the Rating, Payment tab are disabled with the exception of the Enable Manifesting field.
- When Oracle Transportation Management is installed, all fields on the Rating, Payment tab are disabled with the exception of the fields in the Freight Payment and Audit region (that is, the Supplier and Default Supplier Site fields).
- When Oracle Transportation Management is installed, the Mode Limits tab is disabled.
- When Oracle Transportation Management is installed, the Mode Limits tab, within the Services tab, is disabled.
- When Oracle Transportation Management is installed, the Transportation tab within the Addresses/Sites tab, is disabled with the exception of the Supplier Site field.

The Shipping - Transportation Carrier Synchronization concurrent program enables Oracle E-Business Suite to communicate carrier and carrier site information to Oracle Transportation Management through the use of the Location XML transaction. The carrier and carrier site information from the Oracle E-Business Suite tables/columns is interfaced to Oracle Transportation Management tables/columns through the concurrent program.

During the implementation of Oracle Transportation Management, the Shipping - Transportation Carrier Synchronization concurrent program is executed to move all carrier and carrier site data from the Oracle E-Business Suite tables / columns to the Oracle Transportation Management tables/columns. After the implementation is complete, the concurrent program can be run whenever a Carrier/Carrier Site is updated or new Carriers and Carrier Sites are created.

BPEL is used to control the flow of data sent by the concurrent program.

Interface Parameters

The Shipping - Transportation Carriers Synchronization is executed from the Interfaces menu. The program includes the following parameters:

- Carrier Name From: Carrier name range low.
- Carrier Name To: Carrier name range high.
- Last Date Update From: If left blank, then the program will apply to all carriers within the restrictions of the other parameters defined.
- Last Date Update To: If left blank, then the program will apply to all carriers within the restrictions of the other parameters defined.

Transferred Carrier Data

The following table details all carrier data, whether Oracle E-Business Suite or Oracle Transportation Management owns the data, and details how (if at all) the data is transferred from one to the other. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite.)

Transferred Carrier Data

EBS Entity	OTM Entity	Owner	Transfer Data Method
Vehicle Types	Equipment Types / Groups	OTM	None
Carrier Commitments	Carrier Commitments	OTM	None
Vehicle Availability	Carrier Capacity	OTM	None
Carriers	Service Providers/ Corporation ID	EBS	From EBS to OTM
Carrier Sites	Service Providers/ Location ID	EBS	From EBS to OTM
Service Levels	Rate Service	EBS	TIP Interface
Modes	Mode	EBS	TIP Interface
Calendars (Shipping, Receiving, and Carrier)	Calendars	OTM	None

Shipping - Transportation Outbound Interface

The Shipping-Transportation Outbound Interface is executed to pass Oracle Shipping Execution information to Oracle Transportation Management. The interface passes the information to BPEL using XML.

The Shipping-Transportation Outbound Interface includes the following actions:

- **Delete:** Send all Ignore for Planning deliveries and deliveries with no delivery lines (exception being empty LPNs as delivery lines) that must be removed from Oracle Transportation Management.
- **Create:** Send all Include for Planning created deliveries to Oracle Transportation Management using the Release XML transaction.
- **Update:** Send all updated Include for Planning deliveries to Oracle Transportation Management.
- **ActualShipment:** Collect all of the Include for Planning and Ignore for Planning trips and send the trips to Oracle Transportation Management. Only trips with all pickup stops closed are included in the ActualShipment interface.

Shipping-Transportation Outbound interface includes the following parameters:

The interface is triggered at the BPEL process.

Interface Parameters:

- **Interface Action:**
 - **Create:** Send all Include for Planning created deliveries to Oracle Transportation Management
 - **Update:** Send all Include for Planning updated deliveries to Oracle Transportation Management
 - **Delete:** Send all deliveries that must be removed from Oracle Transportation Management

- ActualShipment
- Create, Update: Send all Include for Planning created or updated deliveries to Oracle Transportation Management
- All Except Actual Shipment: Send all Include for Planning created and updated deliveries to Oracle Transportation Management and all deliveries that must be deleted in Oracle Transportation Management
- Auto Split Deliveries: If set to Yes, then deliveries with weight greater than the gross weight specified in Shipping Parameters is split automatically. If set to No, then deliveries with a weight greater than the weight specified in Shipping Parameters are not automatically split. This parameter is disabled if ActualShipment or Delete is the selected Interface Action.
- Ship From Organization: Specify the organization from which you are submitting deliveries and stops. If left as Null, then all organizations are selected.
- Trip Range: The range of trips to be submitted. This field is disabled unless ActualShipment is the Interface Action.
- Delivery Range: The range of deliveries to be submitted. This field is disabled when ActualShipment is selected as the Interface Action.
- Pick Up Date Range: Delivery pick-up date range. This field is disabled when ActualShipment is selected as the Interface Action.
- Number of Child Processes: The number of child batches to be run in parallel.
- Transactions Per Batch: Number of delivery or trip transactions that are run per batch. If this number is exceeded, then another concurrent request is run in parallel to execute the remaining transactions.

When scheduling the Shipping-Transportation outbound interface, it is recommended that you ensure that the Delete action is processed with the highest priority. For example, by scheduling the action with a higher frequency, or by creating a concurrent request set that performs the action ahead of other interface actions. This lowers the risk of double assignment of ship units or order release lines in Oracle Transportation Management, which might prevent proper deletion of the order release.

Reference Data and Mapping

Item, Customer/Customer Site, and Organizations/Ship From Locations are included as reference data that is sent as part of the Shipping-Transportation Outbound Interface concurrent request.

Related Topics

Item XML Mapping, page A-21

Customer XML Mapping, page A-21

Customer Site XML Mapping, page A-21

Organization XML Mapping, page A-21

Carrier XML Mapping, page A-15

Carrier Site XML Mapping, page A-15

Accounts Payables

Overview of Oracle Transportation Management Integration with Accounts Payables

Oracle Transportation Management integrates with Oracle Payables to enable freight payment. Oracle Transportation Management performs an audit and approval of freight payments, and then passes the payment information to Oracle Payables, through the use of the Send Voucher interface. The Send Voucher interface transmits the voucher data to Oracle Payables through BPEL. The Payables Open Interface Import interface is run to import the vouchers into the Oracle Payables tables. The invoice is then created, validated, and ultimately paid in Oracle Payables.

Send Voucher Interface

The Send Voucher interface enables you to send freight payment vouchers from Oracle Transportation Management to Oracle Payables through the use of BPEL.

Interface Parameters

The following defines the setup for the Voucher Interface.

1. Within Oracle Transportation Management, define an external system to send to the BPEL instance.

Sample Data

Field Name	Sample Value
Username	admin
Password	welcome
Use GL Credentials	Enable
BPELProvider	ormi://hostname/orabpel or opmn:ormi://hostname:port:OC4J_BPEL/ orabpel
BPEL Domain (and password)	default/bpel
BPEL Flow	OtmVoucherToOracleApInvoice
BPEL Operation	process

2. Select the voucher that you are sending.
3. Run the Action Send Voucher Interface.
4. Select the External System that is configured for the BPEL Provider.
5. Set the Notify Type to BPEL.

Implementation of Oracle Transportation Management with Oracle Payables

The implementation of Oracle Transportation and Oracle Payables consists of the APInvoice XML transaction. The XML mapping is detailed in the Oracle Payables XML Mapping, page A-31 section of the XML Mapping appendix.

Overview of Oracle Purchasing Integration with Oracle Transportation Management

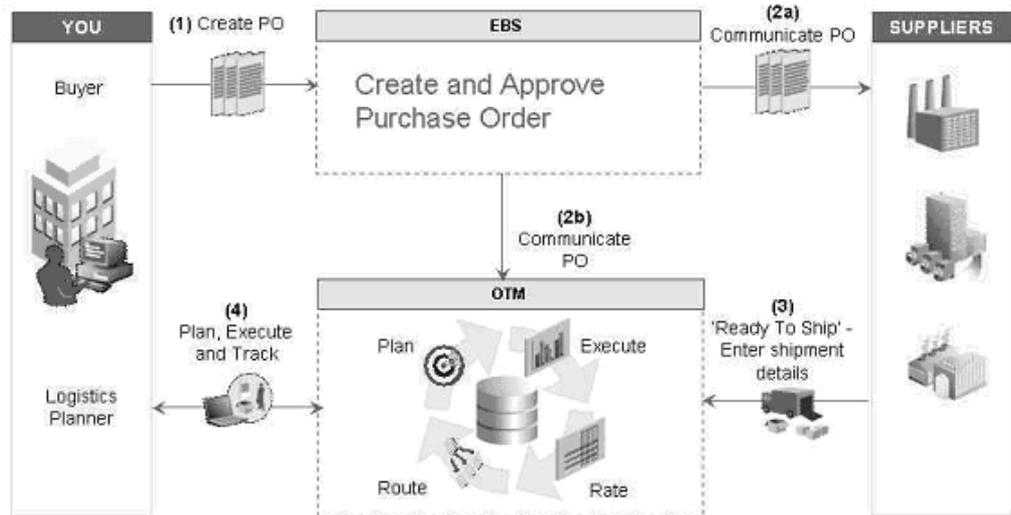
Oracle Transportation Management integrates with Oracle Purchasing, enabling you to manage inbound freight from your suppliers.

The integration of Oracle Transportation Management enables you to plan and track the progress and status of inbound purchase order-related shipments. Purchase orders created in Oracle Purchasing are communicated to Oracle Transportation Management after approval, enabling you to execute (rate, route, track, and reconcile) the related shipment. Purchase order changes are also communicated to Oracle Transportation Management upon re-approval in Oracle Purchasing.

As part of the shipment process, Oracle Transportation Management enables suppliers to submit “ready to ship” information.

Once shipped, purchasing agents access carrier-provided shipment status updates within Oracle Transportation Management. After goods are delivered, invoices for freight payment are collected and processed for payment.

Inbound Purchase Order Flow



Functional Changes with Oracle Transportation Management Installed

Responsibility for Inbound Freight

Inbound freight responsibility is determined by the purchase order header attribute named Transportation Arranged. This attribute is set in the Terms and Conditions window through the Purchase Orders window in Oracle Purchasing. The Transportation Arranged attribute has the following values:

- **Buying Organization:** The payment method code for inbound shipments in Oracle Transportation Management is set to Collect (buying organization is responsible for managing and paying for inbound transportation).
- **Supplier:** The payment method code is set to Prepaid (supplier is responsible for managing and paying for inbound transportation).
- **Blank value:** Purchase orders are not communicated to Oracle Transportation Management.

Impact of Purchase Order Status Changes on Oracle Transportation Management

Purchase Order Event	Impact in Oracle Transportation Management
Cancel Purchase Order	Prevents future releasing against all relevant PO shipments.
Open PO Shipment for Receiving	Allows future releasing against this PO shipment.
Close PO Shipment for Receiving	Prevents future releasing against this PO shipment.
Close Purchase Order	Prevents future releasing against this PO.
Finally Close Purchase Order	Prevents future releasing against this PO.
Place Purchase Order on Hold	Prevents future releasing against this PO.
Release Purchase Order Hold	Allows future releasing against this PO.

Implementation of Oracle Transportation Management with Purchasing

Profile Options

All Profile options, page 4-14 specific to the integration of Oracle Transportation Management with Oracle E-Business Suite are documented in the Shipping Execution chapter of this guide.

The following is a list of profile options that are specific (and required) to the integration with Oracle Purchasing:

- OTM: Integration Enabled
- OTM: Domain Name
- OTM: Domain User
- OTM: Domain Password

See Profile Options and Parameters, page 4-14 for details on the profile options.

