Oracle® Release Management

Implementation Manual

Release 11*i*

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Oracle Release Management Implementation Manual, Release 11*i*

Part No. A90139-06

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Preface

Intended Audience

Welcome to Release 11*i* of the *Oracle Release Management Implementation Manual*.

See Related Documents on page x for more Oracle Applications product information.

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Structure

1 Oracle Release Management Setup

2 Setting Up Oracle e-Commerce Gateway

3 Oracle e-Commerce Gateway for Inbound EDI Demand

Related Documents

Oracle Bills of Material User's Guide

Oracle e-Commerce Gateway User's Guide

Oracle XML Gateway User's Guide

Oracle Inventory User's Guide

Oracle Advanced Planning and Scheduling User's Guide

Oracle Order Management User's Guide

Oracle Receivables User's Guide

Oracle Work in Process User's Guide

Oracle Workflow Guide

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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.

1

Oracle Release Management Setup

This chapter covers the following topics:

- Overview of Oracle Release Management Setup Steps
- Setting Up Oracle Release Management

Overview of Oracle Release Management Setup Steps

The following list represents the setup steps, required and optional, for Oracle Release Management. Each step is described in detail in the following sections:

- Step 1: Install Release 11i Oracle Applications, page 1-2
- Step 2: Define Oracle Release Management Profile Options, page 1-2
- Step 3: Define Customers, Addresses and Locations, page 1-2
- Step 4: Define Warehouse Shipping Calendars, page 1-2
- Step 5: Define Customer Receiving Calendars, page 1-2
- Step 6: Define Shipment Delivery Pattern Codes, page 1-3
- Step 7: Define Pricing, page 1-3
- Step 8: Define Inventory Items, page 1-3
- Step 9: Define Customer Items and Cross-References, page 1-3
- Step 10: Define Release Management Processing Rules, page 1-3
- Step 11: Create and Assign CUM Keys, page 1-4
- Step 12: Verify CUM of Ship-From Customer Items, page 1-4
- Step 13: Enter CUM Adjustment Transactions as Needed, page 1-4
- Step 14: Define e-Commerce Gateway Code Conversion Values, page 1-4
- Step 15: Enable e-Commerce Gateway SPSI, SSSI, PSQI transactions, page 1-6
- Step 16: Optionally Define Additional e-Commerce Gateway Column Rules, page 1-6
- Step 17: Optionally Utilize RLM Trading Partner or Descriptive Flexfields, page 1-6
- Step 18: Define Sourcing Rules for Advanced Planning and Scheduling, page 1-7
- Step 19: Optionally Define Additional CUM Adjustment Reasons, page 1-7
- Step 20: Optionally Define and/or Assign Message Categories, page 1-7

- Step 21: Define Forecast Set, page 1-8
- Step 22: Define Oracle XML Gateway Transaction Types, page 1-9
- Step 23: Define Oracle XML Gateway Trading Partners, page 1-9
- Step 24: Define Oracle XML Gateway Standards, page 1-9
- Step 25: Define Oracle XML Gateway Code Conversion Values, page 1-9
- Step 26: Enable XML Gateway Planning and Shipping Transactions, page 1-9

Setting Up Oracle Release Management

Step 1: Install Release 11*i* Oracle Applications

Oracle Applications Release 11*i* should be installed according to your specific business needs, including Oracle Release Management and Oracle e-Commerce Gateway for SPSI, SSSI, PSQI, DSNO, and INO transactions. Other Oracle applications have specific setup procedures that must be completed before proceeding.

Step 2: Define Oracle Release Management Profile Options

During Implementation, you set a value for each user profile option to specify how Oracle Release Management controls access to and processes data.

Related Topics

Oracle Release Management Profile Options, page 4-1.

Step 3: Define Customers, Addresses and Locations

Refer to the Receivables and Order Management setup steps in their respective implementation manuals.

