

# **Oracle® Transportation Management**

Kewill Flagship Parcel Rate Requests  
Integration Guide

Release 6.3

Part No. E38429-01

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Oracle Transportation Management Kewill Flagship Parcel Rate Requests Integration Guide, Release 6.3

Part No. E38429-01

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Oracle Transportation Management Kewill Flagship Parcel Rate Requests Integration Guide, Release 6.3

Part No. E38429-01

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# Preface

This guide provides instructions and simple examples that demonstrate how to set up rates and extract costs for parcel mode shipments via Oracle Transportation Management to Kewill Flagship external rating engine link.

## Change History

Date	Document Revision	Summary of Changes
12/2012	-01	Initial release.



# 1. Install Flagship

Follow the instructions provided by Kewill to install Flagship on a machine. This machine should be connected to the same network as the application server to minimize communications performance bottlenecks.

Once Flagship is installed, you will need to define the Oracle Transportation Management properties that specify the communication information. For example:

```
glog.RatingEngine.Kewill.URL=otm-kewill  
glog.RatingEngine.Kewill.port=1200
```



## 2. Setup Flagship

### Locations

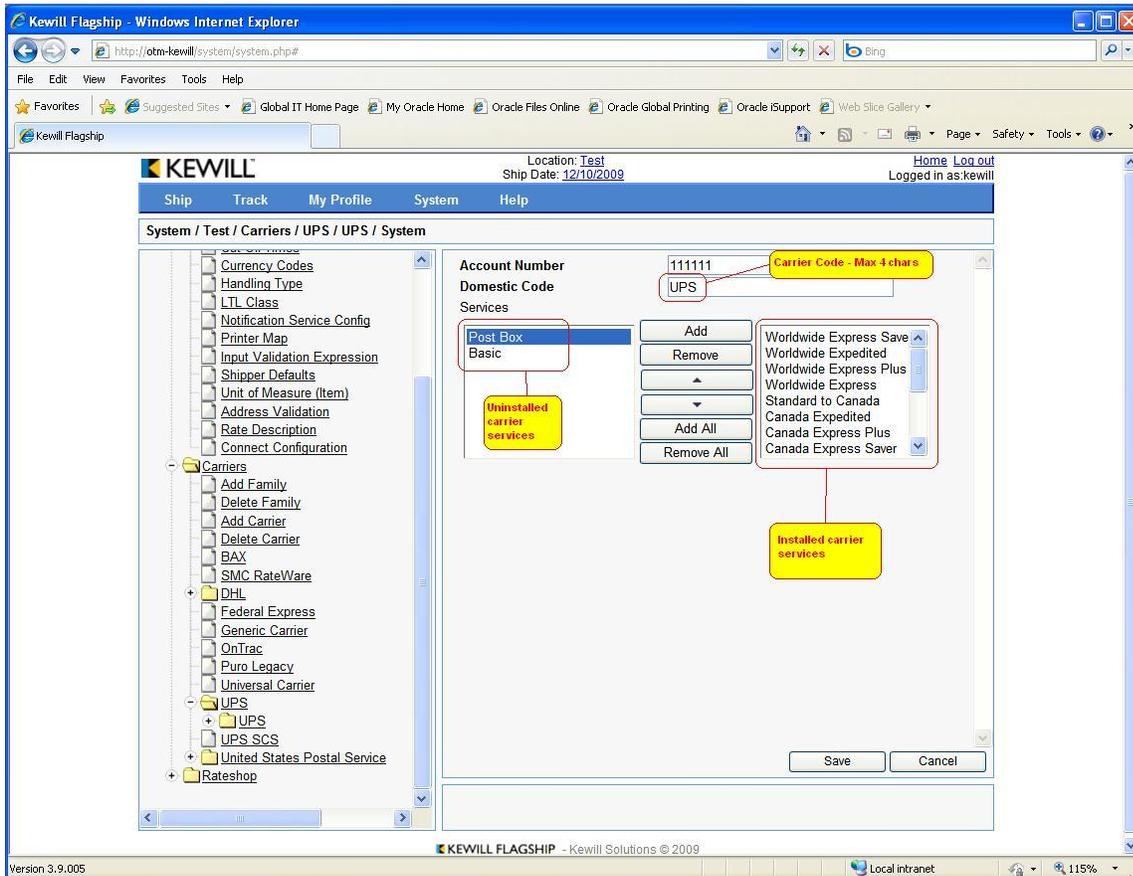
At least one shipper location should be created. This will correspond to the origin location of shipments created and rated within Oracle Transportation Management. You will assign a code to this location within Flagship, referred to as the **CUSTNUM** (customer number, but you can use letters). Ex: PHILAPA. In Flagship itself, this will be referred to as the **Shipper ID** when you add the customer.

The screenshot shows the 'Kewill Flagship' web application in Internet Explorer. The page title is 'System / Add Location'. The left sidebar contains a tree view with 'Global Settings' expanded, showing 'Add Location', 'Delete Location', 'CloseConfig', 'Dangerous Goods Data', and 'Settings'. Below this is a folder named 'Test'. A yellow callout box with the text 'Shipper ID = CUSTNUM' points to the 'Shipper ID' field in the form. The form fields are as follows:

Shipper ID	PHILAPA
Display Name	King of Prussia Office
Description	
Sender Attention	Me
Ship From Company	My Company
Address 1	1016 W. Ninth Ave.
Address 2	
Address 3	
City	King of Prussia
State/Province	Pennsylvania
Postal Code	19406
Country	United States
Phone	6104919881
Fax	
Email	
Time Zone	(GMT-05:00) Eastern Time (US & C
DC Cost Center	
Company ID	

## Carriers/Services

Once a customer location has been created in Flagship, you must install one or more supported carriers and services. Each carrier you install for a particular location must be assigned a carrier code. This is a code that should be unique to the carrier for this location. When you install a carrier, you will be given the opportunity to select which services are supported.



### 3. Setup Base Oracle Transportation Management

Oracle Transportation Management and Flagship are orthogonal solutions to similar problems with vastly different implementations and points of view. Oracle Transportation Management is built to handle multi-modal transportation and generic costing solutions, and Flagship is designed to solve a customer-centric problem of consolidated parcel-mode shipping. This makes interfacing between the two products a little particular.

#### Locations

The first and most important thing to understand is that all shipments rated via the Oracle Transportation Management-Flagship combination must originate at a location that corresponds to a customer location setup in Flagship. This is done by identifying the Flagship CUSTNUM using a special location reference number. The reference number qualifier is user-definable and is specified by the global property: `glog.RatingEngine.Kewill.RefnumQual`. Using the example CUSTNUM seen in the Setup Flagship section, it would be:

```
glog.RatingEngine.kewill.RefnumQual= KEWILL_SFCUSTNUM
```

The screenshot shows the Oracle OTM Location Setup interface. The 'Reference Numbers' section is expanded, showing a table with columns for Reference Number Qualifier ID and Reference Number. The first row has 'GLOG' and 'PLAN.PHILADELPHIA-PA'. The second row has 'KEWILL\_SFCUSTNUM' and 'PHILAPA'. Two yellow callout boxes are present: one pointing to 'KEWILL\_SFCUSTNUM' with text explaining it's a user-specified qualifier ID, and another pointing to 'PHILAPA' with text explaining it's the Shipper ID or CUSTNUM from Flagship.

* Reference Number Qualifier ID	* Reference Number	Save
GLOG	PLAN.PHILADELPHIA-PA	[Edit] [Delete]
KEWILL_SFCUSTNUM	PHILAPA	[Edit] [Delete]

This location qualifier ID can be specified by the user. Use the property `glog.RatingEngine.kewill.RefnumQual` to indicate which qualifier ID to use during rating.

This is the Shipper ID or CUSTNUM as defined in Flagship when the customer location was initially created. Only OTM locations with a valid value for this refnum qualifier can be used as origin locations for orders to be rated by Flagship.

#### Order Releases

As of 6.1.4, it is possible to specify the SFCUSTNUM on the order release using the same reference number qualifier ID as was used on the location. If the SFCUSTNUM is specified here, it will automatically override the SFCUSTNUM (if any) found on the origin location. In addition, Oracle Transportation Management will now take advantage of Kewill's ability (post v4.0) to rate using origin address components that are not directly related to SFCUSTNUM.

If a shipment originates at a location without a CUSTNUM reference number and an override is not found on the order release, the rate request will fail and be flagged as infeasible.

The screenshot shows the 'Order Release' form with the following details:

- Source Location ID:** SEATTLE-WA
- Destination Location ID:** TAMPA-FL
- Reference Numbers:**
  - Qualifier: GLOG, Reference: PLAN/MISC.TEST-KEWILL-ORCUST
  - Qualifier: KEWILL\_SFCUSTNUM, Reference: PHILAPA

**Callout Box 1 (Left):** This Order Release refnum qualifier ID can be specified by the user. Use the property `glog.RatingEngine.Kewill Refnum Qual` to indicate which qualifier ID is used during rating.