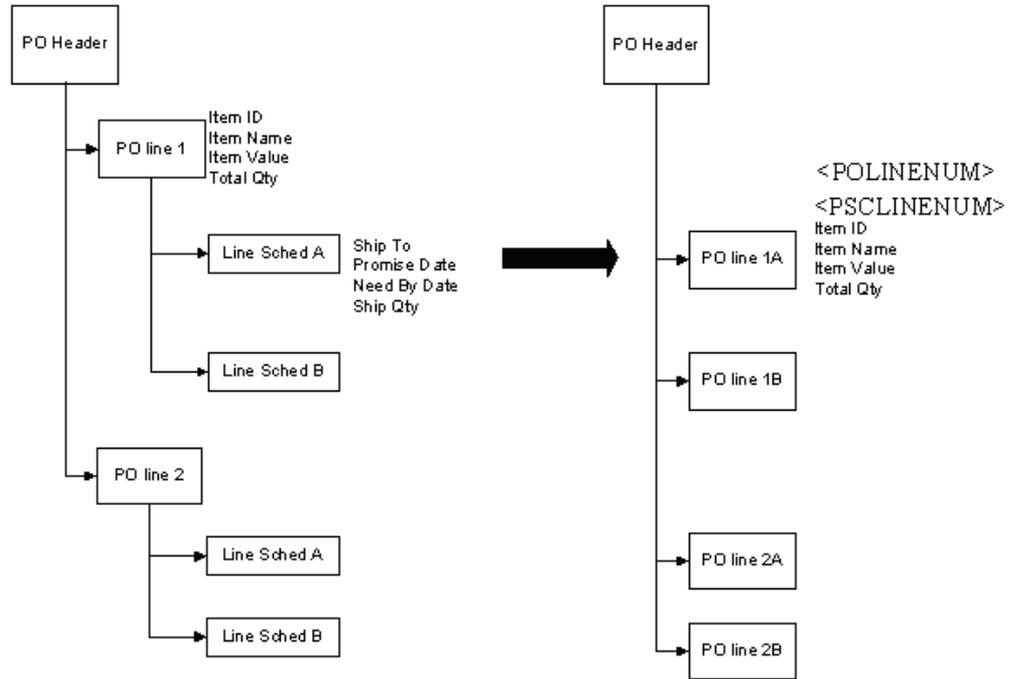
Mapping Oracle Purchasing to Oracle Transportation Management

In Oracle E-Business Suite, the purchase order or blanket release schedule is concatenated with the relevant line information to create an orderbase line in Oracle Transportation Management, as shown in the following figure:

Mapping Purchase Order Shipments to Order Base Lines

EBS Purchasing

OTM Order Base

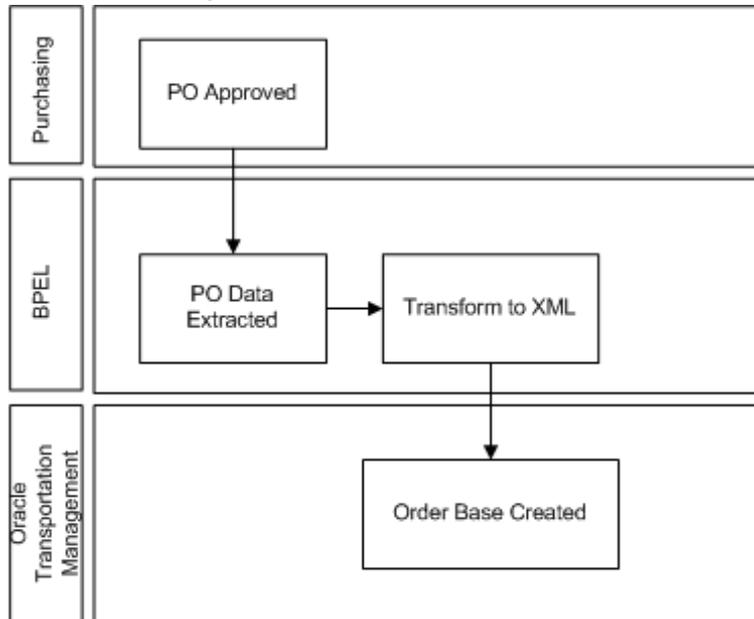


For detailed mapping of Oracle Purchasing to Order Base XML, see the Purchasing Fields to Order Base XML Mapping, page A-37 section of the XML Mapping appendix.

BPEL Process Manager

All communication between Oracle Purchasing and Oracle Transportation Management is through the BPEL process PoSendPoToOtm. The Oracle E-Business Suite Business Event "oracle.apps.po.event.document_action_event" activates this process. Upon activation, the process calls an Oracle Purchasing API to extract the appropriate document data. It then converts the document data to a message in the Oracle Transportation Management schema and invokes the Oracle Transportation Management servlet.

Oracle Purchasing to XML



XML Translation via XSL in BPEL

Oracle Purchasing purchase order and release data are extracted from Oracle E-Business Suite in the database object PO_OTM_ORDER_TYPE. In the BPEL process, an XSL translation converts the data to an Oracle Transportation Management transmission.

The form of the transmission depends upon the action performed. In the case of a document approval or re-approval, the transmission consists of an Oracle Transportation Management TransOrder object, along with a set of Location and Contact objects. For control actions on existing documents, such as cancellation or closure, a GenericStatusUpdate object is transmitted.

The XSL translation implements integration-specific business logic, such as rounding quantities and selecting the appropriate contact methods for involved parties. The XSL step also performs some Oracle Transportation Management specific transformations to Oracle E-Business Suite data, such as generation of unique keys.

Web Services

The BPEL process communicates with Oracle E-Business Suite through the Business Event queue and the PO_OTM_INTEGRATION_PVT API. It terminates with a call to the Oracle Transportation Management servlet.

XML Mapping

Oracle Transportation Management to Oracle E-Business Suite XML Mapping

The following sections describe the XML mapping for Oracle Order Management, Oracle Shipping Execution, Oracle Purchasing, and Oracle Payables.

Oracle Order Management XML Mapping

Oracle Order Management to Oracle Transportation Execution XML Mapping

The following table shows the mapping of the referenced XML carrier data between Oracle E-Business Suite and Oracle Transportation Management, whether the data is required or optional, and a brief description. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite)

Optional/Required	OTM Element	EBS Table.Column	Description
R	LocationGid.Xi	Ship_From/To location id from the PL/SQL FTE_PROCESS_REQUESTS.fte_source_line_tab	Order source location ID
		In the following format: Use same domain name (Profile Option OTM: Domain Name) for all different locations. (customer/supplier/carrier/org).XID part of GID will be concatenation of three fields to generate a unique combination. For example, for customer site it could be CUS-201-101 where 201 is customer ID and 101 is location_id. For carrier site, it could be CAR-301-401 where 301 is carrier ID and 401 is carrier_site_id. For organization location, it could be ORG-501-601 where 501 is organization ID and 601 is location_id.	
O	SourceAddress.CorporationGid.Xid	ORG-201 (if 201 is the org ID)	Source address ID
O	DestAddress.CorporationGid.Xid	CUS-1091 (if 1091 is the customer ID)	Destination address ID
O	City	Is queried from the database using the location ID.WSH_LOCATIONS.CITY	City. DataType: A30
O	ProvinceCode	Use the Region Location mapping to see if the state code exists. If not, and if the state length is two, then use that as the state code. If not, then no state code is passed.	A two-character province code. In the United States, ProvinceCode corresponds to a two character state code such as PA. DataType: A2.

O	CountryCode3Gid	WSH_LOCATIONS.COUNTRY has the 2 letter ISO code. For the three letter codes FND_TERRITORIES.ISO_TERRITORY_CODE must be used. FND_TERRITORIES.TERRITORY_CODE maps to WSH_LOCATIONS.COUNTRY. For a given location ID, the three letter country code can be determined by:SELECT t.iso_territory_code from FND_TERRITORIES t, WSH_LOCATIONS l where l.location_id= X and l.country=t.territory_code. The domain is PUBLIC. Same as not specifying a domain.	The three character ISO country code global identifier. Validation: References COUNTRY_CODE table.
O	PostalCode	WSH_LOCATIONS.POSTAL_CODE	The postal code component of Address. For United States, this is a 3, 5 or 9 character zip code. DataType: A15
O	EstimatedShipDate	Ship_date from PL/SQL records formatted into YYYYMMDDHH-MMSS	Estimated ship date. Format: YYYYMMDDHHMMSS
O	EstimatedArrivalDate	Arrival_date from PL/SQL records formatted into YYYYMMDDHH-MMSS	Estimated arrival date. Format: YYYYMMDDHHMMSS
O	TimeZoneGid	Obtained using FND_TIMEZONES.get_server_timezone_code. The domain is PUBLIC. Same as not specifying a domain.	The time zone global identifier. Validation: References TIME_ZONE table. This is the Java timezone code
O	ShipUnitCount	1	Hardcoded to 1
O	PackagedItemGid.Xid	Inventory_item_id from PL/SQL records, "inventory_organization_id" + "-" + "inventory_item_id" (example: 207-149).	Packaged item ID
O	WeightValue. VolumeValue	Weight/Volume from PL/SQL records	Weight and Volume values

O	WeightUOMGid.Xid, VolumeUOMGid.Xid	Check Attribute15 of descriptive flex field for the UOM in the PL/SQL Record. If there is a value, then use that; otherwise, use the uom_code. The domain for the UOM is PUBLIC. Same as not specifying a domain.	Weight and Volume UOM ID
O	Length/Width/Height and UOMs	Queried using inventory_item_id. Check Attribute15 of descriptive flex field for the UOM in the PL/SQL Record. If there is a value, then use that; otherwise, use the uom_code. The domain for the UOM is PUBLIC. Same as not specifying a domain.	Length, width, height, and UOMs
O	PaymentMethodCode	Freight_terms_code from PL/SQL records. The domain is PUBLIC. Same as not specifying a domain.	Payment method code.
O	TransportModeGid	Same as mode of transport code. Mode_of_transport from PL/SQL records.	Mode of transportation Global ID
O	ServiceProviderGid	Same as carrier ID. Carrier_id from PL/SQL records.	Service provider Global ID
O	RateServiceGid	Same as service_level_code. From service_level from PL/SQL records.	Service rate Global ID
O	RIQRequestType	For CHOOSE SHIP METHODS: All Options For GET FREIGHT RATES: LowestCost.	Delivery Request. Validation: (LowestCost, FastestTransit, AllOptions). Default: LowestCost.

O	Perspective	For CHOOSE SHIP METHODS: B For GET FREIGHT RATES: B	Shipment Perspective. Used to ensure that the order and shipment data shown to the end user makes sense from that users perspective or point of reference. Possible values are B = Buy Side, and S = Sell Side. For the RIQQuery element, a value of 'A' can be used to query for both Buy Side and Sell Side.
O	UseRIQRoute	For CHOOSE SHIP METHODS: N For GET FREIGHT RATES: N	Y, N. Specifies whether to use the RIQ Route functionality, or use the RIQ Rate behavior. Default is N.
O	UserName, Password	From the profile options.	

Oracle Shipping Execution XML Mapping

Location XML Transaction - Carrier

See Concurrent Programs, page 4-19 for details, including XML mapping, of the Location XML transaction for carriers.

Release XML Transaction - Deliveries

The following table shows the XML mapping for the Release XML transaction. Elements that are not mapped are not shown. Item, Customer, Customer Site, and Organization reference data is sent using the Order Release Message. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite.)

Required/ Optional	OTM Attribute	EBS Table.Column	Description
R	ReleaseGid	WSH_NEW_DELIVERIES.DELIVERY_ID	Release Global ID
R	TransactionCode	"I" for creation, RC for update, and D for delete.	Internally sent to OTM as 'RC' for both Update/Create
O	ReleaseHeader.ReleaseName	WSH_NEW_DELIVERIES.NAME	Release name
O	ReleaseHeader.ReleaseMethodGid	PREPACK	EBS dictates the contents of the Shipunits
O	ReleaseHeader.CommercialTerms		Commercial terms
O	ReleaseHeader.CommercialTerms.PaymentMethodCodeGid	WSH_NEW_DELIVERIES.FREIGHT_TERMS_CODE	Payment method code global ID

O	ReleaseHeader. CommercialTerms. IncoTermGid	WSH_NEW_DELIVER IES.FOB_CODE	FOB code
O	ReleaseHeader. TimeWindowEmphasisGid	BOTH	Time window emphasis specification
O	ReleaseHeader. RateServiceGid	WSH_NEW_DELIVER IES.SERVICE_LEVEL	Rate service global ID
O	ReleaseHeader.A.Service ProviderGid	WSH_NEW_DELIVER IES.CARRIER_ID	Service provider global ID
O	ReleaseHeader.B. TransportModeGid	WSH_NEW_DELIVER IES.MODE_OF_TRANS PORT	Transportation mode global ID
R	ShipFromLocationRef. LocationGid	DELIVERY SHIP FROM LOCATION GID as per reference data GID	Location global ID
O	ShipToLocationRef		
R	ShipToLocationRef. LocationGid	DELIVERY SHIP TO/ ULTIMATE DROP-OFF LOCATION GID	Location ID. If the location is mapped to an internal location (e.g., Internal Sales Order) then the internal location ID will be sent.
O	TimeWindow.Early PickupDate	WSH_NEW_DELIVER IES.EARLIEST_PICKU P_DATE	Early pickup date
O	TimeWindow.Late PickupDate	WSH_NEW_DELIVER IES.LATEST_PICKUP_ DATE	Late pickup date
O	TimeWindow. EarlyDeliveryDate	WSH_NEW_DELIVER IES.EARLIEST_DRO POFF_DATE	Early delivery date
O	TimeWindow. LateDeliveryDate	WSH_NEW_DELIVER IES.LATEST_DRO POFF_DATE	Late delivery date
R	TotalWeightVolume.Weight	WSH_NEW_DEL IVERIES.GROSS_WE IGHTWSH_NEW_DEL IVERIES.WEIGHT_ UOM_CODE	Total gross weight and UOM
R	TotalWeightVolume.Volume	WSH_NEW_DELIVER IES.VOLUMEWSH_ NEW_DELIVERIES. VOLUME_UOM_ CODE	Total gross volume and UOM
R	TotalNetWeightVolume. Weight	WSH_NEW_DEL IVERIES.NET_WE IGHTWSH_NEW_DEL IVERIES.WEIGHT_ UOM_CODE	Total net weight and UOM