Step 4: Define Warehouse Shipping Calendars

Within Oracle Shipping Execution, define your Warehouse Shipping Calendar. Then associate this calendar with a particular warehouse. These calendars are used by Oracle Release Management to determine an appropriate ship date.

See *Oracle Order Management Implementation Manual*

Step 5: Define Customer Receiving Calendars

Within Oracle Shipping Execution, define each Customer Receiving Calendar. Then associate this calendar with a particular customer or customer site. These calendars are used by Oracle Release Management to determine an appropriate ship date. You may also define a generic Customer Receiving Calendar and assign it to multiple customers.

See *Oracle Order Management Implementation Manual*

Step 6: Define Shipment Delivery Pattern Codes

Using the Maintain Ship/Delivery Pattern Codes form, verify that seeded Ship/Delivery Pattern Codes are present, and optionally define your own Trading Partner specific patterns that may vary from the seeded values. Seeded codes cannot be modified.

Verify system defined codes, that include all ASC X12 (element 678) and EDIFACT (code 2015) Shipment Delivery Pattern Codes that represent either a pattern of specific day(s) of a week or no pattern.

Step 7: Define Pricing

There are four ways that you can set up pricing:

1. Do not enter pricing information on the Release Management Processing Rules, then let Oracle Order Management use its default logic to determine the price.

2. Create a price list in Oracle Order Management, then enter this price list on the Release Management Processing Rules at the desired level.

3. Create a pricing agreement in Oracle Order Management, then enter this pricing agreement on the Release Management Processing Rules at the desired level.

4. Create a blanket sales order in Oracle Order Management, then enter this blanket sales order on the Release.

Step 8: Define Inventory Items

Within Oracle Inventory, define the inventory items that will be processed by Oracle Release Management.

Step 9: Define Customer Items and Cross-References

Within Oracle Inventory, define the customer items that will be processed by Oracle Release Management, their corresponding inventory items, and preference ranking.

Step 10: Define Release Management Processing Rules

Using the Oracle Release Management Processing Rules form, define the Oracle Release Management attributes associated with each Ship-From/Ship-To business entity for which Oracle Release Management will process demand. If terms are not defined at the optional lower levels, they will default from higher levels.

There are four levels where Processing Rules can be defined:

- Ship-From / Customer (mandatory)

- Ship-From / Customer Item (optional)

- Ship-From / Ship-To (optional)

- Ship-From / Ship-To / Customer Item (optional)

There are five categories of Processing Rules attributes:

- Demand Management

- Demand Fences

- Order Management

- CUM Management

- General

Step 11: Create and Assign CUM Keys

Using the CUM Upgrade program, assign the correct CUM Key to each shipment line for each Ship-From Customer Item if:

- The Ship-From/Ship-To business entity is under CUM Management

- The Ship-From Customer Item CUM Management flag is ON

- Shipment date falls on or after the start date of the current CUM Period

Step 12: Verify CUM of Ship-From Customer Items

For each Ship-From Customer Item under CUM Management, verify the CUM shipped quantity against internal shipment records and external systems (e.g. CARaS if this is an Automotive Upgrade, or a legacy system if this is a new installation). Manually verify the following:

- The CUM shipped quantity was calculated accurately based on the CUM Management Rule defined for the Ship-From/Ship-To business entity;

- The CUM shipped quantity matches the external system CUM shipped quantity after CUM Keys are assigned

- The CUM key is active (by default for a new CUM key)

Step 13: Enter CUM Adjustment Transactions as Needed

If a CUM Adjustment is needed to synchronize the CUM shipped quantity of a Ship-From Customer Item under CUM Management with that of the external system, use the Customer CUM Workbench form to enter a CUM Adjustment for Starting CUM Value.

This step is needed if:

- The CUM shipped quantity does not match the external system CUM shipped quantity after CUM Keys are assigned (e.g. some shipments pertaining to the CUM Period were not made under Release 11 Oracle Shipping);

- The Customer Item ID was not associated with the Release 11 Oracle Shipping detail, which would prevent a CUM Key from being assigned.