**Callout Box 2 (Right):** This is the Shipper ID or SFCUSTNUM as defined in Flagship when the customer location was initially created.

Note: If an order is from DHL Canada to USA, then 'KEWILL\_EXPORT\_REASON' Refnum need to be added with one of the possible values (Permanent (p), Temporary (T), Re-Export(R)). This Refnum is added in Shipment Refnums as well as in Order Release Refnums.

The screenshot shows the 'Order Release' form with the following details:

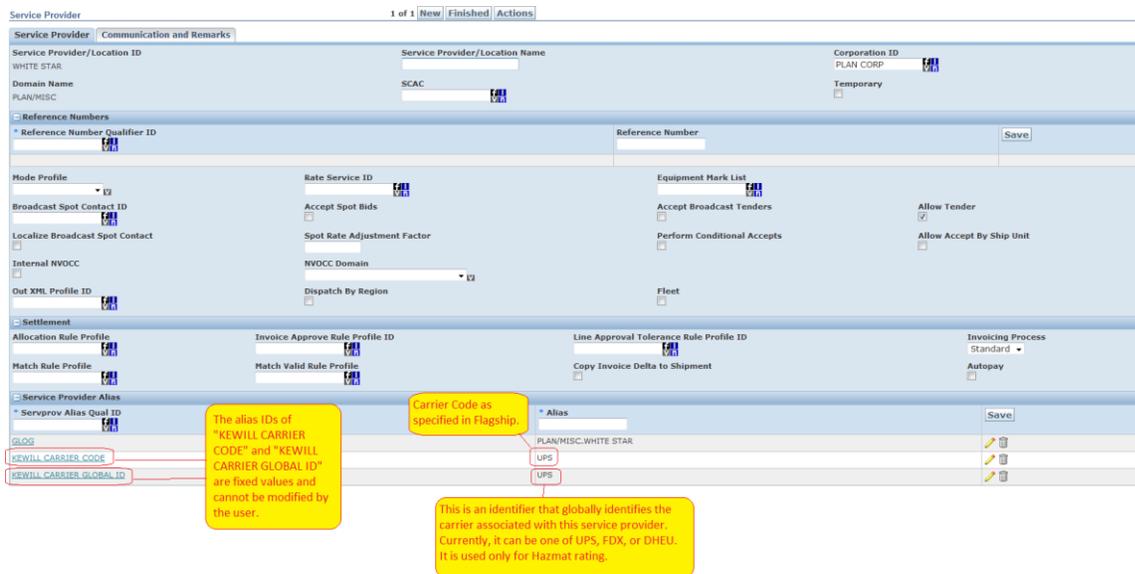
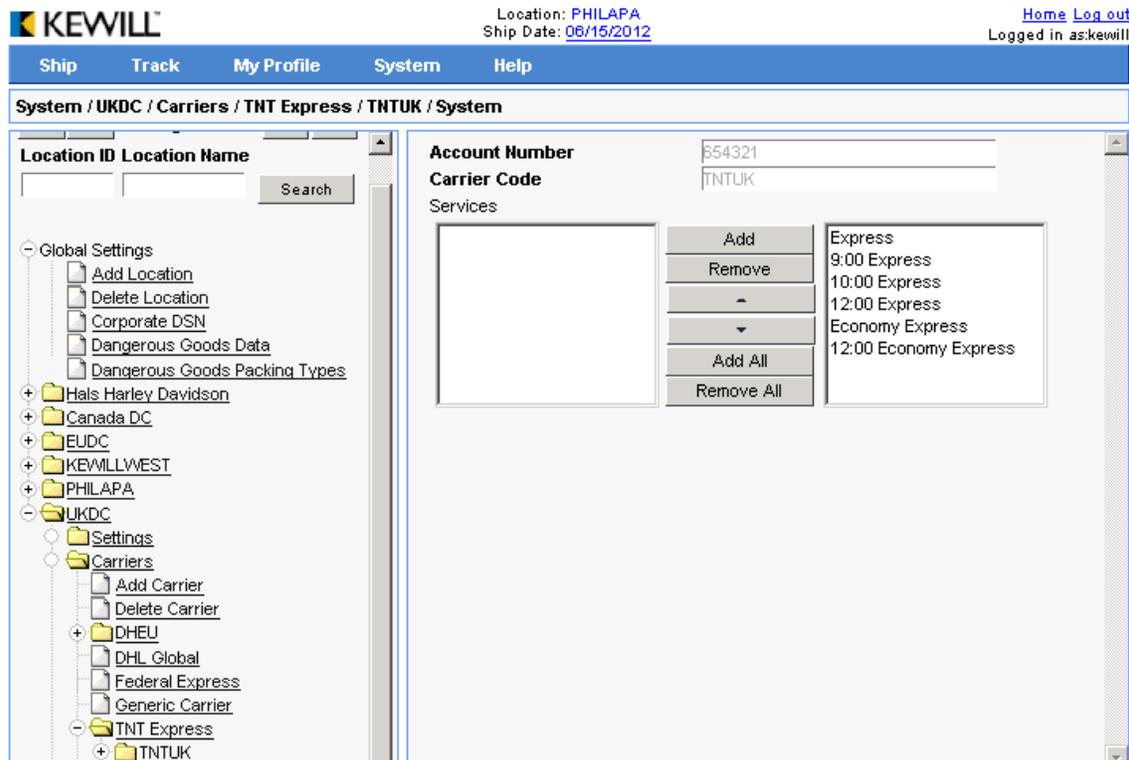
- Source Location ID:** CAN-SRC
- Destination Location ID:** USA-SRC
- Reference Numbers:**
  - Qualifier: GLOG, Reference: PRAVEEN.20120718-0001
  - Qualifier: KEWILL\_EXPORT\_REASON, Reference: P

## Service Providers/Carriers

The concept of a Carrier in Flagship is nearly equivalent to the Service Provider in Oracle Transportation Management. The difference is a matter of scope. A carrier is a specific subset of Oracle Transportation Management service providers. A service provider that can act as a carrier for Kewill-based rating must be explicitly identified as such. This is done by assigning carrier codes (see the Service Providers/Carriers section) to a service provider alias using the following alias IDs: "KEWILL GLOBAL CARRIER CODE" and 'KEWILL CARRIER CODE'. The 'KEWILL CARRIER GLOBAL ID'

records the actual name of the carrier as listed in the table below (ex:TNT,UPS,FDX) while 'KEWILL CARRIER CODE' records the value as configured in Kewill Flagship (please see below screen shot).

Example: If 'TNT' is the actual carrier associated with the carrier code 'TNTUK', then in the carrier data setup, the user will need to define 'TNT' as the 'KEWILL CARRIER GLOBAL ID' and 'TNTUK' as the 'KEWILL CARRIER CODE'.



Carrier Name	Kewill Carrier Code	Kewill Global Carrier Code
--------------	---------------------	----------------------------

DHL	DHL	DHEU
FexEx	FDX	FDX
UPS	UPS	UPS
U.S.Postal Service	USPS	USPS
BAX Global	BAX	BAX
DHL Canada	DHCA	DHCA
UPS Canada	UPSC	UPSC
TNT UK	TNTUK	TNT
UPS SCS	UPSSC	EMRY
Purolator	PURL	PURL

## Rate Service/Carrier Service Level

Each carrier installed in Flagship can provide one or more parcel services. For example, UPS provides standard Ground delivery service, Next Day Air, Second Day, etc. In Oracle Transportation Management, carrier service levels correspond to rate services, which are user-configurable and can be assigned to a contract-level rate offering or a geographical rate record. Rate services in Oracle Transportation Management specify exactly how to calculate the amount of time it takes for a shipment to travel from its origin to its destination, with stops along the way. When defining a rate for Flagship, it is necessary to pass a code that specifies the requested service level for the shipment being rated. These codes are pre-defined by Kewill. The code for UPS Next Day Air, for example, is NDA. For UPS Ground, it is GND. For USPS Priority Mail, it is PRTY. (The full list of codes can be found at the end of this document).

There is a one-to-one relationship between Oracle Transportation Management Rate Services and Flagship Service Levels. There is no need to use a secondary attribute of rate service to associate with a Flagship service, so you can define these services directly in Oracle Transportation Management. The most important restriction is that the rate service ID absolutely must match the desired Flagship service level. This is illustrated in the screenshot below.

**Rate Service Header** | **Rate Service Details**

\* Rate Service ID: NDA Rate Service ID MUST match the predefined Kewill Flagship service code.

Rate Service Name: FDX NEXT DAY AIR -

Driving Penalty: [ ] USD

\* Rate Service Type: TIMEDEFINITESERVICE  A rate service type of TIMEDEFINITESERVICE instructs OTM to use calculated pickup and delivery dates returned from the rating engine.