O	TotalPackagedItemCount		Total quantities of Item regardless of the UOM. A sum of quantities of the item.
O	ReleaseRefnum	WSH_NEW_DELIVERIES.TMS_VERSION_NUMBER[BL]	Delivery revision number Qualifier: REVNUM
O	Remarks	WSH_NEW_DELIVERIES.REASON_OF_TRANSPORTWSH_NEW_DELIVERIES.DESCRPTIONWSH_NEW_DELIVERIES.ADDITIONAL_SHIPMENT_INFOWSH_NEW_DELIVERIES.ROUTING_INSTRUCTIONS	Qualifiers: TRSP_REASON DEL_DESCRIPTION ADD_INFOS ROUTING_INSTR ACTUALS_RECEIVED ACTUALS_RECEIVED is a qualified value used when sending the release transaction in the actual shipment context. (Value =Y)

Release XML Transaction - Delivery Lines (Release.ReleaseLine)

The following table shows the XML mapping for the Release XML transaction for delivery lines. Elements that are not mapped are not shown. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite.)

Optional/Required	OTM Attribute	EBS Table.Column	Description
R	ReleaseLineGid	WSH_DELIVERY_DETAILS.DELIVERY_DETAIL_ID	Release line global ID
R	PackagedItemGid	DELIVERY DETAIL ITEM GID as per reference data GID	Item GID as per reference data.
O	ItemQuantity. ItemTag1	WSH_DELIVERY_DETAILS.LOT_NUMBER	Item lot number
O	ItemQuantity. ItemTag2	WSH_DELIVERY_DETAILS.SERIAL_NUMBER	Item serial number
O	ItemQuantity. ItemTag3	WSH_DELIVERY_DETAILS.TO_SERIAL_NUMBER	Item to serial number
O	ItemQuantity. IsSplitAllowed	N	
R	ItemQuantity. WeightVolume.Weight	WSH_DELIVERY_DETAILS.GROSS_WEIGHT WSH_DELIVERY_DETAILS.WEIGHT_UOM_CODE	Note: UOM codes are PUBLIC data in Oracle Transportation Management. Domain is not mapped in this case.
R	ItemQuantity. WeightVolume. Volume	WSH_DELIVERY_DETAILS.VOLUME WSH_DELIVERY_DETAILS.VOLUME_UOM_CODE	Adjusted to the QUANTITY_SHIPPED when ship confirmation occurs.
O	ItemQuantity. PackagedItemCount	Delivery not ship confirmed WSH_DELIVERY_DETAILS.REQUESTED_QUANTITY. Delivery ship confirmed WSH_DELIVERY_DETAILS.SHIPPED_QUANTITY	Packaged item count
O	Refnum	WSH_DELIVERY_DETAILS.CUST_PO_NUMBER WSH_DELIVERY_DETAILS.SOURCE_HEADER_NUMBER	Qualifiers: CUST_PO SO_NUM

Release XML Transaction - Ship Unit (Release.ShipUnit)

The following table shows the XML mapping for the Release XML transaction for ship units. Elements that are not mapped are not shown. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite.)

Note: Item, customer, customer site, and organization reference data is sent using the Order Release Message.

Optional/Required	OTM Attribute	EBS Table.Column	Description
R	ShipUnitGid	Unpacked: WSH_DELIVERY_DETAILS.DELIVERY_DETAIL_ID Packed: WSH_DELIVERY_DETAILS.DELIVERY_DETAIL_ID of the outer most LPN	Unpacked content: One ship unit per delivery detail is generated, thus ship unit and or line use the same ID
O	TransactionCode	I when creating a release RC when updating	Transaction code
O	ShipUnit. ShipUnitSpecGid	Unpacked: Not mapped Packed: Type of the LPN container item (example STANDARD PALLET)	
O	WeightVolume	Unpacked: Delivery detail content gross weight and volumes. Packed: LPN gross Weights and volume.	UOM codes are PUBLIC data in Oracle Transportation Management. Domain is not mapped in this case.
O	UnitNetWeightVolume	Packed: LPN net weights and volume. Unpacked: Delivery detail weights and volumes.	
O	LengthWidthHeight		LPN container item dimensions
O	ShipUnitSeal	WSH_DELIVERY_DETAILS.SEAL_CODE	Seal code for the ship unit
O	ShipUnitContent. LineNumber	Incremental value	Incremental value per content line : 1,2, 3, etc.
O	ShipUnitContent. ReleaseGid	WSH_NEW_DELIVERIES.DELIVERY_ID	ReleaseGID of the DD contained in the ship unit
O	ShipUnitContent. ReleaseLineGid	WSH_DELIVERY_DETAILS.DELIVERY_DETAIL_ID	ReleaselineGID of the DD contained in the ship unit
O	ShipUnitCount	1	Ship unit count

Release XML Transaction - Packaged Item (Release.ReleaseLine.PackagedItemRef)

The following table shows the XML mapping for the Release XML transaction for packaged items. Elements that are not mapped are not shown. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite.)

Optional/Required	OTM Attribute	EBS Table.Column	Description
R	PackagedItemGid	DELIVERY_DETAIL_ITEM_GID	Item comes from reference data as a result only.

PlannedShipment XML Transaction - Trip

The following table shows the XML mapping for the PlannedShipment XML transaction for trips. Elements that are not mapped are not shown. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite.)

Optional/Required	OTM Attribute	EBS Table.Column	Description
R	Shipment. ShipmentHeader. ServiceProviderGid. Gid.Xid	WSH_TRIPS.CARR IER_ID	Carrier ID
O	Shipment. ShipmentHeader. RateServiceGid.Gid. Xid	WSH_TRIPS.SERV ICE_LEVEL	Rate service ID
O	Shipment. ShipmentHeader. TransportModeGid. Xid	WSH_TRIPS.MODE_ OF_TRANSPORT	Transportation mode ID
O	Shipment. ShipmentHeader. CommercialTerms. PaymentMethodCodeGid	WSH_TRIPS.FRE IGHT_TERMS_CODE	Payment method global ID
O	Shipment.Sequipment. EquipmentGroupGid	WSH_TRIPS.VEH ICLE_ITEM_ID	Equipment type global ID
O	Shipment.Sequipment. EquipmentInitial	WSH_TRIPS.VEH ICLE_NUMBER_PREF IX	Equipment prefix
R	Shipment.Sequipment. EquipmentNumber	WSH_TRIPS.VEH ICLE_NUMBER	Equipment number
O	Shipment. ShipmentHeader. ShipmentGid.Gid.Xid	WSH_TRIPS.TP_ PLAN_NAME	Shipment header global ID
O	Shipment.Release. ReleaseAllocationInfo. ReleaseAllocByType. ReleaseAllocShipment. TotalCost (XSL Mapping chooses the Cost for ReleaseAllocByType = 'PLANNING')	WSH_FREIGHT_ COSTS.TOTAL_ AMOUNT	Freight cost allocated at the release level.

PlannedShipment XML Transaction - Trip Stop

The following table shows the XML mapping for the PlannedShipment XML transaction for trip stops. Elements that are not mapped are not shown. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite.)

Optional/Required	OTM Attribute	EBS Table.Column	Description
R	Shipment. ShipmentStop. LocationRef	WSH_TRIP_STOPS. STOP_LOCATION_ID	Trip stop ID
O	Shipment. ShipmentStop. StopSequence	WSH_TRIP_STOPS. STOP_SEQUENCE_ NUMBER	Trip stop sequence number
O	Shipment. ShipmentStop. ArrivalTime. EventTime. PlannedTime	WSH_TRIP_STOPS. PLANNED_ARR IVAL_DATE	Trip stop planned arrival date
O	Shipment. ShipmentStop. DepartureTime. EventTime. PlannedTime	WSH_TRIP_STO PS.PLANNED_DE PARTURE_DATE	Trip stop planned departure date
O	Shipment.Location. Address.TimezoneGid	WSH_TRIP_STOPS.T IMEZONE_XID	Trip stop time zone

PlannedShipment XML Transaction - Delivery Leg

The following table shows the XML mapping for the PlannedShipment XML transaction for delivery leg. Elements that are not mapped are not shown. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite.)

Optional/Required	OTM Attribute	EBS Table.Column	Description
O	ShipUnit. ShipFromLocationRef	WSH_TRIP_STOPS. STOP_LOCATION_ ID corresponding to WSH_DELIVERY_ LEGS.PICK_UP_STO P_ID	Delivery leg pick up stop ID
O	ShipUnit. ShipToLocationRef	WSH_TRIP_STOPS. STOP_LOCATION_ ID corresponding to WSH_DELIVERY_ LEGS.DROP_OFF_ STOP_ID	Delivery leg drop off stop ID

ActualShipment XML Transaction

The following table shows the XML mapping for the ActualShipment XML transaction. Elements that are not mapped are not shown. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite.)

Optional/Required	OTM Attribute	EBS Table.Column	Description
R	ShipmentHeader. ShipmentGid	Include for planning WSH_TRIPS.TP_ PLAN_NAME Ignore for planning prefix WSH - WSH_TRIPS. TRIP_ID (GID example EBS.WSH-12345)	Shipment global ID
O	ShipmentHeader. ShipmentName	WSH_TRIPS.NAME	Shipment name
O	ShipmentHeader. ShipmentRefnum	WSH_TRIPS.TRIP_ ID WSH_TRIPS. MASTER_BOL_ NUMBER WSH_ TRIPS.PLANNED_ FLAG Total manually entered Freight Costs. Manually entered freight cost currency WSH_TRIPS. OPERATOR	Shipment reference number Qualifiers: TRIP_ID MBOL_NUMBER PLANNED_TRIP MANUAL_FREIGHT_ COSTS MAN_FRE IGHT_COST_CUR OPERATOR
R	ShipmentHeader. TransactionCode	IU: Ignore for planning.	Transaction code
O	ShipmentHeader. ServiceProviderGid	GID of WSH_TRIPS. CARRIER_ID	Service provider global ID
O	ShipmentHeader. IsService ProviderFixed	Y: Ignore for planning	Whether or not service provider is fixed.
O	ShipmentHeader. TransportModeGid	WSH_TRIPS.MODE_ OF_TRANSPORT	Mode of transportation global ID

O	ShipmentHeader. TotalWeightVolume. Weight	Sum of TRIP_STO PS. Departure gross weights. NOTE : Rules for trip's Weights and Volumes UOM Get UOM Class defined in Shipping Parameters (Org-specific) Base UOM defined for this UOM Class in Inventory > Units Of Measure > In the Outbound Concurrent Request, we would have to check that for each trip that gets picked-up, the base UOM exists for the first stop location's organization's UOM Class. And for each trip, it's base UOM would be used to calculate total weight/ volume at the trip level for Actuals. > End-Users will have to ensure that both forms are defined at set-up time and that OTM has defined this UOM (or UOMs if it's different across Orgs). Note UOM domain: because UOMs are in the PUBLIC domain in OTM we do not map a DOMAIN for UOM GIDs	Total gross weight
O	ShipmentHeader. TotalWeightVolume. Volume	Sum of TRIP_STOPS departure volumes	Total gross volume of the trip
O	TotalNetWeight. Volume		Total net volume of the trip
O	ShipmentHeader. TotalNetWeightVolume. Weight	Sum of TRIP_STOPS departure net weights	Total net weight
O	ShipmentHeader. TotalShipUnitCount	Count of Ship_units = count of outermost LPNs + 1 unpacked content	Ship unit count.
O	ShipmentHeader.Total PackagedItemCount	Total quantity of items regardless of UOM.	Packaged item count for the trip
O	CommercialTerms. PaymentMethodCode	WSH_TRIPS.FRE IGHT_TERMS_CODE	Payment method code