Step 14: Define e-Commerce Gateway Code Conversion Values

Generic Code Conversions

It might be necessary to define additional Code Conversions for UOM (Unit of Measure), a category used in multiple Oracle e-Commerce Gateway transactions.

- Existing UOM code conversions should be evaluated to ensure that you have defined all internal and external values to be used on inbound demand transactions. Additional values might be required, both generic and Trading Partner-specific.

- Any new internal value must also be set up within Oracle Inventory, for example UOM Conversions.

RLM Code Conversions: Additional internal values allowed

RLM_SHP_DEL_CODE specifies the days for routine shipments and deliveries. The seed data for Oracle e-Commerce Gateway Code Conversion includes both ANSI X12 (ele. 678) and EDIFACT (code 2015) Shipment Delivery Pattern Codes.

You may define additional generic or trading partner specific Shipment Delivery Pattern Codes. This Code Conversion enables you to define customer specific internal Shipment Delivery Pattern Codes using the Release Management Maintain Ship/Delivery Pattern Codes form. They are then mapped to external EDI values using customer keys in Oracle e-Commerce Gateway as needed.

RLM Code Conversions: Additional internal values not allowed

It might be necessary to define Trading Partner specific values of Oracle Release Management Data Elements requiring Code Conversion that are used for inbound demand.

For example, one customer might consider a Purpose Code of Change to mean a Replacement of a subset of items on a previous schedule; another customer might consider a Purpose Code of Change to mean a Net Change of all data on a previous schedule. To ensure that the Demand Processor will handle the data from the first situation correctly, a Trading Partner specific Code Conversion for RLM_TRX_PURP must be defined to link the external Purpose Code of Change to the internal Purpose Code of Replacement.

The following RLM Code Conversions are defined for inbound demand, and are used for SPSI, SSSI, and PSQI transactions. New internal values cannot be added, but new generic and Trading Partner specific external values may be cross-referenced to existing internal values:

- RLM_SCHED_TYPE
- RLM_DTL_TYPE
- RLM_DTL_SUBTYPRLM_DATE_TYPE
- RLM_QTY_TYPE
- RLM_TRX_PURP
- RLM_SHP_DEL_CODE

Examine each Trading Partner's EDI Implementation Guide for applicable inbound demand transactions to determine if the seeded values will handle the Trading Partner's EDI demand properly in the Demand Processor.

For example, Modern Truck uses the EDIFACT DELJIT message for two different schedule types; they assign element 1001 of the BGM segment with a value of 241 for Shipping Schedules and 242 for Sequenced Production Schedules. If Modern Truck is one of your trading partners, additional code conversions for RLM_ SCHEDULE_TYPE could be set up as follows:

Additional Schedule Type Code Conversions

Internal	External 1	External 2	EDI Standard
Sequenced	DELJIT	242	EDIFACT
Shipping	DELJIT	241	EDIFACT

However, if another trading partner uses 242 with DELJIT to indicate a Kanban Shipping Schedule, you should set up these code conversions using trading partner keys. If not, define Trading Partner specific external values for applicable internal values using the Define Code Conversions form.

Step 15: Enable e-Commerce Gateway SPSI, SSSI, PSQI transactions

If you are upgrading from Release 11 to Release 11*i*, enable applicable Oracle e-Commerce Gateway inbound demand transactions (SPSI, SSSI, and PSQI) for each trading partner setup in CARaS under Release 11.

Step 16: Optionally Define Additional e-Commerce Gateway Column Rules

If you are utilizing the Oracle Release Management Trading Partner Layer, it might be necessary to define additional e-Commerce Gateway Column Rules and corresponding Actions for specific trading partner requirements regarding inbound demand transactions (SPSI, SSSI, and PSQI). Each trading partner implementation guide should be evaluated for gaps between the standard processing and trading partner requirements. See: *Oracle e-Commerce Gateway User's Guide.*

Step 17: Optionally Utilize RLM Trading Partner or Descriptive Flexfields

Evaluate the data storage and processing provided by Oracle Release Management for gaps in Trading Partner specific requirements for Demand, Order, Shipping, and CUM Management.