Calendar: [ ]

Waiting Penalty: [ ] USD

Time Window Tolerance: [ ] D [ ] H [ ] M

Ignore Delivery Location Calendar:

Max Wait Time Per Stop: [ ] D [ ] H [ ] M

Max Longhaul Wait Time: [ ] D [ ] H [ ] M

Use Rush Hour:

In addition, Flagship has the ability to calculate and return to Oracle Transportation Management the expected pickup and delivery dates for certain carrier service levels, thus allowing Oracle Transportation Management to skip this calculation itself. To do this, you must specify a rate service type of TIMEDEFINITESERVICE.

Some carriers do not provide expected pickup and delivery dates for all service levels. For these carrier/service level combinations, an alternate rate service type should be selected, such as SIMULATION or LOOKUP. Check with Flagship Support for an up-to-date listing of these carrier/service level combinations.

	Rate Service Type	
Carriers	Domestic	International
DHL	TIMEDEFINITESERVICE	LOOKUP
FDX	TIMEDEFINITESERVICE	LOOKUP
UPS	TIMEDEFINITESERVICE	TIMEDEFINITESERVICE
USPS	TIMEDEFINITESERVICE	TIMEDEFINITESERVICE
BAX	LOOKUP	TIMEDEFINITESERVICE
DHCA	TIMEDEFINITESERVICE	LOOKUP
UPCA	TIMEDEFINITESERVICE	TIMEDEFINITESERVICE
EMRY	LOOKUP	LOOKUP
TNT	Not Supported	LOOKUP

## DHL Canada to USA Rating

For DHL Canada to USA rating, it is necessary to pass an Export Reason Code to the rating engine. This can be done by using the order release and setting the property

glog.RatingEngine.Kewill.ExportReasonRefnumQual to KEWILL\_EXPORT\_REASON. Additionally, you need to configure the refnum (KEWILL\_EXPORT\_REASON) at Order Release level to one of the following values (P,T,R) ->(Permanent, Temporary, Re-Export). No support from Rate Inquiry.

## 4. Rating

This section will discuss how to set up basic rating information, using the previous section's locations, carriers, and rate services, to invoke and extract costs and time of service information from Flagship. In Oracle Transportation Management 6.1, there are different ways to invoke an external engine. In previous versions of Oracle Transportation Management, external engines could only be invoked as the major part of the contract-level rate offering structure. Only the SMC external rating engine was available for use at this level. It is now possible to invoke an external rating engine as part of the calculation of a standard rate cost, including the ability to impose shipment data-based conditions. A simple example of each will be provided below.

### Setting Up to Invoke Flagship from a Rate Offering

This simplest way to invoke Flagship is from a rate offering. This is very similar to how Oracle Transportation Management invokes SMC Rateware, also done from a rate offering.

#### Rate Offering Type

All rating calculations are controlled by an entity called the rate offering type. A rate offering type is two sets of attributes that describe the characteristics and the main calculations performed by the rating engine. For example, a standard TL rate may require stop off charges, accessorial cost calculations, and standard costing. Rate offering types are not going to be discussed in detail here, beyond what is necessary to setup the invocation of Flagship. To invoke Flagship from a rate offering type, only one attribute is needed: EXTERNALRATINGENGINE. The attribute must be specified in the rate offering type's main attribute list, and in the costing sequence.

* Rate Offering Type ID	* Rate Offering Type Name	Geography Base Type
PARCEL - EXTERNAL	PARCEL - EXTERNAL	Lane
* Rate Attribute ID		Save
EXTERNALRATINGENGINE		
* Sequence Number	* Rate Attribute ID	Save
	1 EXTERNALRATINGENGINE	
* Rate Basis		Save

#### Rate Offering

When setting up the rate offering type, the correct service provider must be chosen, along with the correct rate service and rate offering type. On the Oracle Transportation Management rate offering Attributes page, the Kewill Flagship external rating engine is chosen.

Rate Header	Attributes	Accessorials	Special Services	Involved Parties	Comments
Offering ID TEST-EXTERNAL	Service Provider ID WHITE STAR	Rate Service ID NDA	Version FOREVER		
* Offering ID TEST-EXTERNAL	* Offering Type PARCEL - EXTERNAL	Service Provider ID WHITE STAR	* Transport Mode PARCEL		
* Rate Service ID NDA	Rate Group ID	Equipment Group Profile ID	Corporation Profile ID		
* Version FOREVER					

The service provider, WHITE STAR, as assigned a carrier code of UPS, corresponding to the code assigned in Flagship.

Rate Service ID of NDA corresponds to UPS Next Day Air service.

The Rate Offering Type, PARCEL - EXTERNAL, instructs the rating engine to request rates from an external source.

**Note:** In the above example, the carrier code of UPS is associated with the Service Provider ID of WHITE STAR. It would probably be easier to track if the service providers were also named UPS, but it is not necessary for the name of the service provider to match the carrier code.

On the Attributes page, select the Kewill external rating engine:

Rate Header	Attributes	Accessorials	Special Services	Involved Parties	Comments	Rules and Terms
Offering ID TEST-EXTERNAL	Service Provider ID WHITE STAR	Rate Service ID NDA	Version FOREVER			
Rate Classification	Package Weight Minimum	External Rating Engine ID	Package Count is determined by:	Generic External Engine Fieldset ID		
	LB	KEWILL	L - Ship Unit Lines			
Rail Intermodal Service Plan Code	Customer or Shipper Rate	COFC/TOFC				
Tariff Refnum Qualifier	Tariff Refnum	Tariff Publishing Authority	Tariff Agency Code			
Tariff Issuing Carrier	Tariff Refnum Suffix	Tariff Reg Agency Code	Tariff Supplement ID			

Choose the Kewill external rating engine, and whether to use Ship Units or Ship Unit Lines to represent packages on a shipment.

Package Count is determined by: L - Ship Unit Lines

On this page, choose the internal representation of a package on a shipment. You can choose to represent a package using either ship units or ship unit lines.

## Rate Record

The rate record's geography must at least accommodate the location that is associated with the customer location defined in Flagship.

## Sample Rate Inquiry

The following rate inquiry (RIQ) shows an example of how a rate can be retrieved from Flagship using the sample setup described in the previous sections. The origin location must be one of the supported locations created in Flagship and flagged with the appropriate location\_refnum (KEWILL\_SFCUSTNUM) in Oracle Transportation Management. The destination can be anywhere supported by the carrier.

Ask OTM About Rates

Request Type: ALL | Rate Group: ALL

**\* Ship From**  
 Location ID: PHILADELPHIA-PA

**\* Ship To**  
 Location ID: TAMPA-FL

Origin Location must be flagged with the CUSTNUM that matches the same location created in Flagship.

Three dimensions and weight must be specified for each package (defined by ship units in this example). A ship unit count greater than 1 indicates multiple packages represented by a single line. These packages will be rated on an individual basis.

In addition to package information, one can specify each package as hazmat using Is Hazardous, Package Item ID, and Hazmat Item ID attributes. The working of hazmat request depends on the parameter called 'Run Hazmat Qualification Process'.

Transport Handling Unit	Ship Unit Count	Hazardous	Packaged Item ID	Hazmat Item ID	Weight	Volume	Length
SUPER SACK	3	No	ETHYL ALCOHOL	ETHYL ALCOHOL	2 LB	31.25 CU FT	2 FT
SMALL BOX	1		COMPRESSED GAS	COMPRESSED GAS	2 LB	1.5 CU FT	2 FT

THU is not used by Flagship.

Ship Unit count > 1 indicates multiple packages.

Package weight is a required field. Flagship will not rate without a weight for each package.

Package dimensions are also required.

The results from running this query:

Legend: ⚡ Optimal Rate   ⌚ Meets Service Time   ⌚ Will not meet Service Time

**TEST-EXTERNAL**

<b>Service Provider</b> WHITE STAR	<b>Rate Offering ID</b> TEST-EXTERNAL	<b>Rate Record</b> TEST-EXTERNAL	<b>Mode</b> PARCEL
<b>Cost</b> 255.03 USD	<b>Pickup Time</b> 2009-11-09 17:34 EST	<b>Delivery Time</b> 2009-11-10 10:30 EST	<b>Transit Time</b> 16H 56M
	<b>Distance</b>	<b>Equipment Group</b>	<b>Chargeable Weight</b>
	<b>Rate Offering Domain Profile</b>	<b>Rate Record Domain Profile</b>	<b>Route Code</b> <a href="#">Equipment Marks</a>

The Rate Inquiry Results are Based on the Following Inquiry Parameters:

**Request Type** AllOptions      **Rate Group**

**Ship From Location** ID=PHILADELPHIA-PA;      **Domain**

**Ship To Location** ID=TAMPA-FL;

**Mode**

**Equipment Group Profile**

**Equipment Initial**

**Date Available By** 2009-11-09 05:34 PM EST      **Equipment Number**

**Rate Service ID**      **Date Deliver By**

**Rate Record ID**      **Commodity Description:**

**Perspective** Buy      **Offering ID** TEST-EXTERNAL

**Force Tiered Rating**      **Show Preferred Rates Only**

**Estimate Tiered Rate Using Tier #:**

The details of the returned shipment costs:

**Cost Detail**

Cost Type	Cost	Accessorial Code	Special Service Code	Details
Base Cost	221.75 USD			Base shipping charge
KEWIL FUEL SURCHARGE (Accessorial)	33.28 USD	K-FUEL		Fuel surcharge
<b>Total Cost</b>	<b>255.03 USD</b>			

Each cost type is rolled up into the total for a shipment. Package costs cannot be viewed on an individual basis in OTM v6.0.