O	ShipmentHeader. Remark	WSH_TRIPS.ROUTING_INSTRUCTIONS	Miscellaneous remarks
O	ShipmentHeader. StopCount		Number of stops within the trip.
O	ShipmentHeader2. ShipmentAsWork	N= Include for Planning Y= for Ignore for Planning	
O	SEquipment. IntSavedQuery. IntSavedQueryGID	Include for Planning trips only. S_EQUIPMENT_1	Saved query global ID
O	SEquipment. IntSavedQuery. IntSavedQueryArg. ArgName	Include for Planning trips only. SHIPMENT_GID	
O	SEquipment. IntSavedQuery. IntSavedQueryArg. Value	Include for Planning trips only SHIPMENT_GID = DOMAIN.WSH_TRIPS.TP_PLAN_NAME	Saved query value
R	SEquipmentGid	Ignore for Planning trips only. SHIPMENT_GID = DOMAIN.WSH-WSH_TRIP.TRIP_ID (for example EBS.WSH-12345).	Equipment Global ID If Ignore, then populate SEquipmentGid. DomainName and SEquipmentGid.Value If Include, then populate IntSavedQueryGid, IntSavedQueryArgValue, IntSavedQueryArgName
O	SEquipment. EquipmentInitial	WSH_TRIP.VEHICLE_NUMBER_PREFIX	Equipment prefix
O	SEquipment. EquipmentNumber	WSH_TRIP.VEHICLE_NUMBER	Equipment number
O	SEquipment. EquipmentGroupGid	Item name of item WSH_TRIP.VEHICLE_ITEM_ID (for example 40ft trailer)	Equipment group global ID
O	SEquipment. SEquipmentSeal	WSH_TRIP.SEAL_CODE	Equipment seal code
O	SEquipment. SEquipmentSeal. SequenceNumber	Incremental number, 1 because there is one seal number for the trip.	Equipment sequence number.
R	ShipmentStop. StopSequence	WSH_TRIP.STOP_SEQUENCE_NUMBER	Stop sequence number

O	ShipmentStop. TransactionCode	I: Ignore for planning trips IU: Include for planning	Transaction code
O	ShipmentStop. StopDuration	Pick up stop only Difference between start of loading end of loading	Stop duration
	ShipmentStop. LocationRef. locationGid	GID of WSH_TRIP_ STOPS.LOCATION_ ID	Location global ID
O	ShipmentStop. ArrivalTime. EventTime. ActualTime.GLogDate	Ignore for planning - pick up stop WSH_TR IP_STOPS.ACTUAL_ ARRIVAL_DATE Ignore for Planning - drop stop WSH_TRI P_STOPS.PLANNED_ ARRIVAL_DATE Include for Planning - Pick up stop WSH_TR IP_STOPS.ACTUAL_ ARRIVAL_DATE	Arrival time
O	ShipmentStop. DepartureTime. .EventTime. ActualTime.GLogDate	Ignore for planning - Pick up stop WSH_TR IP_STOPS.ACTUAL_ DEPARTURE_DATE Ignore for Planning - Drop stop WSH_TRI P_STOPS.PLANNED_ DEPARTURE_DATE Include for Planning - Pick up stop WSH_TR IP_STOPS.ACTUAL_ DEPARTURE_DATE	Actual arrival time
R	ShipmentStop. ShipmentStopDetail. Activity	P if the ship unit is to be picked up D if the ship unit is to be dropped off.	Activity information
R	ShipmentStop. ShipmentStopDetail. ShipUnitGid	Release's ShipUnit Gid picked up or dropped off.	Ship unit Global ID
O	ShipmentStop. ShipmentStopDetail. Refnum	WSH_TRIP_STOPS. DEPARTURE_SEAL_ CODE	Reference number

Shipping-Transportation Carrier Synchronization XML Mapping

Carrier XML Mapping

The following table shows the mapping of the referenced XML carrier data between Oracle E-Business Suite and Oracle Transportation Management, whether the data is required or optional, and a brief description. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite)

Carrier XML Mapping

Optional/ Required	OTM Element	EBS Table.Column	Description
	Corporation		Structure containing corporate information specific to a corporation headquarters.
O	CorporationName	AR.HZ_PARTIES. PARTY_NAME (via CARRIER_ID)	Corporation name
	Location		Structure containing place where transportation related activities occur, for example, a loading and unloading freight location. In addition, a location might represent a corporation, and/or a service provider.
R	Location.TransactionCode	CONSTANT =IU	Specifies how the XML transaction should be processed." I" adds new data. "U" updates existing data. "IU" updates if present, insert otherwise. "D" to delete."RC" to replace children.
R	Location.LocationGid	DomainName = Profile Option "OTM: Domain Name" value XID = CAR " WSH.WSH_CARR IERS.CARRIER_ID	A global ID that uniquely identifies a location.
O	Location.LocationName	AR.HZ_PARTIES. PARTY_NAME (via CARRIER_ID)	Location name. Truncated to 30 characters because of size limitations in OTM.
R	Location.Address. CountryCode3Gid	DomainName = PUBL IC XID = Profile Option "WSH: OTM Corporation Country Code value	The three character ISO country code global identifier.
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID = ORIGIN	Location reference number global ID.

R	Location.LocationRefnum. LocationRefnumValue	CONSTANT = CARR IER	Location reference number is used to provide smart EBS values. For example, when Qualifier = ORIGIN, Value is the origin EBS data such as Customer, Carrier, or Organization.
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID = ORIGIN	Location reference number qualifier global ID.
R	Location.LocationRefnum. LocationRefnumValue	WSH.WSH_CARR IERS.CARRIER_ID	Location reference number is used to provide smart EBS values. For example, when Qualifier = CAR ID, Value is the origin EBS data is the EBS carrier ID known by EBS users.
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID = CARNM	Location reference number qualifier Global ID.
R	Location.LocationRefnum. LocationRefnumValue	WSH: AR.WSH_CARR IERS.SCAC_CODE	Location reference number is used to provide smart EBS values. For example, when Qualifier = CARNM, Value is the EBS carrier short name known by EBS users.
O	Location.LocationRoleGid	DomainName = PUBL IC XID = CARRIER	A structure specifying a location role.
O	Location.Corporation. CorporationName	AR.HZ_PARTIES. PARTY_NAME (via CARRIER_ID)	Corporation name. Truncated to 30 characters because of size limitations in OTM.
	ServiceProvider		An optional structure containing a location represents a service provider.

R	ServiceProvider Alias.Service ProviderAliasQualifierGid	DomainName = PUBL IC XID = SUPPLIER_ID	Indicates the type of value in the Service ProviderAliasValue element.
R	ServiceProvider Alias.Service ProviderAliasValue	DomainName = Profile Option OTM: Domain Name value XID = SUP "-" WSH.WSH_CARR IERS.SUPPLIER_ID	Service provider alias is used to provide EBS information. For example, when Qualifier = SUPPLIER_ID, Value is the EBS link between carrier and supplier.

Carrier Site XML Mapping

The following table shows the mapping of the referenced XML carrier site data between Oracle E-Business Suite and Oracle Transportation Management, whether the data is required or optional, and a brief description. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite)

Carrier Site XML Mapping

Optional/ Required	OTM Element	EBS Table.Column	Description
R	Location		Structure containing a place where transportation related activities occur, such as loading and unloading freight.
R	Location.TransactionCode	CONSTANT =IU	TransactionCode specifies how the XML transaction should be processed. "I" adds new data. "U" updates existing data. "IU" updates if present, inserts otherwise. "D" to delete. "RC" to replace children
R	Location.LocationGid	DomainName = Profile Option "OTM: Domain Name" value XID= CAR "-" WSH.WSH_CARR IERS.CARRIER_ID "-" AR.HZ_PARTY_SITES. LOCATION_ID	Global ID that uniquely identifies a location.

O	Location.LocationName	AR.HZ_PARTIES. PARTY_NAME (via CARRIER_ID) " " AR.HZ_LOCATIONS.C ITY " " AR.HZ_LOCATIONS. STATE " " AR.HZ_LOCATION. COUNTRY	The total length for Location. LocationName should be 30 characters. Therefore, 10 charcaters from ten character from NAME + "," + ten characters from CITY + "," + four characters from STATE + "," + three characters from COUNTRY.
O	Location.Address. AddressLines	AR.HZ_LOCAT IONS.ADDRESS1AR. HZ_LOCATIONS. ADDRESS2AR. HZ_LOCATIONS. ADDRESS3AR. HZ_LOCATIONS. ADDRESS4	Contains the sequence number and address lines.
O	Location.Address.City	AR.HZ_LOCATIONS.C ITY	City
O	Location.Address.Province	AR.HZ_LOCATIONS. STATE Only if length is not 2 letters or AR. HZ_LOCATIONS. PROVINCE Only if length is not 2 letters or AR.HZ_LOCATIONS_ ALL.REGION_2 Only if length is not 2 letters or AR.HZ_LOCATIONS_ ALL.REGION_1 Only if length is not 2 letters.	Province is a long description corresponding to ProvinceCode.
O	Location.Address. ProvinceCode	AR.WSH_REGIONS. STATE Only if length is 2 letters; if not, then nothing or AR.HZ_ LOCATIONS.STATE Only if length is 2 letters; if not, then nothing or AR.HZ_ LOCATIONS.PROV INCE Only if length is 2 letters; if not, then nothing or AR.HZ_ LOCATIONS_ALL. REGION_2 Only if length is 2 letters; if not, then nothing or AR.HZ_LOCATIONS_ ALL.REGION_1 Only if length is 2 letters; if not, then nothing.	ProvinceCode is a two character province code. In the United States, ProviceCode corresponds to a two character state code such as PA.

O	Location.Address.PostalCode	AR.HZ_LOCATIONS. POSTAL_CODE	PostalCode is the postal code component of Address. For United States, this is a 3, 5 or 9 character zip code.
R	Location.Address. CountryCode3Gid	DomainName = PUBL IC XID = FND_TERRITORIES.ISO_TERRITORY_CODEAR	CountryCode3Gid is the three-character ISO country code global identifier.
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID =ORIGIN	LocationRefnumQualifierGid is a location reference number qualifier global identifier.(For example: Gid.Xid = DUNS)
R	Location.LocationRefnum. LocationRefnumValue	CONSTANT = CARRIER	Used to provide smart EBS values. For example, when Qualifier = ORIGIN, Value is the origin EBS data such as Customer, Carrier, or Organization
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID = CARID	Location reference number qualifier global ID.
R	Location.LocationRefnum. LocationRefnumValue	WSH.WSH_CARRIERS.CARRIER_ID	Used to provide smart EBS values. For example, when Qualifier = CARID, Value is the EBS carrier ID known by EBS user.
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID = LOCID	Location reference number qualifier global ID.
R	Location.LocationRefnum. LocationRefnumValue	AR.HZ_PARTY_SITES.PARTY_SITE_NUMBER	Used to provide smart EBS values. For example, when Qualifier = CARNM, Value is the EBS carrier short name known by EBS user.
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID = LOCID	Location reference number qualifier global ID.
R	Location.LocationRefnum. LocationRefnumValue	AR.HZ_PARTY_SITES.PARTY_SITE_NUMBER	Used to provide smart EBS values. For example, when Qualifier = LOCID, Value is the EBS carrier location ID known by EBS user.

O	Location.LocationRoleGid	DomainName = PUBL IC XID = CARRIER	LocationRole is a structure specifying a location role. Locations may play multiple roles. Examples of location roles include warehouse, crossdock, loading dock, etc. A calendar may be associated with a location role, to limit the times when a part
R	Location.ParentLocationGid	DomainName = Profile Option "OTM: Domain Name" value XID = CAR "-" WSH.WSH_CARR IERS.CARRIER_ID	Within the Location element, the ParentLocationGid specifies the parent corporation for this location. Within the OperationalLocation element, ParentLocationGid specifies the main location to which the operational location belongs.
R	ServiceProvider Alias.Service ProviderAliasQualifierGid	DomainName = PUBL IC XID = SUPPLIER_SITE_ ID	Service ProviderAliasQualifierGid indicates the type of value in the Ser- viceProviderAliasValue element.
R	ServiceProvider Alias.Service ProviderAliasValue	DomainName = Profile Option "OTM: Domain Name" value XID = SUP "-" WSH.WSH_CARR IERS.SUPPLIER_ID "-" WSH_CARRIER_S ITES.SUPPLIER_SITE_ ID	Service provider alias is used to provide EBS information. For example, when Qualifier = SUPPLIER_ SITE_ID, Value is the EBS link between carrier and supplier site.