If data storage gaps exist, evaluate where the required data should be stored:

- Use Descriptive Flexfields for data on inbound demand schedules that needs to be carried through Order Management and Shipping.

- Use Trading Partner Flexfields for data on inbound demand schedules that will be referenced in Trading Partner specific Workflow customizations.

If processing gaps exist, evaluate where customization of the workflow is needed to accommodate the requirement. See: *Oracle Automotive Trading Partner Toolkit User's Guide* for details about trading partner specific processing.

The following tables must have the same definition in AOL for Descriptive Flexfield Attributes for the RLM Demand Processor:

- Headers

    - RLM_INTERFACE_HEADERS

    - RLM_SCHEDULE_HEADERS

    - OE_ORDER_HEADERS

- Lines

    - RLM_INTERFACE_LINES

    - RLM_SCHEDULE_LINES

    - OE_ORDER_LINES

Step 18: Define Sourcing Rules for Advanced Planning and Scheduling

In Oracle Advanced Planning and Scheduling, use the Define Supply Chain Sourcing Rules form to define any sourcing rules required to split demand into multiple Inventory Organizations. The Demand Processor will use the sourcing rules to split the requirements accordingly.

Step 19: Optionally Define Additional CUM Adjustment Reasons

If you would like to use additional CUM Adjustment Reasons that are not in the list below, define additional reasons using the Define Transaction Reasons form within Oracle Inventory.

The seeded CUM adjustment reasons are:

- Starting CUM: Indicates that this adjustment is the initial cumulative shipped quantity for this CUM entity.

- CUM Adjustment: Indicates that the customer has requested a CUM Adjustment because the ship-from organization's cumulative shipped quantity is out of sync with the customer's cumulative shipped/received quantity.

- Damaged Goods: Indicates that this adjustment corrects the ship-from organization's cumulative shipped quantity to reflect goods damaged while in transit that must be replaced without reducing the customer's additional demand.

- Lost Shipment: Indicates that this adjustment corrects the ship-from organization's cumulative shipped quantity to reflect goods lost while in transit that must be replaced without reducing the customer's additional demand.

Step 20: Optionally Define and/or Assign Message Categories

Oracle Release Management Exception Messages can be assigned to message categories that are used to organize the messages in the Exception Report. There are six predefined Message Categories and new Message Categories that can be defined and assigned to exception messages as needed.

Define Message Categories

Using the Application Developer responsibility, navigate to the Application Object Library Lookups form. Query RLM_MESSAGE_CATEGORY Lookup Type. Enter a new code and message. Define as many Message Categories as needed.

Setup Message Categories

Navigate to the Message Categories form under the Release Management responsibility. On this form you will see all of the Release Management Exception Messages. The following columns of information are displayed:

- Number: The exception number

- Text: The text of the exception message

- Message Category: The category currently assigned to the message

The following Message Categories are currently available:

- Action messages

- Default

- Data related issues

- Matching criteria related issues

- Non-matching criteria related issues

- Quantity changes

Newly defined message categories are also available in the list of values.

Step 21: Define Forecast Set

The Demand Processor will utilize customer, ship-to, bill-to, and warehouse data provided on the inbound schedule to derive the appropriate forecast name for interfacing planning data to Oracle Advanced Planning and Scheduling. The profile option RLM: MRP Forecast Selection List is used to identify the source list consisting of forecast names. The Forecast Source List contains the forecast names and their corresponding inventory organizations.

Define Forecast Set and Forecast Name

For each Inventory Organization that represents a Ship From/Warehouse, create the forecast set and individual forecast name with Customer, Ship-To, and Bill-To attributes. It is not required that all three attributes be specified. It is required, however, that only one Forecast Name representing a unique criteria combination be included in the Forecast Source List. The Demand Processor searches for the Forecast Name in the source list in the following way:

1. For the Ship From specified on the schedule line, look for a Forecast Name that has the same Customer, Ship To and Bill To.