Fuel surcharges are calculated automatically by Flagship. Flagship-calculated accessorial codes can be assigned to accessorial codes via planning parameters.

In the above Cost Detail page, you see the base cost and an accessorial cost called "KEWILL FUEL SURCHARGE". Flagship has the ability to calculate many different accessorial costs that can then be returned and displayed separately from the base shipment cost. Oracle Transportation Management currently supports eight of these accessorial codes. These are discussed in the Accessorial Codes section of this document.

### Setting Up to Invoke Flagship from a Rate Cost

There are occasions when a rate will require calculations to be retrieved from an external source (such as Flagship), and then combined with additional calculations done within Oracle Transportation Management. When this is necessary, external engines can be invoked from a rate cost.

#### Rate Offering Type

The rate offering type must include the GRID rate attribute, the ACCESSORIALS rate attribute, or both. EXTERNALRATINGENGINE should NOT be included in this case, since you are not invoking the external engine from the rate offering.

This rate offering type instructs the Oracle Transportation Management rating engine to perform calculations using both rate costs and accessorial costs (if any). Rate costs are defined on the rate record.

## Rate Offering

The only important difference in this example is that the Kewill external rating engine is not chosen on the attributes page.

## Rate Record Cost

A cost must be created and added to the rate record that invokes the external rating engine. The engine is chosen in much the same way as seen earlier on the rate offering Attributes tab in the Rate Manager. First, you must select *External* from the Cost Type dropdown. Then, you select which external rating engine to invoke. In this case, the only option is Kewill.

**Note:** When invoking Flagship from a rate cost, it is not possible to retrieve the calculated pickup and delivery dates, so the Rate Service must not be defined using the TIMEDEFINITESERVICE rate service type.

## Understanding Rate Responses

Because Oracle Transportation Management and Kewill Flagship capture costs differently, there is a specific mapping required between applications. Individual costs are identified by named keys in Flagship's response. These keys are mapped and combined within Oracle Transportation Management to present this data in a familiar format. Below is a summary of these named keys and their associated calculations:

- CALCFREIGHT represents the total shipment cost. This includes all costs and applicable discounts associated with the shipment.
- FREIGHT represents the Base Cost (B).
- Accessorial Costs are either anticipated or unanticipated. Costs which are anticipated can be manually mapped as parameters by the user for clarity. These accessorial (A) are: CUSTOMS\_CLEARANCE\_CHRG, DRYICE\_CHRG/DRY\_ICE\_CHRG/ DRYICECHRG, FUELCHG, SATPICKCHG, DECVALCHG, HAZCHG, SATDLVYCHG, CHG\_ADD\_HNDL, CHG\_DLVY\_AREA, CHG\_DLVY\_CONF and CHG\_RESIDENTIAL. Any anticipated accessorial which have not been manually mapped by the user will display in Oracle Transportation Management with a cost type of OTHER (O).
- Unanticipated accessorial are those which are not specifically requested by Oracle Transportation Management however they are returned by Flagship. These costs are captured as other costs with a cost type of OTHER (O). Examples of these costs are accessorial such as CODFEE and EXTAREA\_CHG.

Finally, there are some remaining costs which are not returned as named keys in Flagship's response. These costs are included in the CALCFREIGHT key and must be calculated out by Oracle Transportation Management's rating logic. This relationship can be expressed as follows:

- Remaining Costs = CALCFREIGHT - [FREIGHT (B) + Anticipated Accessorial Costs (A) + Other Costs (O)]

## Calculating Discounts

All costs returned from Flagship reflect any applicable discounts. If you want to see a summary of calculated discounts in Oracle Transportation Management, set the following property to true:

```
glog.RatingEngine.Kewill.Costs.IncludeDiscount
```

With this property set to true, a shipment's freight cost will be adjusted upward to simulate a "pre-discounted" cost, then a separate discount cost line will appear with the discount amount, finally the shipment's total cost will match the CALCFREIGHT cost received from Kewill.

Presently, this feature is only available for the carrier FEDEX, as Flagship only returns a discount key for this carrier. For this carrier, the named key for discounts is called TOTDISCOUNT. Again, because all discounts are already reflected in the costs returned from Flagship, the TOTDISCOUNT key is only returned for reference. The calculation for remaining costs (including discounts) can be expressed as follows:

$$\text{Remaining Costs} = \text{CALCFREIGHT} - [\text{FREIGHT(B)} + \text{Anticipated Accessorial Charges (A)} + \text{Other Costs (O)} + \text{Discount (negative)}]$$

## 5. Accessorials

Flagship has the ability to calculate many different types of accessorial costs. Oracle Transportation Management can recognize and support some of those accessorial cost types. These are: Fuel Surcharges, Simple Delivery Confirmation, Additional Handling, Delivery Insurance, Saturday Delivery, Saturday Pickup, Residential Delivery, Out of Area Charges and Hazardous Material charges. Using parameters, each accessorial calculated by Flagship can be assigned an Oracle Transportation Management accessorial code. This will allow Oracle Transportation Management to correctly categorize these charges for settlement and display purposes. There are charges that are returned by Flagship which Oracle Transport Management does not categorize into any of above mentioned accessorial charges. Such charges if present are categorized as Other Charges. Some of these accessorial charges are calculated automatically, and some must be requested explicitly. In addition, some of the accessorials impose additional requirements on the input data.

First, you edit your Oracle Transportation Management parameter set via Shipment Management > Power Data > General > Parameter Sets. Then, you assign a parameter value to each KEWILL specific parameter. The list of parameter values will populate based on the accessorial codes that you have set up:

RATES		
Parameter	Default Value	Parameter Value
ALLOW DUPLICATE PREFERRED RATE OFFERINGS	0.Always	
ALLOW DUPLICATE RATES BY CARRIER	0.Never	
KEWILL ADDITIONAL HANDLING CHARGE ACC CODE		K-ADDHNDL <input type="checkbox"/>
KEWILL CUSTOMS CLEARANCE CHARGE ACCESSORIAL CODE		<input type="checkbox"/>
KEWILL DELIVERY CONFIRMATION CHARGE ACC CODE		K-DELVCONF <input type="checkbox"/>
KEWILL DRY ICE CHARGE ACCESSORIAL CODE		K-DRYICE <input type="checkbox"/>
KEWILL FUEL SURCHARGE ACCESSORIAL CODE		K-FUEL <input type="checkbox"/>
KEWILL HAZMAT CHARGE ACCESSORIAL CODE		K-HAZMAT <input type="checkbox"/>
KEWILL INSURANCE CHARGE ACCESSORIAL CODE		K-DECVAL <input type="checkbox"/>
KEWILL OUT OF AREA DELIVERY CHARGE ACC CODE		K-EXTAREA <input type="checkbox"/>
KEWILL RESIDENTIAL DELIVERY CHARGE ACC CODE		K-RESIDENTIAL <input type="checkbox"/>
KEWILL SATURDAY DELVY CHARGE ACCESSORIAL CODE		K-SATDELV <input type="checkbox"/>
KEWILL SATURDAY PICKUP CHARGE ACCESSORIAL CODE		K-SATPICK <input type="checkbox"/>
KEWILL UNCATEGORIZED CHARGE ACCESSORIAL CODE		<input type="checkbox"/>
RATING ENGINE ALWAYS CALCULATES TIERED RATES	FALSE	<input type="checkbox"/>
RATING ENGINE FAILS FAST ON CATASTROPHIC ERRORS	FALSE	TRUE <input type="checkbox"/>
RATING ENGINE STORES DETAILED COST INFORMATION	FALSE	TRUE <input type="checkbox"/>
RIQ HAZMAT SPECIAL SERVICE CODE	<a href="#">RIQ_HAZARDOUS</a>	<input type="checkbox"/>

If an accessorial, like fuel surcharge, is calculated and returned by Flagship but no accessorial code has been assigned to the appropriate parameter, the cost will still be stored, but it will not be flagged as an accessorial in Oracle Transportation Management. The cost type will be set to OTHER. Other accessorials, like insurance charges, must be requested. In order to request a charge, you must assign an accessorial code using this screen, and you must then assign that accessorial code to the order being planned. The accessorial code can be assigned to the order in multiple ways. In Oracle Transportation Management, accessorial codes can be directly assigned to the order release itself, ship units, line items. Accessorial codes can also be assigned to locations. In addition, special services can also be assigned to order releases. In Oracle Transportation Management special services are associated with one or more accessorial codes. Accessorial codes associated with special services are also used to trigger Flagship accessorial cost calculations.