Shipping-Transportation Outbound Interface XML Mapping

The following table shows the mapping of the referenced data between Oracle E-Business Suite and Oracle Transportation Management, whether the data is required or optional, and a brief description of each. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite)

Item XML Mapping

Optional/Required	OTM Attribute	EBS Table.Column	Description
R	Item.TransactionCode	CONSTANT =IU	TransactionCode specifies how the XML transaction should be processed. "I" adds new data. "U" updates existing data. "IU" updates if present, inserts otherwise. "D" to delete. "RC" to replace children.
R	Item.ItemGid	DomainName = Profile Option "OTM: Domain Name" value XID = MTL_SYSTEM_ITEMS_B.ORGANIZATION_ID " MTL_SYSTEM_ITEMS_B.INVENTORY_ITEM_ID	Item global ID
O	Item.ItemName	MTL_SYSTEM_ITEMS_B.segment1. .segment15	Item name Truncated to 30 characters because of size limitations in OTM.
O	Item.Description	MTL_SYSTEM_ITEMS_TL.DESCRPTION	Item description Truncated to 120 characters because of size limitations in OTM
R	Packaging.Packaged ItemGid	DomainName = Profile Option "OTM: Domain Name" value XID = MTL_SYSTEM_ITEMS_B.ORGANIZATION_ID " MTL_SYSTEM_ITEMS_B.INVENTORY_ITEM_ID	Packaged item global ID
O	Packaging.Description	MTL_SYSTEM_ITEMS_TL.DESCRPTION	Packaging description Truncated to 120 characters because of size limitations in OTM.

Customer XML Mapping

Optional/ Required	OTM Attribute	EBS Table.Column	Description
O	CorporationName	AR.HZ_PARTIES. PARTY_NAME (via CUST_ACCOUNT_ ID)	Corporation name
R	Location.TransactionCode	CONSTANT =IU	TransactionCode specifies how the XML transaction should be processed. "I" adds new data. "U" updates existing data. "IU" updates if present, inserts otherwise. "D" to delete. "RC" to replace children.
R	Location.LocationGid	DomainName = Profile Option "OTM: Domain Name" value XID = CUS "-" AR.HZ_CUST_ ACCOUNTS.CUST_ ACCOUNT_ID	Location global ID
O	Location.LocationName	AR.HZ_PARTIES. PARTY_NAME (via CUST_ACCOUNT_ ID)	Location name Truncated to 30 characters because of size limitations in OTM.
R	Location.Address. CountryCode3Gid	DomainName = PUBL IC XID = Profile Option "OTM: Corporation Country Code" value	The three character ISO country code global identifier
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID = ORIGIN	Reference number qualifier global ID
R	Location.LocationRefnum. LocationRefnumValue	CONSTANT = CUSTOMER	Used to provide smart EBS values. For example, when Qualifier = ORIGIN, Value is the origin EBS data such as Customer, Carrier, or Organization.
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID = CUSID	Reference number qualifier global ID

R	Location.LocationRefnum. LocationRefnumValue	AR.HZ_CUST_ ACCOUNTS. ACCOUNT_ NUMBER	Location reference number is used to provide smart EBS values. For example, when Qualifier = CUS ID, Value is the origin EBS data is the EBS customer ID known by EBS users.
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID = CUSNM	Location reference number qualifier global ID
R	Location.LocationRefnum. LocationRefnumValue	AR.HZ_PARTIES. PARTY_NAME (via CUST_ACCOUNT_ ID)	Location reference number is used to provide smart EBS values. For example, when Qualifier = CUSNM, Value is the EBS customer name known by EBS users.
R	Location.LocationRole. LocationRoleGid	DomainName = PUBL IC XID = CUSTOMER	Location role global ID
O	Location.Corporation. CorporationName	AR.HZ_PARTIES. PARTY_NAME (via CUST_ACCOUNT_ ID)	Corporation name

Customer Site XML Mapping

Optional/ Required	OTM Attribute	EBS Table.Column	Description
R	Location.TransactionCode	CONSTANT =IU	TransactionCode specifies how the XML transaction should be processed. "I" adds new data. "U" updates existing data. "IU" updates if present, inserts otherwise. "D" to delete. "RC" to replace children
R	Location.LocationGid		Location global ID

O	Location.LocationName	AR.HZ_PARTIES. PARTY_NAME (via CUST_ACCOUNT_ ID) " " AR.HZ_LOCATIONS. CITY " " AR.HZ_LOCATIONS. STATE " " AR.HZ_LOCATION. COUNTRY	The total length for Location. LocationName should be 30 characters; therefore, ten character from NAME + "," + ten characters from CITY + "," + four characters from STATE + "," + three characters from COUNTRY
O	Location.Address.AddressLines	AR.HZ_LOCAT IONS.ADDRESS1AR. HZ_LOCATIONS. ADDRESS2AR. HZ_LOCATIONS. ADDRESS3AR. HZ_LOCATIONS. ADDRESS4	Contains the sequence number and address lines.
O	Location.Address.City	AR.HZ_LOCATIONS. CITY	City
O	Location.Address.Province	AR.HZ_LOCATIONS. STATE Only if length is not 2 letters, or AR.HZ_LOCATIONS. PROVINCE Only if length is not 2 letters, or AR.HZ_LOCAT IONS_ALL.REGION_ 2 Only if length is not 2 letters, or AR.HZ_ LOCATIONS_ALL. REGION_1 Only if length is not 2 letters	Province is a long description corresponding to ProvinceCode.
O	Location.Address. ProvinceCode	AR.WSH_REGIONS. STATE Only if length is 2 letters; if not, then nothing, or AR.HZ_ LOCATIONS.STATE Only if length is 2 letters; if not, then nothing, or AR.HZ_ LOCATIONS.PROV INCE Only if length is 2 letters; if not, then nothing, or AR.HZ_ LOCATIONS_ALL. REGION_2 Only if length is 2 letters; if not, then nothing, or AR.HZ_LOCATIONS_ ALL.REGION_1 Only if length is 2 letters; if not, then nothing	A two character province code. In the United States, ProvinceCode corresponds to a two character state code such as PA.

O	Location.Address.PostalCode	AR.HZ_LOCATIONS. POSTAL_CODE	Postal code
R	Location.Address. CountryCode3Gid	DomainName = PUBL IC XID = FND_TERR ITORIES.ISO_TERR ITORY_CODEAR	Three character ISO country code global identifier.
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID =ORIGIN	Location reference number qualifier global ID
R	Location.LocationRefnum. LocationRefnumValue	CONSTANT = CUSTOMER	Used to provide smart EBS values. For example, when Qualifier = ORIGIN, Value is the origin EBS data such as Customer, Carrier, or Organization
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID =CUSID	Location reference number qualifier global ID
R	Location.LocationRefnum. LocationRefnumValue	AR.HZ_CUST_ ACCOUNTS. ACCOUNT_NUMBER	Used to provide smart EBS values. For example, when Qualifier = CUSID, Value is the EBS customer ID known by EBS user
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID =CUSNM	Location reference number qualifier global ID
R	Location.LocationRefnum. LocationRefnumValue	AR.HZ_PARTIES. PARTY_NAME (via CUST_ACCOUNT_ ID)	Location reference number is used to provide smart EBS values. For example, when Qualifier = CUSNM, Value is the EBS customer name known by EBS users.
R	Location.Contact.ContactGid	DomainName = Profile Option "OTM: Domain Name" value XID = AR.RA_ CONTACTS. CONTACT_ID	Contact global ID

O	Location.Contact.TransactionCode	CONSTANT = IU) TransactionCode specifies how the XML transaction should be processed. "I" adds new data. "U" updates existing data. "IU" updates if present, inserts otherwise. "D" to delete. "RC" to replace children
O	Location.Contact.EmailAddress	AR.HZ_CONTACT_POINTS.EMAIL_ADDRESS	Contact Email address
O	Location.Contact.FirstName	AR.HZ.PARTIES.PERSON_FIRST_NAME	Contact first name
O	Location.Contact.LastName	AR.HZ.PARTIES.PERSON_LAST_NAME	Contact last name
O	Location.Contact.JobTitle	AR.HZ_ORG_CONTACTS.JOB_TITLE	Contact job title
O	Location.Contact.Phone1	AR.HZ_CONTACT_POINTS.PHONE_COUNTRY_CODEAR.HZ_CONTACT_POINTS.PHONE_AREA_CODEAR.HZ_CONTACT_POINTS.PHONE	Contact phone number
R	Location.LocationRole.LocationRoleGid	DomainName = Profile Option "OTM: Domain Name" value XID = SHIPFROM / SHIPTO	Location role global ID

R	Location.ParentLocationGid	DomainName = Profile Option "OTM: Domain Name" value XID = CUS " AR.HZ_CUST_ ACCOUNTS.CUST_ ACCOUNT_ID	Parent location global ID
R	Location.SubstituteLocationGid	DomainName = Profile Option "OTM: Domain Name" value XID = CUS " AR.HZ_CUST_ ACCOUNTS.CUST_ ACCOUNT_ID " AR.HZ_LOCATIONS. LOCATION_ID	Substitute location global ID

Organization XML Mapping

Optional/ Required	OTM Attribute	EBS Table.Column	Description
O	CorporationName	HR.HR_ALL_ORGAN IZATION_UNITS. NAME	Corporation name
R	Location.TransactionCode	CONSTANT =IU	TransactionCode specifies how the XML transaction should be processed. "I" adds new data. "U" updates existing data. "IU" updates if present, inserts otherwise. "D" to delete. "RC" to replace children.
R	Location.LocationGid	DomainName = Profile Option "OTM: Domain Name" value XID = ORG " HR.HR_ALL_ORGAN IZATION_UNITS. ORGANIZATION_ID " HR.HR_LOCATIONS_ ALL.LOCATION_ID	Location global ID

O	Location.LocationName	HR.HR_ALL_ORGANIZATION_UNITS.NAME	Location name Truncated to 30 characters because of size limitations in OTM.
O	Location.Address.AddressLines	HR.HR_LOCATIONS_ALL.ADDRESS_LINE_1HR.HR_LOCATIONS_ALL.ADDRESS_LINE_2HR.HR_LOCATIONS_ALL.ADDRESS_LINE_3	Contains the sequence number and address lines.
O	Location.Address.City	HR.HR_LOCATIONS_ALL.TOWN_OR_CITY	City
O	Location.Address.Province	HR.HR_LOCATIONS_ALL.REGION_1	Province is a long description corresponding to ProvinceCode
O	Location.Address.ProvinceCode	HR.HR_LOCATIONS_ALL.REGION_2 Only if length is 2 letters; if not, then nothing.	ProvinceCode is a two character province code. In the United States, ProvinceCode corresponds to a two character state code such as PA.
O	Location.Address.PostalCode	HR.HR_LOCATIONS_ALL.POSTAL_CODE	Postal code
R	Location.Address.CountryCode3Gid	DomainName = PUBLIC XID= HR.HR_LOCATIONS_ALL.COUNTRY	CountryCode3Gid is the three character ISO country code global identifier
R	Location.LocationRefnum.LocationRefnumQualifierGid	DomainName = PUBLIC XID = ORIGIN	Location reference number qualifier global ID
R	Location.LocationRefnum.LocationRefnumValue	CONSTANT = ORGANIZATION	Used to provide smart EBS values. For example, when Qualifier = ORIGIN, Value is the origin EBS data such as Customer, Carrier, or Organization.
R	Location.LocationRefnum.LocationRefnumQualifierGid	DomainName = PUBLIC XID = ORGID	Location reference number qualifier global ID

R	Location.LocationRefnum. LocationRefnumValue	MTL_PARAMETERS. ORGANIZATION_ CODE	Location reference number is used to provide smart EBS values. For example, when Qualifier = ORG ID, Value is the EBS organization ID known by EBS users.
R	Location.LocationRefnum. LocationRefnumQualifierGid	DomainName = PUBL IC XID = ORGNM	Location reference number qualifier global ID
R	Location.LocationRefnum. LocationRefnumValue	HR.HR_ALL_ORGAN IZATION_UNITS. NAME	Location reference number is used to provide smart EBS values. For example, when Qualifier = ORGNM, Value is the EBS organization name known by EBS users.
R	Location.Contact.ContactGid	DomainName = Profile Option "OTM: Domain Name" value XID = ORG " HR.HR_ALL_ORGAN IZATION_UNITS. ORGANIZATION_ID " HR.HR_LOCATIONS_ ALL.LOCATION_ID	Contact global ID
O	Location.Contact. TransactionCode	CONSTANT = IU) TransactionCode specifies how the XML transaction should be processed. "I" adds new data. "U" updates existing data. "IU" updates if present, inserts otherwise. "D" to delete. "RC" to replace children.
O	Location.Contact.Phone1	HR.HR_LOCATIONS_ ALL.TELEPHONE_ NUMBER_1	Contact phone number
O	Location.Contact.Phone2	HR.HR_LOCATIONS_ ALL.TELEPHONE_ NUMBER_2	Contact phone number
O	Location.Contact.Fax	HR.HR_LOCATIONS_ ALL.TELEPHONE_ NUMBER_3	Contact fax number