2. If no match is found, find a Forecast Name that has the same Customer and Ship To (Ship To and Forecast Name cannot be null).

3. If no match is found, find a Forecast Name that has the same Customer.

4. If no match is found, issue an error message.

Define Forecast Source List

Specify the Forecast Source List that contains all of the Forecast Names that are candidates to be assigned the inbound forecast demand. It is required that at least one Forecast Name representing a unique combination of criteria be included in the Forecast Source List. For example, if two Forecast Names have the same Customer, Ship To, and Bill To and both Forecast Names were included in the Forecast Source List, this is an error. The Demand Processor does not know which Forecast Name to use.

Although both Forecast Sets and Forecast Names can be included on a source list, only Forecast Names should be included in the Forecast Source List. The Demand Process only looks at Forecast Names and does not expand a Forecast Set to the Forecast Names associated with it.

Assign Forecast Source List to Profile

Under the System Administrator Responsibility, navigate to the Profile Options form. Set the site value for RLM: MRP Forecast Selection List to the Forecast Source List defined above.

Step 22: Define Oracle XML Gateway Transaction Types

Use the following values to define transaction types within Oracle XML Gateway:

- Party Type: Customer
- Transaction Type: RLM
- Transaction Subtype: SPSI and SSSI
- Transaction Description: Planning Schedule Inbound Transaction
- Standard Code: OAG
- Direction: IN
- External Transaction Type: SYNC

Step 23: Define Oracle XML Gateway Trading Partners

Use the following values to define trading partners within Oracle XML Gateway:

- Trading Partner Type: Customer
- Trading Partner Name: (name of your customer)
- Trading Partner Site: (physical location of your customer)
- Company Admin Email: (your customer's email)
- Transaction Type: RLM
- Transaction Subtype: SPSI and SSSI
- Standard Code: OAG
- External Transaction Type: PLANSCHD and SHIPSCHD
- External Transaction Subtype: SYNC
- Direction: IN
- Map: RLM_SPSI_OAG70_IN and RLM_SSSI_OAG70_IN

Step 24: Define Oracle XML Gateway Standards

Use the following values to define standards within Oracle XML Gateway:

- Standard Code: OAG
- Standard Type: OAG

Step 25: Define Oracle XML Gateway Code Conversion Values

Oracle XML Gateway code conversion provides a method to cross-reference the codes defined in Oracle Applications to codes used by trading partners. See: *Oracle XML Gateway User's Guide.*

Step 26: Enable XML Gateway Planning and Shipping Transactions

Enable the applicable XML Gateway inbound planning and shipping transactions for each trading partner.

2

Setting Up Oracle e-Commerce Gateway

This chapter covers the following topics:

- Overview of Setup Steps
- Oracle Release Management Specific Setup Steps for Oracle e-Commerce Gateway

Overview of Setup Steps

The following list represents the steps that you must perform in Oracle e-Commerce Gateway to enable Inbound Planning, Shipping, and Production Sequence Schedules:

- Step 1: Setup Oracle Release Management, page 2-1
- Step 2: Define Code Conversion Values, page 2-1
- Step 3: Enable Inbound transactions for Trading Partners, page 2-3
- Step 4: Optionally Define Additional Column Rules, page 2-3
- Step 5: Validate Interface Data File Map for Each Trading Partner, page 2-3
- Step 6: Validate Interface Data File Business Rules by the EDI Translator, page 2-3

Oracle Release Management Specific Setup Steps for Oracle e-Commerce Gateway

Step 1: Setup Oracle Release Management

For details of all required setup procedures, refer to Overview of Oracle Release Management Setup Steps, page 1-1.