When reading the charges from Flagship response, the charges are indentified using different keys as follows:

- Charge represented by the key CALCFREIGHT is the Shipment Total Cost.
- Charge represented by the key FREIGHT is the actual base charge with Cost Type Base (B).
- The below defined charges represented by the different keys are captured as accessorial charges with cost type Accessorial (A) when we configure an accessorial code in the parameters for each of the charge. Otherwise they are captured as other charges with cost type Others (O).

## **Fuel Surcharge**

This accessorial is automatically calculated and returned by Flagship. The corresponding parameter is KEWILL FUEL SURCHARGE ACCESSORIAL CODE. If no code is assigned, the cost will be returned with a cost type of OTHER. The key which represents this charge is FUELCHG.

## **Additional Handling**

This accessorial may or may not be automatically calculated and returned by Flagship. The choice is made according to the parameters of the shipment being rated and is entirely up to the carrier. The corresponding parameter is KEWILL ADDITIONAL HANDLING CHARGE ACC CODE. If the carrier does not automatically calculate this charge, but the shipper needs the charges to be calculated, it can be requested by assigning the accessorial code to the order release. The key which represents this charge is CHG\_ADD\_HNDL.

## **Delivery Confirmation**

This accessorial must be requested by the shipment. In order to do this, it must have an assigned accessorial code, and that accessorial code must be assigned to the order being planned or included in the accessorial codes list of an RIQ query. The corresponding parameter is KEWILL DELIVERY CONFIRMATION CHARGE ACC CODE. The key which represents this charge is CHG\_DLVEY\_CONF.

## **Insurance**

This accessorial must be requested by the shipment. In order to do this, it must have an assigned accessorial code, and that accessorial code must be assigned to the order being planned or included in the accessorial codes list of an RIQ query. The corresponding parameter is KEWILL INSURANCE CHARGE ACCESSORIAL CODE. In addition, the individual ship units or ship unit lines specified on the order or the RIQ must also have assigned declared values. The declared values can be zero, of course. The key which represents this charge is DECVALCHG.

## **Out of Area Delivery**

This accessorial must be requested by the shipment. In order to do this, it must have an assigned accessorial code, and that accessorial code must be assigned to the order being planned or included in the accessorial codes list of an RIQ query. The corresponding parameter is KEWILL OUT OF AREA CHARGE ACC CODE. The key which represents this charge is CHG\_DLVEY\_AREA.

## Residential Delivery

Residential delivery charges are often treated differently by different carriers. Some carriers will calculate and return it as an accessorial cost, while others will calculate a different base cost using a residential vs. commercial tariff. In the cases where this charge is calculated as an accessorial, the corresponding parameter is KEWILL RESIDENTIAL DELIVERY CHARGE ACC CODE. In all cases, the Oracle Transportation Management destination location determines whether the delivery address is residential or commercial. This is then passed into Flagship for appropriate treatment. It is not necessary to explicitly request the charge calculation. The key which represents this charge is CHG\_RESIDENTIAL.

## Saturday Pickup

This accessorial is automatically calculated if the pickup date is on a Saturday. The corresponding parameter is KEWILL SATURDAY PICKUP CHARGE ACCESSORIAL CODE. The accessorial request cannot be combined with Saturday delivery. The requested service type must support Saturday pickup. The key which represents this charge is SATPICKCHG.

## Saturday Delivery

This accessorial must be requested by the shipment. In order to do this, it must have an assigned accessorial code, and that accessorial code must be assigned to the order being planned or included in the accessorial codes list of an RIQ query. The corresponding parameter is KEWILL SATURDAY DELVY CHARGE ACCESSORIAL CODE. This cannot be combined with Saturday pickup. The requested service type must support Saturday delivery. The key which represents this charge is SATDLVYCHG.

## Dry Ice Charges

This accessorial must be requested by the shipment. In order to do this, it must have an assigned accessorial code, and that accessorial code must be assigned to the order being planned or included in the accessorial codes list of an RIQ query. The corresponding parameter is KEWILL DRY ICE CHARGE ACCESSORIAL CODE. The key which represents this charge is DRYICE\_CHRG or DRY\_ICE\_CHRG or DRYICECHRG.

When a dry ice charge is requested, additional information about the weight and packaging type of the dry ice is required by the carriers. This information is specified on the order release lines or ship units, depending on the package type specified on the rate offering. The additional information is passed to Kewill using order release line or ship unit remarks as follows:

- **DRYICEWT:** The weight in pounds (for US origin) or kilograms (for non-US origin). Do not include the UOM designation.
- **DRYICE\_PKGTYPE:** This is a text description of the UN Hazmat package type for the dry ice. Ex: fireboard box

The dry ice charge will be calculated either as a discrete accessorial charge, or it will be included in the overall HAZMAT charge accessorial, depending on the carrier.

## Customs Clearance Charges

This accessorial is automatically calculated if the appropriate carrier and service is specified. The corresponding parameter is KEWILL CUSTOMS CLEARANCE CHARGE ACCESSORIAL CODE. If no code is assigned, the cost will be returned with a cost type of OTHER. The key which represents this charge is CUSTOMS\_CLEARANCE\_CHRG.

## Hazmat

It is not necessary to specify an accessorial code for Hazmat rating to occur. Hazmat rating is triggered by the presence of the Hazmat option on the order release line or the packaged item. If an accessorial code for Kewill Hazmat rating is specified, however, the cost will be flagged as an accessorial cost and assigned the proper code. The corresponding parameter is KEWILL HAZMAT CHARGE ACCESSORIAL CODE. Without the code, the cost will still be calculated and returned, but flagged as a cost of type OTHER. The key which represents this charge is HAZCHG.

Dangerous goods (or Hazmat) rating for certain carriers and geographies can involve quite a few additional pieces of information on each package being shipped. Most of these fields can be entered directly on the order release line or can be specified on a separately identified object called a Hazmat Item. Shipments and order releases can then reference the Hazmat Item by specifying the corresponding Hazmat Item ID. All Kewill Flagship API keys used by UPS, FedEx, and DHL-EU have corresponding Oracle Transportation Management fields in the order release, order release line, hazmat item, or hazmat generic tables. If an order release line specifies both a Hazmat Item and individual hazmat values, the value on the order release line will override the value stored in the Hazmat Item or Hazmat Generic record.

In order to get a Hazmat charge, it is required to have the Hazmat flag set on either the order release line or on the packaged item. Additional Hazmat data is required for certain parcel carriers. The list of additional required fields is identified in the tables below. In order to identify a specific parcel carrier it is necessary to add a Service Provider Alias (such as 'KEWILL GLOBAL CARRIER CODE') to the service provider. See Service Providers/Carriers in the Setup Base Oracle Transportation Management section for a more detailed explanation.

### Note:

- 1) Hazmat rating is currently only supported for UPS, FedEx, and DHL-EU. Additional carriers will be added and verified in upcoming updates.
- 2) There is a limit on the number of Hazmat Line Items that can be shipped in one package. This limit varies by carrier. Oracle Transportation Management will try to rollup/aggregate quantities and weight details of similar hazmat line items (items having same UN Number, Package Group and Proper Shipping Name) and create unique hazmat line items based on UN Number, Package Group and Proper Shipping Name before calling the Kewill Rating Engine.
- 3) The package-level information below is required for Kewill to rate Hazmat items. These details are always read from the first line item of a package (SU or SUL). For more details about each field please refer to the below table.
  - HAZMAT\_PACKAGETYPE

- HAZMAT\_OVERPACK
- HAZMAT\_OUTER\_PACKING\_COUNT
- HAZMAT\_ALL\_PACKED
- HAZMAT\_OUTER\_PACKAGING\_TYPE
- HAZMAT\_OUTER\_PACKING\_COUNT

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
FDX	Order Release: Emergency Phone Number  Shipment: Emergency Phone Number	EMERGENCYPHONENUMBER	Emergency phone number when shipping hazardous materials. The 24-hour contact for the shipment.	order_release.em_phone_number, shipment.em_phone_number	Y
FDX	Order Release Line: All Packed in One  Hazmat Item: All Packed in One	HAZMAT_ALL_PACKED	Flag to indicate the pkg is 'All packed in one'	order_release_line, hazmat_item	N