R	Location.LocationRole. LocationRoleGid	DomainName = Profile Option "OTM: Domain Name" value XID = SHIPFROM / SHIPTO	Location role global ID
O	Location.Corporation. CorporationName	HR.HR_ALL_ORGAN IZATION_UNITS. NAME	Corporation name
R	Location.Corporation. VatRegistration. CountryCode3Gid	DomainName = PUBL IC XID = HR.HR_LOCAT IONS_ALL.COUNTRY	Country code
O	Location.IsShipperKnown	CONSTANT = Y	

Oracle Payables XML Mapping

API Invoice Interface XML Mapping

The following table shows the mapping of the required referenced data between Oracle E-Business Suite and Oracle Transportation Management and a brief description of each. (OTM = Oracle Transportation Management. EBS = Oracle E-Business Suite)

Target AP Invoices Interface	Source OTM / BPEL AP Integration Usage	Description
exchangeRateType	In BPEL set to "CORPORATE."	<p>Exchange rate type for foreign currency invoices.</p> <p>EXCHANGE_RATE_TYPE: Type of exchange rate used to calculate the exchange rate between the invoice currency and your functional currency. If the value in the INVOICE_CURRENCY_CODE column is a foreign currency code, then enter a value in this column to indicate which exchange rate type you are using. You can enter a predefined or user-defined exchange rate type. If the invoice record has a foreign currency and you do not enter a value for EXCHANGE_RATE_TYPE, then during import the system uses the Exchange Rate Type selected in the Payables Options window. If the invoice currency and your functional currency are associated fixed-rate currencies, such as euro and another EMU currency, then enter EMU Fixed. Validation - Payables uses five types of exchange rates: User, Spot, Corporate, EMU Fixed, and user-defined. If you use Spot, Corporate, or any user-defined rate type, the value you enter here is validated against the GL Daily Rates table. If you use EMU Fixed, Payables provides the exchange rate during import. If you use User as the exchange rate type, You must either enter a value for EXCHANGE_RATE or, if the Payables Option Calculate User Exchange Rate is enabled, you can enter a value for NO_XRATE_BASE_AMOUNT instead.</p> <p>Destination - AP_INVOICES_ALL.EXCHANGE_RATE_TYPE</p>

invoiceAmount	Map from OTM Voucher AmountToPay	Invoice Amount INVOICE_AMOUNT: Amount of the invoice. Do not exceed the precision of the currency of the invoice. For example, if you are entering an amount in US dollars, then do not enter more than two numbers after the decimal point. Validation - This value must equal the sum of the AMOUNT values in the AP_INVOICE_LINES_INTERFACE table for lines with the same INVOICE_ID. The amount must correspond to the invoice type. For example, Standard invoices must have an amount of zero or greater. Destination - AP_INVOICES_ALL.INVOICE_AMOUNT
invoiceCurrencyCode	ISO standard OTM GlobalCurrencyCode	Currency of invoice. INVOICE_CURRENCY_CODE: Currency code for the invoice. If you do not enter a value, then the supplier site value defaults during import. Validation - If you enter a code in a foreign currency, then you must enter a valid, active currency code from Destination - FND_CURRENCIES.CURRENCY_CODE.AP_INVOICES_ALL.INVOICE_CURRENCY_CODE
invoiceDate	Map to InvoiceDate from voucher. Supplier's invoice date This date is used to drive Accounting Date/GL Date.	Invoice Date INVOICE_DATE: Date of the invoice. If you do not enter a value, then the system uses the date that you submit the Payables Open Interface Import as the invoice date. Validation - The value must be in valid date format. Destination - AP_INVOICES_ALL.INVOICE_DATE
invoiceId	Call AP to retrieve sequence, and then apply to header and lines.	Invoice ID Required, Primary key. This value is assigned in the Quick Invoices window by the AP_INVOICES_INTERFACE_S sequence. Unique identifier for this invoice within this batch. You assign the same value to the invoice's lines in the AP_INVOICE_LINES_INTERFACE table to identify the data as belonging to the same invoice.

invoiceNum	<p>Concatenated field InvoiceNum plus VoucherGid AP Invoice Number <= 50 characters. Must be a unique number for the supplier. Carrier Invoice Num = "JBHT-1002322-1" Voucher Gid = "EBS.12345678." Invoice number will be a concatenated field of CarrierInvoiceNum plus VoucherGID = "JBHT-1002322-1 EBS.2345678"</p>	<p>Vendors number/invoice number Required if there is more than one invoice for the supplier during import. INVOICE_NUM: Enter the invoice number that you want to assign to the invoice created in Payables from this record. The number must be unique for the supplier. If you do not enter a value, then during import, Payables uses the system date at the time of import as a default. If you enter more than one invoice for a supplier, then be sure to enter unique invoice numbers rather than using the default, or the invoices will have duplicate invoice numbers and will be rejected during import. Validation - Must be a unique number for the supplier. If you assign a duplicate number for the supplier, Payables Open Interface Import does not create an invoice from this record. Destination - AP_INVOICES_ALL.INVOICE_NUM</p>
invoiceTypeLookupCode	<p>BPEL transformation. Positive amount voucher = "STANDARD," Negative amounts on voucher = "CREDIT."</p>	<p>Type of Invoice (can be STANDARD or CREDIT) INVOICE_TYPE_LOOKUP_CODE: Type of invoice: Credit or Standard. If you do not enter a value, then the system assigns a value during Payables Open Interface Import based on the value of INVOICE_AMOUNT. If INVOICE_AMOUNT is less than zero, the invoice will be Credit. If INVOICE_AMOUNT is zero or greater, the invoice will be Standard. Validation - The value must be Credit or Standard. The invoice type must correspond to the invoice amount if it is Credit or Standard. For example, a Credit invoice must have an invoice amount that is less than zero. Destination - AP_INVOICES_ALL.INVOICE_TYPE_LOOKUP_CODE</p>

source	Source = "TRANSPORTATION MANAGEMENT."	<p>Source of the invoices. SOURCE: Source of the invoice data. Examples include Quick Invoices, EDI Gateway (e-Commerce Gateway), Credit Card, Oracle Assets, Oracle Property Manager, ERS (Evaluated Receipt Settlement), RTS (Return to Supplier), iSupplier Portal, XML Gateway, and user-defined. You define additional values for Source in the Oracle Payables Lookups window. If you have defined additional sources, you should use a source name for only one type of source. For example, do not use the same source name for invoices that you enter in Quick Invoices, and invoices you load with SQL*Loader. The Source name also determines which records will be selected for import or purge. You specify a Source name when you submit Payables Open Interface Import or Purge Payables Open Interface. Validation - If you do not use a predefined source you must enter the name exactly as you have defined the lookup value in the Oracle Payables Lookups window, or Payables Open Interface Import will not create an invoice from the record. The lookup value must have the Type SOURCE. See: Lookups in the <i>Oracles Payables User Guide</i>. Destination - AP_INVO ICES_ALL.SOURCE</p>
vendorNum	Map to ServiceProvider Alias Qualf ="VENDOR_NUM."	<p>Supplier number VENDOR_NUM: Supplier number. You must identify the supplier by entering a value for one of the following columns in this table: VENDOR_ID, VENDOR_NUM, VENDOR_SITE_ID, VENDOR_SITE CODE, or PO_NUMBER. If you have not yet entered the supplier in the Suppliers window, then enter it before import. Validation - The number must be for an existing, valid supplier. You can obtain a list of valid values from PO_VENDORS.SEGMENT1. None. This value is used to enter Destination - AP_INVO ICES_ALL.VENDOR_ID.</p>

vendorSiteCode	Map from SeerviceProvider Alias Qualf = "VENDOR_SITE_CODE."	Supplier site code VENDOR_SITE_CODE: Supplier site name. If you do not provide a valid value to identify the pay site in VENDOR_SITE_CODE or VENDOR_SITE_ID, then import searches for a valid supplier pay site in the following order: Primary pay site for supplier Single existing pay site for supplier Derived from PO number matched at the header level Import rejects the invoice if it cannot identify a valid supplier site. Validation - This must be a valid, active supplier site for the supplier you specify (VENDOR_NUM or VENDOR_ID). You can obtain a list of valid values from PO_VENDORS.VENDOR_SITE_CODE. The site must also be a pay site. Destination - None. This value is used to enter AP_INVOICES_ALL.VENDOR_SITE_ID.
amount	Represents the amount for this invoice line. One line per invoice in delivered integration. "CREDIT" = negative "STANDARD" = positive.	Line amount
lineTypeLookupCode	BPEL set to "FREIGHT"	Type of invoice line (Item, Freight, Tax, Miscellaneous)
DistCodeConcatenated	BPEL conditional logic in mapped to location reference number qualifier "ACCOUNT_NUMBER" from the source location or if not available on the source location the value is taken from "ACCOUNT_NUMBER" on the service provider location.	Accounting flexfield for account associated with a distribution line

APIInvoices Interface Sample XML

```

<PushToEBS_insert_InputVariable>
<part name="ApInvoicesInterfaceCollection" >
<ApInvoicesInterfaceCollection>
<ApInvoicesInterface>
<description>-002647*GUEST.02420*</description>
<exchangeRateType>CORPORATE</exchangeRateType>
<invoiceAmount>1300.0</invoiceAmount>
<invoiceCurrencyCode>USD</invoiceCurrencyCode>
<invoiceDate>2006-04-03T08:00:00</invoiceDate>
<invoiceId>46836</invoiceId>
<invoiceNum>ZIPPY-000004|GUEST.20060402-0001</invoiceNum>
<invoiceTypeLookupCode>STANDARD</invoiceTypeLookupCode>
<source>TRANSPORTATION MANAGEMENT</source>
<vendorSiteCode>ZIPPY</vendorSiteCode>
<apInvoiceLinesInterfaceCollection>
<ApInvoiceLinesInterface>
<amount>1300.0</amount>
<distCodeConcatenated>01-000-2210-0000-000</distCodeConcatenated>
<invoiceLineId>77910</invoiceLineId>
<lineTypeLookupCode>FREIGHT</lineTypeLookupCode>
</ApInvoiceLinesInterface>
</apInvoiceLinesInterfaceCollection>
</ApInvoicesInterface>
</ApInvoicesInterfaceCollection>
</part>
</PushToEBS_insert_InputVariable>

```

Oracle Purchasing XML Mapping

Purchasing Fields to Order Base XML Mapping

Warning: You must ensure that for each address in Oracle E-Business Suite, the Country Code is defined. An address passed to Oracle Transportation Management without a Country Code will fail.

Required/Optional	OTM Element	EBS Table.Column	Description
O	TransOrderHeader. TransOrderGid.Gid. DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	
O	TransOrderHeader. TransOrderGid.Gid. Xid	Concatenation: In the case of a std PO:PO-< PO_HEADERS_ALL. po_header_id> In the case of a blanket release:PO-<PO_ HEADERS_ALL.po_ header_id>-REL-<PO_ RELEASES_ALL.po_ release_id>	Standard PO:PO- Blanket Release:PO- REL- SPO: PO-12341Release: PO-12345-REL-1
O	TransOrderHeader. OrderTypeGid.Gid. DomainName	Profile Option: OTM_ DOMAIN_NAME	OTM: Domain Name profile option

O	TransOrderHeader. OrderTypeGid.Gid. Xid	Constant: PURCHASE_ORDER	PURCHASE_ORDER
O	TransOrder- Header.OrderRefNum. OrderRefNumQualifierGid. Gid.Xid	Constant: PO	Order refnum qualifiers and values are used to send reference information, such as the EBS document number, supplier, operating unit, and so on. PO
O	TransOrderHeader. OrderRefNum. OrderRefNumValue	PO_HEADERS_ALL. segment1	PO Number
O	TransOrder- Header.OrderRefNum. OrderRefNumQualifierGid. Gid.Xid	Constant: RELEASE_ NUMBER	RELEASE_NUMBER
O	TransOrderHeader. OrderRefNum. OrderRefNumValue	PO_RELEASES_ALL. release_num	PO Release Number
O	TransOrder- Header.OrderRefNum. OrderRefNumQualifierGid. Gid.Xid	Constant: SELL_TOP	SELL_TO
O	TransOrderHeader. OrderRefNum. OrderRefNumValue	HR_LOCATIONS_ ALL.location_code	Operating Unit Name
O	TransOrder- Header.OrderRefNum. OrderRefNumQualifierGid. Gid.Xid	Constant: SUPPLIER	SUPPLIER
O	TransOrderHeader. OrderRefNum. OrderRefNumValue	PO_VENDORS. vendor_name	Supplier Name
O	TransOrder- Header.OrderRefNum. OrderRefNumQualifierGid. Gid.Xid	Constant: SUPPLIER_ SITE	
O	TransOrderHeader. OrderRefNum. OrderRefNumValue	PO_VENDOR_SITES_ ALL.vendor_site_code	Supplier Site
O	TransOrder- Header.OrderRefNum. OrderRefNumQualifierGid. Gid.Xid	Constant: BILL_TO	BILL_TO
O	TransOrderHeader. OrderRefNum. OrderRefNumValue	HR_LOCATIONS_ ALL.location_code	Bill To Site (Inventory Org)

O	TransOrderHeader. TransactionCode	Constant: IU	I or U (Insert or Update)
O	TransOrderHeader. CommercialTerms. PaymentMethodCode	If PO_HEADERS_ ALL.shipping_control = 'BUYER':Constant: COLOtherwise: Constant: SUP	Transportation Arranged By COL . PPD (Codes correspond to Freight Collect or Freight Prepaid)
O	TransOrderHeader. InvolvedParty. Involved PartyQualifierGid. Gid.Xid	Constant: SUPPLIER	SUPPLIER
O	TransOrderHeader. InvolvedParty. LocationRef. LocationGid.Gid. DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	TransOrderHeader. InvolvedParty. LocationRef. LocationGid.Gid.Xid	Concatenation:SUP-< PO_HEADERS_ALL. vendor_id> <PO_HEADERS_ALL. vendor_site_id>	SUP <SupplierID>- <Site ID>
O	TransOrderHeader. InvolvedParty.Contact. ContactGid.Gid. DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	TransOrderHeader. InvolvedParty.Contact. ContactGid.Gid.Xid	In order of preference: 1. PO_VENDOR_ CONTACTS.email_ address 2. Concatenation: PO_VENDOR_ CONTACTS.area_ code PO_VENDOR_ CONTACTS.phone_ number 3. Concatenation: PO_VENDOR_ CONTACTS.first_ name PO_VENDOR_ CONTACTS.last_ name	Supplier contact ID (mapped to the email address, phone number or name in that order)
O	Location.Corporation. CorporationName	Concatenation: SUP-<PO_HEADERS_ AL.vendor_id>	SUP-<Vendor ID>
O	Location. LocationName	PO_VENDOR_SITES_ ALL.vendor_site_code	Supplier Site Name SAN JOSE-ERS

O	Location. LocatioRefNum. Qualifier	Constant: EBS_NAME	EBS_NAME
O	Location. LocatioRefNum.Value	PO_VENDOR_SITES_ ALL.vendor_site_code	Supplier Site Name
O	LocationGid.Gid.Xid	Concatenation: SUP-<PO_HEADERS_ AL.vendor_id>-<PO_ HEADERS_ALL. vendor_site_id>	SUP <Supplier ID>- <Site ID>
O	Location.LocationRole	Constant: SHIPFROM- SHIPTO	SHIPFROM >SHIPTO
O	Location.Address. AddressLine1 to AddressLine3	Concatenation: PO_ VENDOR_SITES_ ALL.address_line1 PO_VENDOR_SITES_ ALL.address_line2 PO_VENDOR_SITES_ ALL.address_line3	Supplier Site Address Lines
O	Location.Address.City	PO_VENDOR_SITES_ ALL.city	Supplier Site Address City
O	Location.Address. CountryCode3	PO_VENDOR_SITES_ ALL.country	Supplier Site Address Country
O	Location.Address. PostalCode	PO_VENDOR_SITE,S_ ALL.zip	Supplier Site Address Postal Code
O	Location.Address. Province	In order of preference: 1. PO_VENDOR_S ITES_ALL.state 2. PO_VENDOR_S ITES_ALL.province 3. PO_VENDOR_S ITES_ALL.county	Supplier Site Address Province
O	Location.Address. ProvinceCode	In order of preference: 1. PO_VENDOR_S ITES_ALL.state 2. PO_VENDOR_S ITES_ALL.province PO_VENDOR_SITES_ ALL.county	Supplier Site Address Province Code
O	Contact.ContactGid. Gid.DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option

O	Contact.ContactGid. Gid.Xid	In order of preference: 1. PO_VENDOR_CONTACTS.email_address 2. Concatenation: PO_VENDOR_CONTACTS.area_code PO_VENDOR_CONTACTS.phone_number 3. Concatenation: PO_VENDOR_CONTACTS.first_name PO_VENDOR_CONTACTS.last_name	Supplier contact ID (mapped to the email address, phone number or name in that order)
O	Contact.FirstName	PO_VENDOR_CONTACTS.first_name	Supplier Contact First Name
O	Contact.LastName	PO_VENDOR_CONTACTS.last_name	Supplier Contact Last Name
O	Contact.Phone1	Concatenation: PO_VENDOR_CONTACTS.area_code PO_VENDOR_CONTACTS.phone_number	Supplier Contact Phone Number
O	Contact.EmailAddress	PO_VENDOR_CONTACTS.email_address	Supplier Contact Email ID
O	Contact.Fax	Concatenation: PO_VENDOR_CONTACTS.fax_area_code PO_VENDOR_CONTACTS.fax	Supplier contact fax number
O	Contact. CommunicationMethod	Constant. In order of preference: 1. EMAIL 2. FAX 3. MANUAL	Email/Fax/Manual (Phone)
O	TransOrderHeader. InvolvedParty. Involved PartyQualifierGid. Gid.Xid	Constant: SELL_TO	This involved party is the purchasing operating unit SELL_TO
O	TransOrderHeader. InvolvedParty. LocationRef. LocationGid.Gid. DomainName	Profile Option: OTM_DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option

O	TransOrderHeader. InvolvedParty. LocationRef. LocationGid.Gid.Xid	Concatenation: ORG-<PO_ HEADERS_ALL. org_id>-<HR_LOCAT IONS_ALL.location_ id>	ORG-<Org ID>- <Location ID>
O	TransOrderHeader. InvolvedParty.Contact. ContactGid.Gid. DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	TransOrderHeader. InvolvedParty.Contact. ContactGid.Gid.Xid	In order of preference: 1. PER_ALL_PEO PLE_F.email_address 2. PER_PHONES. phone_number 3. Concatenation: PER_ALL_PEOPLE_F. first_name PER_ALL_ PEOPLE_F.last_name	Buyer contact ID (mapped to the email address, phone number or name in that order)
O	Location.CorporationX ID	Concatenation: ORG-<PO_ HEADERS_ALL.org_ id>	ORG-<Operating Unit ID> ORG-204
O	Location. LocatioRefNum. Qualifier	Constant: EBS_NAME	EBS_NAME
O	Location. LocatioRefNum.Value	HR_LOCATIONS_ ALL.location_code	Operating Unit Default Location Name
O	Location.LocationGid. Gid.Xid	Concatenation: ORG-<PO_ HEADERS_ALL. org_id>-<HR_LOCAT IONS_ALL.location_ id>	ORG-<Org ID>- <Location ID> ORG-204-4848
O	Location.LocationRole	Constant: SHIPFROM- SHIPTO	SHIPFROM->SHIPTO
O	Location.Address. AddressLine1 to AddressLine3	Concatenation: HR_LOCATIONS_ ALL.address_line_1 HR_LOCATIONS_ ALL.address_line_2 HR_LOCATIONS_ ALL.address_line_3	OU Default Location Address Lines
O	Location.Address.City	HR_LOCATIONS_ ALL.town_or_city	OU Default Location Address City
O	Location.Address. CountryCode3	FND_TERRITORIES. iso_territory_code	OU Default Location Address Country
O	Location.Address. PostalCode	HR_LOCATIONS_ ALL.postal_code	OU Default Location Address Postal code

O	TransOrderHeader. InvolvedParty. LocationRef.Location. Address.Province	Either HR_LOCATIONS_ALL.region_1 or HR_LOCATIONS_ALL.region_2, depending on address style.	OU Default Location Address Province
O	Location.Address. ProvinceCode	Either HR_LOCATIONS_ALL.region_1 or HR_LOCATIONS_ALL.region_2, depending on address style.	OU Default Location Address Province Code
O	Contact.ContactGid. Gid.DomainName	OTM: Domain Name profile option	OTM: Domain Name profile option
O	Contact.ContactGid. Gid.Xid	In order of preference: 1. PER_ALL_PEOPLE_F.email_address 2. PER_PHONES. phone_number 3. Concatenation: PER_ALL_PEOPLE_F. first_name PER_ALL_ PEOPLE_F.last_name	Supplier contact ID (mapped to the email address, phone number or name in that order)
O	Contact.FirstName	PER_ALL_PEOPLE_F. first_name	Buyer Contact First Name
O	Contact.LastName	PER_ALL_PEOPLE_F. last_name	Buyer Contact Last Name
O	Contact.Phone1	PER_PHONES.phone_ number	Buyer Contact Phone Number
O	Contact.EmailAddress	PER_ALL_PEOPLE_F. email_address	Buyer Contact Email ID
O	Contact.Fax	PER_PHONES.phone_ number	Buyer Contact Fax Number
O	Contact. CommunicationMethod	Constant. In order of preference: 1. EMAIL 2. FAX 3. MANUAL	Email/Fax/Manual (Phone)
O	TransOrderHeader. InvolvedParty. Involved PartyQualifierGid. Gid.Xid	Constant: BILL-TO	BILL-TO

O	TransOrderHeader. InvolvedParty. Involved PartyLocationRef. LocationRef. LocationGid.Gid. DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	TransOrderHeader. InvolvedParty. Involved PartyLocationRef. LocationRef. LocationGid.Gid.Xid	Concatenation:ORG- <PO_HEADERS_ ALL.org_id>-<PO_ HEADERS_ALL.bill_ to_location_id>	ORG-<Org ID>-<Bill to Location ID>
O	TransOrderHeader. InvolvedParty.Contact. ContactGid.Gid. DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	TransOrderHeader. InvolvedParty.Contact. ContactGid.Gid.Xid	In order of preference: 1. PER_ALL_PEO PLE_F.email_address 2. PER_PHONES. phone_number 3. Concatenation: PER_ALL_PEOPLE_F. first_name PER_ALL_ PEOPLE_F.last_name	Buyer contact ID (mapped to the email address, phone number or name in that order)
O	Location.LocationGid. Gid.DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	Location.LocationGid. Gid.Xid	Concatenation: ORG-<PO_ HEADERS_ALL.org_ id>-<PO_HEADERS_ ALL.bill_to_location_ id>	ORG-<Org ID>-<Bill to Location ID>
O	Location.CorporationX ID	Concatenation:ORG-< PO_HEADERS_ALL. org_id>	ORG-<Org ID>
O	Location. LocatioRefNum. Qualifier	Constant: EBS_NAME	EBS_NAME
O	Location. LocatioRefNum.Value	HR_LOCATIONS_ ALL.location_code	Bill To Location Name
O	Location.Address. AddressLine1 to AddressLine3	Concatenation: HR_LOCATIONS_ ALL.address_line_1 HR_LOCATIONS_ ALL.address_line_2 HR_LOCATIONS_ ALL.address_line_3	Bill To Location Address Lines

O	Location.Address.City	HR_LOCATIONS_ ALL.town_or_city	Bill To Location Address City
O	Location.Address. CountryCode3	FND_TERRITORIES. iso_territory_code	Bill To Location Address Country
O	Location.Address. PostalCode	HR_LOCATIONS_ ALL.postal_code	Bill To Location Address Postal Code
O	Location.Address. Province	Either HR_LOCAT IONS_ALL.region_1 or HR_LOCATIONS_ ALL.region_2, depending on address style.	Bill To Location Address Province
O	Location.Address. ProvinceCode	Either HR_LOCAT IONS_ALL.region_1 or HR_LOCATIONS_ ALL.region_2, depending on address style.	Bill To Location Address Province Code
O	Location.Contact. ContactGid	In order of preference: 1. PER_ALL_PEO PLE_F.email_address 2. PER_PHONES. phone_number 3. Concatenation: PER_ALL_PEOPLE_F. first_name PER_ALL_ PEOPLE_F.last_name	
O	Contact.ContactGid. Gid.DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	Contact.ContactGid. Gid.Xid	In order of preference: 1. PER_ALL_PEO PLE_F.email_address 2. PER_PHONES. phone_number 3. Concatenation: PER_ALL_PEOPLE_F. first_name PER_ALL_ PEOPLE_F.last_name	Buyer contact ID (mapped to the email address, phone number or name in that order)
O	Contact.FirstName	PER_ALL_PEOPLE_F. first_name	Buyer Contact First Name
O	Contact.LastName	PER_ALL_PEOPLE_F. last_name	Buyer Contact Last Name
O	Contact.Phone1	PER_PHONES.phone_ number	Buyer Contact Phone Number