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
FDX	Order Release Line: Authorization for Dangerous Goods  Hazmat Item: Authorization for Dangerous Goods	HAZMAT_AUTHORIZATION	The authorization for the dangerous goods shipment. The authorization field is only required to state special governmental authorizations that are required because of the provisions or packing materials shipped with.	order_release_line.haz_authorization, hazmat_item.authorization	N
FDX, UPS	Order Release Line: Passenger Aircraft Forbidden  Hazmat Item: Passenger Aircraft Forbidden	HAZMAT_CARGO_PLANE	Required if a cargo aircraft packing instruction from the IATA DG Regulations is used. Y – Shipment prepared for shipment via cargo aircraft only. N – Shipment prepared for shipment via passenger or cargo aircraft. See Table 4.2 column K of the IATA DG Regulations	order_release_line.haz_is_passenger_aircraft_forb, hazmat_item.is_passenger_aircraft_forbid	N
FDX	Order Release Line: Chemical Description  Hazmat Item: Chemical Description	HAZMAT_CHEMICAL_FORMULA	The basic chemical description of the substance	order_release_line.haz_chemical_formula, hazmat_item.chemical_formula	N

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
FDX, UPS	Order Release Line: Hazardous Classification ID  Hazmat Generic: Hazardous Classification ID	HAZMAT_CLASS_DIVISION_NUMBER	Hazmat class / division number	order_release_line.hazardous_classification_gid, hazmat_generic.hazardous_classification_gid	N
UPS	Order Release Line: Identification Number  Hazmat Generic: Identification Number	HAZMAT_CODE	The unique hazmat code to identify hazardous material. Valid values are a numeric identifier; for example: 0012456. This information is retrieved and used by the Label Module. This value can be configured through Web Admin tool. Note that Hazmat quantity, ClassDivisionNumber, Units, IDGProperShippingN are required fields to ship Hazmat item. (Note: This references the UN DG ID. It is not a required field for UPS rating, but may be used by some other feature in the future.)	order_release_line.haz_identification_number, hazmat_generic.identification_number	N

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
DHEU	Order Release Line: Identification Number  Hazmat Generic: Identification Number	HAZMAT_CODEIDENTITY_NUMBER	The unique hazmat code to identify hazardous material. Valid values are a numeric identifier; for example: 0012456. This information is retrieved and used by the Label Module. This value can be configured through Web Admin tool. Note that Hazmat quantity, ClassDivisionNumber, Units, IDGProperShippingN are required fields to ship Hazmat item. (Note: This is the UN DG ID for this item. It is apparently the same value as the API key: HAZMAT_UNDG_NUMBER. Both keys are required for DHEU hazmat rating)	order_release_line.haz_identification_number, hazmat_generic.identification_number	N
FDX	Order Release Line: Concentration Percent  Hazmat Item: Concentration Percent	HAZMAT_CONCENTRATION_PERCENT	Required if the Dangerous Goods UN Number is 2031, 1796, 1826, or 1873. Enter the percentage of DG concentration if the above condition applies.	order_release_line.haz_concentration_percent, hazmat_item.concentration_percent	Y
FDX	Order Release Line: Critical Safety Index  Hazmat Item: Critical Safety Index	HAZMAT_CRITICALITY_SAFETY_INDEX	A measurement for packages containing fissile material that is determined by dividing the number 50 by the smaller of the numbers determined using the rules in section 10.6.2.4.3 of the DG Regulation Guide	order_release_line.haz_crit_safety_index, hazmat_item.criticality_safety_index	N

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
FDX	Order Release Line: Approval Exemption (Hazmat Approval Exemption: Description)  Hazmat Item: DOT Exemption (Hazmat Approval Exemption: Description)	HAZMAT_EXEMPTIONNUMBE R	Exemption number and text (ground shipments only)	hazmat_approval_exemption.description	N
UPS	Order Release Line: Hazmat IDG Info  Hazmat Item: Hazmat IDG Info	HAZMAT_IDG_ADDITIONAL_ DESCINFO	Hazmat IDG additional description information	order_release_line.haz_idg_add_desc_info, hazmat_item.idg_additional_desc_info	Y

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
FDX, UPS	Order Release Line: Proper Shipping Name  Hazmat Generic: Proper Shipping Name	HAZMAT_IDG_PROPER_SHIPPING_NAME	Proper shipping name (Should conform to IATA proper shipping names)	order_release_line.haz_proper_shipping_name, hazmat_generic.proper_shipping_name	Y
FDX, UPS	Order Release Line: Identification Number  Hazmat Generic: Identification Number	HAZMAT_IDGIDENTIFICATION_NUMBER	Hazmat IDG UN identification number	order_release_line.haz_identification_number, hazmat_generic.identification_number	N
FDX	Order Release Line: Limited Quantity  Hazmat Item: Limited Quantity	HAZMAT_LIMITED_QUANTITY	Limited quantity flag	order_release_line.haz_is_limited_quantity, hazmat_item.is_limited_quantity	N

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
FDX	Order Release Line: Maximum Volume  Hazmat Item: Maximum Volume	HAZMAT_MAX_QUANTITY	Maximum passenger volume or the maximum cargo volume for the item (Used in Q- Value calculation)	order_release_line.haz_max_quantity, hazmat_item.max_quantity	N
FDX	Order Release Line: Outer Packaging Type  Hazmat Item: Outer Packaging Type	HAZMAT_OUTER_PACKAGING_TYPE	Outer packaging type if packing type = All packed in one	order_release_line.haz_outer_packaging_type, hazmat_item.outer_packaging_type	N
FDX	Order Release Line: Outer Packing Count  Hazmat Item: Outer Packing Count	HAZMAT_OUTER_PACKAGING_COUNT	Outer packing count	order_release_line.haz_outer_packing_count, hazmat_item.outer_packing_count	N

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
FDX	Order Release Line: Overpack  Hazmat Item: Overpack	HAZMAT_OVERPACK	Flag to indicate the package is an 'overpack'	order_release_line.haz_is_overpack, hazmat_item.is_overpack	N
DHLEU, FDX, UPS	Order Release Line: Hazmat Package Type  Hazmat Item: Hazmat Package Type	HAZMAT_PACKAGETYPE	Hazmat package type of the Dangerous Goods shipment.	order_release_line.haz_package_type, hazmat_item.package_type arks	Y (FDX)
FDX, UPS	Order Release Line: Packing Count  Hazmat Item: Packing Count	HAZMAT_PACKING_COUNT	Packing count (number of packaged units)	order_release_line.haz_packing_count, hazmat_item.packing_count	N
FDX, UPS	Order Release Line: Packing Instructions  Hazmat Item: Packing Instructions	HAZMAT_PACKINGINSTRUCTIONS	Required for dangerous goods shipments, unless the DG class is radioactive or Not Restricted. See Table 4.2 columns G, I, or K of the IATA DG Regulations.	order_release_line.haz_packaging_instr, hazmat_item.packaging_instr	Y

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
FDX	Order Release Line: Hazmat Physical Form  Hazmat Item: Physical Form	HAZMAT_PHYSICAL_FORM	A description of the physical form of the radioactive substance : Special Solid Liquid Gas	order_release_line.haz_physical_form, hazmat_item.physical_form	N
FDX	Order Release Line: Q Value Ratio  Hazmat Item: Q Value Ratio	HAZMAT_Q_VALUE	Ratio used to indicate that the combined quantities in 'all packed in one' package are within the maximum allowable limits.	order_release_line.haz_q_value, hazmat_item.q_value	N
FDX, UPS	Order Release Line: Hazmat Item Quantity  Hazmat Item: Hazmat Item Quantity	HAZMAT_QUANTITY	Hazmat item quantity	order_release_line.haz_quantity, hazmat_item.quantity	Y
FDX	Order Release Line: Type of Shipment Label  Hazmat Item: Type of Shipment Label	HAZMAT_RADIOACTIVE_LABEL	The type of label on the shipment. W1 (White I) Y2 (Yellow II) Y3 (Yellow III)	order_release_line.haz_radioactive_label, hazmat_item.radioactive_label	N

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
FDX	Order Release Line: Packaging Type  Hazmat Item: Packaging Type	HAZMAT_RADIOACTIVE_PAC KAGING	A description of the type of packaging the substance is contained in. Acceptable package types are listed in section 10.5 of the DG Regulations Guide: Expected ( Expected ) Industrial ip1 ( Industrial Type 1(IP-1) ) Industrial ip2 ( Industrial Type 2(IP-2) ) Industrial ip3 ( Industrial Type 3(IP-3) ) Type a ( Type A ) Type b(m) ( Type B(M) ) Type b(u) ( Type B(U) ) Type c ( Type C )	order_relea_e_line.haz_r ad_packaging, hazmat_item.radioactiv e_packaging	N
FDX	Order Release Line: Shipment Radioactivity  Hazmat Item: Shipment Radioactivity	HAZMAT_RADIOACTIVITY	A measurement of the activity of the shipment. For fissile material, the weight of the material in grams or kilograms may be substituted for the activity measurement	order_release_line.haz_ radioactivity, hazmat_item.radioactivi ty	N
FDX	Order Release Line: Radioactivity Units  Hazmat Item: Radioactivity Units	HAZMAT_RADIOACTIVITY_U NITS	The units that the activity were measured in. This must be in becquerel units (or multiples thereof) : Bq (becquerel) kBq (kilobecquerel) MBq (megabecquerel) GBq (gigabecquerel) TBq (terabecquerel) PBq (petabecquerel)	order_release_line.haz_ radioactivity_units, hazmat_item.radioactivi ty_units	N

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
FDX	Order Release Line: Radionuclide  Hazmat Item: Radionuclide	HAZMAT_RADIONUCLIDE	The radionuclide assigned to the substance being shipped. A table of basic radionuclides is available in the DG Regulation Guide section 10.4.A. For example, aluminum (13) has a radionuclide Al-26	order_release_line.haz_radionuclide, hazmat_item.radionuclide	N
FDX, UPS	Order Release Line: Reportable Quantity  Hazmat Item: Reportable Quantity	HAZMAT_REPORTABLE_QUANTITY	Enter Y if the DG is a reportable quantity. For U.S. entry/exit only. Default: N	order_release_line.haz_is_reportable_quantity	Y
FDX	Order Release Line: Special Provisions  Hazmat Generic: Special Provisions	HAZMAT_SPECIAL_PROVISIONS	Indicates Dangerous Goods (DG) are being shipped under one of the special provisions listed in the IATA Dangerous Goods Regulation Guide, section 4.4. There appear to be 146 different provisions, and multiple provisions may apply to a single item in some cases.	order_release_line.haz_special_provisions, hazmat_generic.special_provisions	N
FDX, UPS	Order Release Line: Subsidiary Hazard  Hazmat Generic: Subsidiary Hazard	HAZMAT_SUBRISKCLASS	Hazmat subrisk class	order_release_line.haz_subsidiary_hazard, hazmat_generic.subsidiary_hazard	N

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
DHEU	Order Release Line: Substance Number  Hazmat Item: Substance Number	HAZMAT_SUBSTANCE_NUMBER	Hazardous materials substance number.	order_release_line.substance_number, hazmat_item.substance_number	N
FDX	Order Release Line: Surface Reading  Hazmat Item: Surface Reading	HAZMAT_SURFACE_READING	The surface reading of the radiation exposure for the package. This reading must be measured in mrem/h	order_release_line.haz_surface_reading, hazmat_item.surface_reading	N
FDX, UPS	Order Release Line: NOS Technical Name 1  Hazmat Item: NOS Technical Name 1	HAZMAT_TECHNICAL_NAME	Technical name: The technical name is used to expand upon certain hazmat items that do not have a descriptive enough proper shipping name, and end with "n.o.s." On the IATA DGN document, the technical name must follow the proper shipping name in parenthesis like this: "proper shipping name n.o.s. (technical name)". See section 4.1.2 of the IATA Dangerous Goods Regulation Guide if more clarification is required.	order_release_line.haz_nos_technical_name, hazmat_item.nos_technical_name_gid_1	Y

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
FDX	Order Release Line: Hazmat Transport Index  Hazmat Item: Transport Index	HAZMAT_TRANSPORT_INDEX	A number based on the radiation exposure of a package. This is determined based on the maximum measurement of the radiation in mrem/h at a distance of 1 meter from the package surface	order_release_line.haz_transport_index, hazmat_item.transport_index	N
DHEU	Order Release Line: Identification Number  Hazmat Generic: UN/NA ID Number	HAZMAT_UNDG_NUMBER	Hazardous Materials UN Dangerous Goods number.	order_release_line.haz_identification_number, hazmat_generic.identification_number	Y
FDX, UPS	Order Release Line: IATA Units  Hazmat Item: IATA Units	HAZMAT_UNITS	IATA units for non UPS shipments (L=>Liters g=>Grams kg=>Kilograms kg G=>Kilograms Gross).	order_release_line.haz_units, hazmat_item.units	Y

<b>Carrier</b>	<b>Screen and Name</b>	<b>API Key</b>	<b>Description</b>	<b>Oracle Transportation Management Field</b>	<b>Required to Rate</b>
FDX	Order Release Line: Packaging Group  Hazmat Generic: Packaging Group	PACKINGGROUPNUMBER_TY PE	Type of packaging for Dangerous Goods. Packing Group (I, II, III)	order_release_line.haz_packaginggroup, hazmat_generic.packaginggroup	Y

## Other Charges

This accessorial is calculated when there are charges which are not specified by any of the above categories of charges returned from Flagship. The corresponding parameter is KEWILL UNCATEGORIZED CHARGE ACCESSORIAL CODE. If no code is assigned, the sum of these costs will be returned with a cost type of OTHER.

Charges represented by the Keys CODFEE, EXTAREA\_CHG are captured as other charges with cost type Others (O).

Kewill Flagship has still has some remaining charges represented by different keys which are part of the total shipment cost (CALCFREIGHT). These charges are calculated using the following formula:

Remaining Other Charges = Total Shipment Cost (CALCFREIGHT) - (Base charge (FREIGHT) + Categorized Accessorial Charges + Other Charges).

## 6. Discounts

For some carriers, Flagship returns a discount charge using the key TOTDISCOUNT. In this case all of the charges returned by Flagship have already been discounted and only a total discount is returned for reference.

To see this total discount as part of the shipment costs you must set the following property to true.

```
glog.RatingEngine.Kewill.Costs.IncludeDiscount.
```

When this property is set to true, the total discount represented by the key TOTDISCOUNT will be captured as a discount charge with cost type Discount (D).

All the remaining charges, if present, will be adjusted to compensate for the displayed discount.

Remaining Other Charges = Total Shipment Cost (CALCFREIGHT) - (Base charge (FREIGHT) + Categorized Accessorial Charges + Other Charges + Discount (negative)).

When the property is set to false the charge represented by the key TOTDISCOUNT is ignored.



## 7. Rating Engine Fatal Exception

As of Oracle Transportation Management version 6.1.5, certain situations will trigger the rating subsystem to throw a fatal exception. A fatal rating exception is a situation considered severe enough to completely halt rating and the invoking planning process in progress. This is now set by the addition of a new planning parameter group called Exception Handling. Within this parameter group, the parameter FAIL ON FATAL RATING EXCEPTION has been added. To trigger the Fatal Exception, the value for this parameter must be set to true. Currently, only the following situations will cause this exception to be thrown:

- The Kewill Flagship engine fails to accept a socket connection during rating.
- The Federal Express fails to communicate with Kewill Flagship during a query for FDX rates.

In normal Oracle Transportation Management operations, a fatal exception will have no impact. If thrown, the rate will be marked as infeasible, and the rating engine will continue on to evaluate the next rate. When the FAIL ON FATAL RATING EXCEPTION planning parameter is **true**, a fatal exception will instruct the invoking planning process to immediately abort all operations. Bulk Plan, for example, will halt and no shipments will be created.



## 8. Appendix: Supported Carrier Service Codes

### DHL U.S Origin: Carrier Code “DHL”

<b>Domestic</b>	<b>Service Flagship Service Code</b>
Next Day 10:30 AM Letter	NDEL
Next Day 10:30 AM	DNDE
Next Day 12:00 Letter	N12L
Next Day 12:00	DN12
Next Day 3:00 PM Letter	DN3L
Next Day 3:00 PM	DND3
2nd Day Letter	DSDL
2nd Day	DSD
Ground	GND
@Home Standard Delivery Confirmation Required (DCR)	DHST
@Home Deferred DCR	DHDF
Media Mail @Home STD DCR	DMHS
Media Mail @Home Def. DCR	DMHD
Bound Printed Matter @Home Standard DCR	DBHS
Bound Printed Matter @Home Deferred DCR	DBHD
@Home Standard	HST
@Home Deferred	HDF
Media Mail @Home Standard	MHS
Media Mail @Home Deferred	MHD
Bound Printed Matter @Home Standard	BHS
Bound Printed Matter @Home Deferred	BHD

<b>International</b>	<b>Service Flagship Service Code</b>
Global Mail Standard	GMS

<b>International</b>	<b>Service Flagship Service Code</b>
Global Mail Priority	GMP
International Document Letter	IDL
International Document	IDOC
Worldwide Priority Express	WPX

### **FedEx U.S. Origin: Carrier Code “FDX”**

<b>Domestic</b>	<b>Service Flagship Service Code</b>
Ground	GND
Home Delivery	RES
Express Saver	SVR
Priority Overnight	PRI
2Day	2ND
Standard Overnight	STD
First Overnight	FST
1Day Freight	1FR
2Day Freight	2FR
3Day Freight	3FR
SmartPost Plus	SPP