O	Contact.EmailAddress	PER_ALL_PEOPLE_F. email_address	Buyer Contact Email ID
O	Contact.Fax	PER_PHONES.phone_ number	Buyer Contact Fax Number
O	Contact. CommunicationMethod	Constant. In order of preference: 1. EMAIL 2. FAX 3. MANUAL	Email/Fax/Manual (Phone)
O	TransOrderLineDetail. TransactionCode	Constant: IU	IU (Insert/Update)
O	TransOrderLineDetail. TransOrderLineGid. Gid.Xid	Concatenation:LINE- <PO_LINES_ALL.po_ line_id>-SCHED-<PO_ LINE_LOCATIONS_ ALL.line_location_id>	LINE-<Line ID>- SCHED-<Schedule ID>
O	TransOrderLineDetail. TransOrderLineGid. Gid.DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	TransOrderLineDetail. ItemQuantity. ItemTag1	Concatenation: LINE/SCHEDUL: < PO_LINES_ALL.line_ num>/<PO_LINE_ LOCATIONS_ALL. shipment_num>	LINE->SCHEDULE: <Line Number>- <Schedule Number> These tags are displayed in the Ready to Ship screen in OTM.
O	TransOrderLineDetail. ItemQuantity. ItemTag2	Concatenation: SUPPLIER ITEM: <PO_LINES_ALL. vendor_product_ num>	SUPPLIER ITEM: <Supplier Item>
O	TransOrderLineDetail. ItemQuantity. ItemTag3	Concatenation: REV: <PO_LINES_ ALL.item_revision>	REV: <Item Revision>
O	TransOrderLineDetail. ItemQuantity. PackagedItemCount	PO_LINE_LOCAT IONS_ALL.quantity	Shipment or Schedule Quantity Quantity changes in Purchasing will not affect released or shipped quantities in OTM – only the order base line quantity.

O	TransOrderLineDetail. PackagedItemRef. PackagedItemGid.XID	Concatenation: If UOM code is same in EBS and OTM:<MTL_ SYSTEM_ITEMS_ KFV.concatenated_ segments> <MTL_UN ITS_OF_MEASURE. uom_code> Otherwise:<MTL_ SYSTEM_ITEMS_ KFV.concatenated_ segments> <MTL_UN ITS_OF_MEASURE. attribute15 >	<EBS Item ID>_ <UOM> For one time items:<Item Description>_<UOM>
O	TransOrderLineDetail. PackagedItemRef. ItemGid.XID	Concatenation: If UOM code is same in EBS and OTM:<MTL_ SYSTEM_ITEMS_ KFV.concatenated_ segments> <MTL_UN ITS_OF_MEASURE. uom_code> Otherwise:<MTL_ SYSTEM_ITEMS_ KFV.concatenated_ segments> <MTL_UN ITS_OF_MEASURE. attribute15 >	<EBS Item ID>_ <UOM> For one time items:<Item Description>_<UOM>
O	TransOrderLineDetail. ItemQuantity. DeclaredValue. MonetaryAmount	Calculated field:PO_ LINE_LOCATIONS_ ALL.price_override * C IEL(PO_LINE_LOCAT IONS_ALL.quantity)	Line Amount Does not include tax
O	TransOrderLineDetail. DeclaredValue. FinancialAmount. GlobalCurrencyCode	PO_HEADERS_ALL. currency_code	PO Currency
O	TransOrderLineDetail. TransOrderLine. ItemAttributes. ItemFeatureQualGid. Gid.DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option Item Feature Qualifiers are used to display additional item information.
O	TransOrderLineDetail. TransOrderLine. ItemAttributes. ItemFeatureQualGid. Gid.Xid	Constant: DESCRIPT ION	DESCRIPTION
O	TransOrderLineDetail. TransOrderLine. ItemAttributes. ItemFeatureValue	PO_LINES_ALL.item_ description	PO Line Description

O	TransOrderLineDetail. TransOrderLine. ItemAttributes. ItemFeatureQualGid. Gid.DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	TransOrderLineDetail. TransOrderLine. ItemAttributes. ItemFeatureQualGid. Gid.Xid	Constant: REVISION	REVISION
O	TransOrderLineDetail. TransOrderLine. ItemAttributes. ItemFeatureValue	PO_LINES_ALL.item_ revision	Item Revision
O	TransOrderLineDetail. TransOrderLine. ItemAttributes. ItemFeatureQualGid. Gid.DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	TransOrderLineDetail. TransOrderLine. ItemAttributes. ItemFeatureQualGid. Gid.Xid	Constant: SUPPLIER_ ITEM	SUPPLIER_ITEM
O	TransOrderLineDetail. TransOrderLine. ItemAttributes. ItemFeatureValue	PO_LINES_ALL. vendor_product_num	Supplier Item
O	TransOrderLineDetail. TransOrderLine. ItemAttributes. ItemFeatureQualGid. Gid.DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	TransOrderLineDetail. TransOrderLine. ItemAttributes. ItemFeatureQualGid. Gid.Xid	Constant: SUPPLIER_ CONFIG_ID	SUPPLIER_CONFIG_ ID
O	TransOrderLineDetail. TransOrderLine. ItemAttributes. ItemFeatureValue	PO_LINES_ALL. supplier_ref_number	Supplier Config ID This is the configuration ID got from the supplier. For example, a user configured desktop purchased from Dell Web site via punch-out.

O	TransOrderLineDetail. TransOrderLine. TimeWindow. LateDeliveryDate	Calculated field. In order of preference: 1. PO_LINE_LOCATIONS_ALL.promised_date + PO_LINE_LOCATIONS_ALL.days_late_receipt_allowed 2. PO_LINE_LOCATIONS_ALL.need_by_date + PO_LINE_LOCATIONS_ALL.days_late_receipt_allowed	Promised or Need-by Date + Days late receiving tolerance on PO Promised Date if it exists, else Need-By Date
O	TransOrderLineDetail. TransOrderLine. TimeWindow. EarlyDeliveryDate	Calculated field. In order of preference: 1. PO_LINE_LOCATIONS_ALL.promised_date - PO_LINE_LOCATIONS_ALL.days_early_receipt_allowed 2. PO_LINE_LOCATIONS_ALL.need_by_date - PO_LINE_LOCATIONS_ALL.days_early_receipt_allowed	Promised or Need-by Date - Days early receiving tolerance on PO Promised Date if it exists, or else the Need-By Date
O	TransOrderlineDetail. TransOrderLine. InvolvedParty. InvolvedPartyQualifierGid. Gid.Xid	Constant: SHIP TO	SHIP TO
O	TransOrderHeader. InvolvedParty. InvolvedPartyLocationRef. LocationRef. LocationGid.Gid. DomainName	Profile Option: OTM_DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	TransOrderHeader. InvolvedParty. InvolvedPartyLocationRef. LocationRef. LocationGid.Gid.Xid	Concatenation: ORG-<PO_HEADERS_ALL.org_id>-<PO_HEADERS_ALL.bill_to_location_id>	ORG-<Org ID>-<Bill to Location ID>
O	TransOrderHeader. InvolvedParty.Contact. ContactGid.Gid. DomainName	Profile Option: OTM_DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option

O	TransOrderHeader. InvolvedParty.Contact. ContactGid.Gid.Xid	In order of preference: 1. PER_ALL_PEO PLE_F.email_address 2. PER_PHONES. phone_number 3. Concatenation: PER_ALL_PEOPLE_F. first_name PER_ALL_ PEOPLE_F.last_name	Requestor contact ID – This is mapped to the email address, phone number or name in that order Requestor, if it exists, or else the buyer
O	Location.LocationGid. Gid.Xid	Concatenation. If internal location:ORG- <PO_LINE_LOCAT IONS_ALL.ship_to_ organization_id>-< PO_LINE_LOCAT IONS_ALL.ship_to_ location_id> If drop-ship:CUS-000- <PO_LINE_LOCAT IONS_ALL.ship_to_ location_id>	ORG-<Org ID>-<Ship- To Location ID> or CUS-000-<Ship-To Location ID>
O	Location.LocationRole	Constant: SHIPFROM- SHIPTO	SHIPFROM-SHIPTO
O	Location.CorperationX ID	Concatenation. If internal location:ORG- <PO_LINE_LOCAT IONS_ALL.ship_to_ organization_id> If drop-ship:CUS-000	ORG-<Org ID> or CUS-000 Use 'CUS-000' for drop ship orders.
O	Location. LocatioRefNum. Qualifier	Constant: EBS_NAME	EBS_NAME
O	Location. LocatioRefNum.Value	HR_LOCATIONS_ ALL.location_code	Ship-to Location Name
O	Location.Address. AddressLine1 to AddressLine3	Concatenation: HR_LOCATIONS_ ALL.address_line_1 HR_LOCATIONS_ ALL.address_line_2 HR_LOCATIONS_ ALL.address_line_3	Ship-to Location Address Lines
O	Location.Address.City	HR_LOCATIONS_ ALL.town_or_city	Ship-to Location Address City
O	Location.Address. CountryCode3	FND_TERRITORIES. iso_territory_code	Ship-to Location Address Country
O	Location.Address. PostalCode	HR_LOCATIONS_ ALL.postal_code	Ship-to Location Address Postal Code

O	Location.Address. Province	Either HR_LOCATIONS_ALL.region_1 or HR_LOCATIONS_ALL.region_2, depending on address style.	Ship-to Location Address Province
O	Location.Address. ProvinceCode	Either HR_LOCATIONS_ALL.region_1 or HR_LOCATIONS_ALL.region_2, depending on address style.	Ship-to Location Address Province Code
O	Contact.ContactGid. Gid.DomainName	Profile Option: OTM_DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option
O	Contact.ContactGid. Gid.Xid	In order of preference: 1. PER_ALL_PEOPLE_F.email_address 2. PER_PHONES.phone_number 3. Concatenation: PER_ALL_PEOPLE_F.first_name PER_ALL_PEOPLE_F.last_name	Supplier contact ID (mapped to the email address, phone number or name in that order)
O	Contact.FirstName	PER_ALL_PEOPLE_F.first_name	Requestor Contact First Name
O	Contact.LastName	PER_ALL_PEOPLE_F.last_name	Requestor Contact Last Name
O	Contact.Phone1	PER_PHONES.phone_number	Requestor Contact Phone Number
O	Contact.EmailAddress	PER_ALL_PEOPLE_F.email_address	Requestor Contact Email ID
O	Contact.Fax	PER_PHONES.phone_number	Requestor Contact Fax Number
O	Contact. CommunicationMethod	Constant. In order of preference: 1. EMAIL 2. FAX 3. MANUAL	Email/Fax/Manual (Phone)
O	TransOrderLineDetail. TransOrderLine. ShipFromLocationRef. LocationRef. LocationGid.Gid. DomainName	Profile Option: OTM_DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name profile option

O	TransOrderLineDetail. TransOrderLine. ShipFromLocationRef. LocationRef. LocationGid.Gid.Xid	Concatenation:SU P-<PO_HEADERS_ ALL.vendor_id>-< PO_HEADERS_ALL. vendor_site_id>	SUP-<Supplier ID>_ <Site ID> Note: Although the supplier site need not be the ship-from location, this is a required attribute in OTM and therefore is mapped to supplier site. This can however be updated with the true ship-from location downstream in OTM. EBS PO does not currently carry the ship-from location.
O	TransOrderLineDetail. TransOrderLine. ShipToLocationRef. LocationRef. LocationGid.Gid. DomainName	Profile Option: OTM_ DOMAIN_NAME (OTM: Domain Name)	OTM: Domain Name
O	TransOrderLineDetail. TransOrderLine. ShipToLocationRef. LocationRef. LocationGid.Gid.Xid	Concatenation. If internal location:ORG- <PO_LINE_LOCAT IONS_ALL.ship_to_ organization_id>-< PO_LINE_LOCAT IONS_ALL.ship_to_ location_id> If drop-ship:CUS-000- <PO_LINE_LOCAT IONS_ALL.ship_to_ location_id>	ORG-<Ship-To Org ID>_<Ship-To Location ID> or CUS-000- <Location ID>

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