<b>International</b>	<b>Service Flagship Service Code</b>
International Priority	IPRI
International Economy	IECO
International First	IFIR
International Priority Freight	IPFR
International Economy Freight	IEFR
International Ground	IGND
International Priority Distribution	IPD

## Generic Rated or Non-Rated – LTL: Carrier Code “GEN”

<b>Generic</b>	<b>Service Flagship Service Code</b>
Generic	GEN

## UPS U.S. Origin: Carrier Code “UPS”

<b>Domestic</b>	<b>Service Flagship Service Code</b>
Next Day Air	NDA
Next Day Air Early A.M.	NDAE
Next Day Air Saver	NDAS
2nd Day Air AM	SDAE
2nd Day Air	SDA
3 Day Select	TDS
Ground	GND
UPS Basic	BAS

<b>International</b>	<b>Service Flagship Service Code</b>
Worldwide Express	IEXP
Worldwide Express Plus	IEPL
Worldwide Expedited	IEXD
Worldwide Saver	EXPS

<b>U.S. to Canada</b>	<b>Service Flagship Service Code</b>
Canada Express	CEXP
Worldwide Express Plus Canada	CEPL
Worldwide Expedited Canada	CEXD
Standard Canada	CSTD
Worldwide Saver To Canada	CXPS

## U.S. Postal Service U.S. Origin: Carrier Code “USPS”

As of May 14, 2007, the US Postal Service changed their rating methodology. The size of all U.S. Postal Service mail pieces will play a larger role in determining the amount of postage. New services codes have been added in Flagship to support this change. You no longer need to supply the packaging type.

<b>Domestic</b>	<b>Service Flagship Service Code</b>
First Class Parcel	FCLS
First Class Flat	FCF
First Class Letter	FCL
Priority Mail Parcel	PRTY
Priority Mail Flat-Rate Box	PMFB
Priority Mail Flat-Rate Envelope	PMFE
Express Mail Parcel	EXPR
Express Mail Flat-Rate Envelope	EMFE
Standard Mail Machinable Parcels	SMP
Standard Mail Irregular Parcels	SMPI
Parcel Post	PPST
Media Mail	MEDM
BPM Destination BMC Flats	BDBF
BPM Destination BMC Irregular Parcels	BDBI
BPM Destination BMC Machinable Parcels	BDBP
BPM Destination SCF Flats	BDSF
BPM Destination SCF Irregular Parcels	BDSI
BPM Destination SCF Machinable Parcels	BDSP
BPM Presorted Flats	BPF
BPM Presorted Irregular Parcels	BPI
BPM Presorted Parcels	BPP
BPM Nonpresort Flats	BSF
BPM Nonpresort Irregular Parcels	BSI

<b>Domestic</b>	<b>Service Flagship Service Code</b>
BPM Nonpresort Parcels	BSP

<b>International</b>	<b>Service Flagship Service Code</b>
First Class Mail International	FCI
First Class Mail International Cards	FCIC
Express Mail International	EMS
Express Mail Intl Flat-Rate Envelope	EMIE
Priority Mail International	PMI
Priority Mail Intl Flat-Rate Envelope	PMIE
Priority Mail Intl Flat-Rate Box	PMIB

### **UPS Supply Chain Solutions (SCS) US Origin: Carrier Code “EMRY”**

<b>Domestic</b>	<b>Service Flagship Service Code</b>
UPS Next Day Air Freight - DOM	AM
UPS Next Day Air Freight NGS - DOM	AMNG
UPS 2 <sup>nd</sup> Day Air Freight - DOM	2M
UPS 2 <sup>nd</sup> Day Air Freight NGS- DOM	2MNG
UPS 3 Day Freight - DOM	DEFR
UPS 3 Day Freight NGS- DOM	DFNG
Saturday Delivery - DOM	SAT

**Note:** Use domestic services for U.S. shipments to Canada and Puerto Rico as well.

<b>International</b>	<b>Service Flagship Service Code</b>
Express Freight	CX
Air Freight Consolidated	EC
Air Freight Direct	CA

## Purolator (legacy) CA Origin: Carrier Code “PURO”

<b>Canada Domestic</b>	<b>Service Flagship Service Code</b>
Air	AIR
Ground	GRD

<b>Canada to U.S.</b>	<b>Service Flagship Service Code</b>
U.S. Air (Overnight)	UNDA
U.S. Ground (Deferred)	UGND

<b>Canada International</b>	<b>Service Flagship Service Code</b>
International Air	INTL

## FedEx SmartPost US Origin: Carrier Code “SPO”

<b>Service</b>	<b>Service Flagship Service Code</b>
Priority	SPRI
Standard A	SSTA
Standard B – BPM	SSBB
Standard B – Media	SSBM
Standard B – Parcel Post	SSBP

## Czar - Using SMC3 RateWare Server: Carrier Code “CZAR”

<b>Service</b>	<b>Service Flagship Service Code</b>
Generic Czar Service	GEN

## DHL Canada CA Origin: Carrier Code “DHCA”

<b>Domestic</b>	<b>Service Flagship Service Code</b>
-----------------	--------------------------------------

<b>Domestic</b>	<b>Service Flagship Service Code</b>
Express	DEXP
Ground	DGRD

<b>International</b>	<b>Service Flagship Service Code</b>
DHL Worldwide Priority	WPX
International Document	DOX
International Air Letter	IAL
U.S. Overnight Air Letter	UOA
DHL International (southbound) U.S. Ground	IGRD

### **BAX Global US Origin: Carrier Code “BAX”**

<b>Domestic</b>	<b>Service Flagship Service Code</b>
BAX Global Overnight	1DAY
BAX Global Second Day	2DAY
BAX Global Saver	BSAV
BAX Global Deferred	BDEF

**Note:** Use domestic services for U.S. shipments to Canada.

<b>International</b>	<b>Service Flagship Service Code</b>
Door to Door - Standard Air Freight	DDAF
Door to Airport - Standard Air Freight	DAAF
Airport to Door - Standard Air Freight	ADAF
Airport to Airport - Standard Air Freight	AAAF
International BAX Saver (U.S. to Mexico only)	ISAV
Guaranteed Door to Airport - Standard	GDTA
Air Freight (U.S. to Mexico only)	

## UPS Canada CA Origin: Carrier Code “UPCA”

<b>Domestic</b>	<b>Service Flagship Service Code</b>
UPS Express Early A.M.	CEAM
UPS Express	CEXP
UPS Express Saver	CEXS
UPS Expedited	CEXD
UPS Standard	CST

<b>Canada to U.S.</b>	<b>Service Flagship Service Code</b>
UPS Express Early A.M.	UEAM
UPS Express	UEXP
UPS Expedited	UEXD
UPS 3 Day Select	UTDS
UPS Standard to the U.S.	USTD

<b>Canada to Mexico</b>	<b>Service Flagship Service Code</b>
UPS Express	MEXP
UPS Expedited	MEXD

<b>International</b>	<b>Service Flagship Service Code</b>
UPS Worldwide Express Plus	WEPP
UPS Worldwide Express	WEXP
UPS Worldwide Expedited	WEXD

## TNT UK: Carrier Code “TNTUK”

<b>International</b>	<b>Service Flagship Service Code</b>
TNT 9:00 Express	09

<b>International</b>	<b>Service Flagship Service Code</b>
TNT 10:00 Express	10
TNT 12:00 Express	12
TNT Express	15
TNT Economy Express	412
TNT 12:00 Economy Express	48N

**Note: Domestic services are not supported.**



## 9. Appendix: Certified Carrier List and Support Detail

The following is a list of carriers that have been certified with Oracle Transportation Management. Certification means that a representative number of carrier service levels have been installed and verified within Oracle Transportation Management's QA environment.

This list also details whether these carriers offer hazmat rating support and package-level cost detail support. Package-level cost detail means that shipment costs can be captured within Oracle Transportation Management at the individual package level. Carriers who do not support package-level cost details can still rate multiple packages within a shipment, however the cost lines for all packages will be rolled up to the shipment level.

<b>Carrier/Geography</b>	<b>Hazmat Supported in Oracle Transportation Management</b>	<b>Package-Level Cost Detail Support</b>
<b>Geography: USA origin</b>		
USPS	Not Offered	Yes
UPS	Yes	Yes
DHL		No
FDX	Yes	No
PURO		No
BAX		Yes
UPS SCS	Not Offered	No
<b>Geography: UK origin</b>		
TNT	Not Offered	No
<b>Geography: EU origin</b>		
DHLEU	Yes	No
UPSEU		Yes
<b>Geography: CANADA origin</b>		
UPS Canada		Yes
DHL Canada		No