Step 2: Define Code Conversion Values

Generic Code Conversions

It might be necessary to define additional Code Conversions for UOM (Unit of Measure), a category used in multiple Oracle e-Commerce Gateway transactions.

- Existing UOM code conversions should be evaluated to ensure that you have defined all internal and external values to be used on inbound demand transactions. Additional values might be required, both generic and Trading Partner-specific.

- Any new internal value must also be set up within Oracle Inventory, for example UOM Conversions.

For details of all of the required define procedures, refer to Step 14: Define e-Commerce Gateway Code Conversion Values, page 1-4.

RLM Code Conversions: Additional internal values allowed

RLM_SHP_DEL_CODE specifies the days for routine shipments and deliveries. The seed data for Oracle e-Commerce Gateway Code Conversion includes both ANSI X12 (ele. 678) and EDIFACT (code 2015) Shipment Delivery Pattern Codes.

You may define additional generic or trading partner specific Shipment Delivery Pattern Codes. This Code Conversion enables you to define customer specific internal Shipment Delivery Pattern Codes using the Release Management Maintain Ship/Delivery Pattern Codes form. They are then mapped to external EDI values using customer keys in Oracle e-Commerce Gateway as needed.

RLM Code Conversions: Additional internal values not allowed

It might be necessary to define Trading Partner specific values of Oracle Release Management Data Elements requiring Code Conversion that are used for inbound demand.

For example, one customer might consider a Purpose Code of Change to mean a Replacement of a subset of items on a previous schedule; another customer might consider a Purpose Code of Change to mean a Net Change of all data on a previous schedule. To ensure that the Demand Processor will handle the data from the first situation correctly, a Trading Partner specific Code Conversion for RLM_TRX_PURP must be defined to link the external Purpose Code of Change to the internal Purpose Code of Replacement.

The following RLM Code Conversions are defined for inbound demand, and are used for SPSI, SSSI, and PSQI transactions. New internal values cannot be added, but new generic and Trading Partner specific external values may be cross-referenced to existing internal values:

- RLM_SCHED_TYPE
- RLM_DTL_TYPE
- RLM_ DTL_SUBTYP
- RLM_DATE_TYPE
- RLM_QTY_TYPE
- RLM_TRX_PURPOSE
- RLM_SHP_DEL_CODE

Examine each Trading Partner's EDI implementation manuals for applicable inbound demand transactions to determine if the seeded values will handle the Trading Partner's EDI demand properly in the Demand Processor.

For example, Modern Truck uses the EDIFACT DELJIT message for two different schedule types; they assign element 1001 of the BGM segment with a value of 241 for Shipping Schedules and 242 for Sequenced Production Schedules. If Modern Truck is one of your trading partners, additional code conversions for RLM_ SCHEDULE_TYPE could be set up as follows:

Additional Schedule Type Code Conversions

Internal	External 1	External 2	EDI Standard
Sequenced	DELJIT	242	EDIFACT
Shipping	DELJIT	241	EDIFACT

However, if another trading partner uses 242 with DELJIT to indicate a Kanban Shipping Schedule, you should set up these code conversions using trading partner keys. If not, define Trading Partner specific external values for applicable internal values using the Define Code Conversions form.

Step 3: Enable Inbound transactions for Trading Partners

Once data file directories, trading partner information, code conversions, and optional customizations of interface data file formats have been performed, use Oracle Applications Standard Request Submission to run extract programs for outbound transactions and import programs for inbound transactions.

Enable Inbound Planning (SPSI), Shipping (SSSI) and Production Sequence Schedules (PSQI) for each applicable Trading Partner. Specify which EDI Standard is used for the transaction.

Step 4: Optionally Define Additional Column Rules

For details of all required define procedures, refer to Step 16: Optionally Define Additional e-Commerce Gateway Column Rules, page 1-6.

If you are utilizing the Release Management Trading Partner Layer, it might be necessary to define additional Oracle e-Commerce Gateway Column Rules and corresponding Actions for specific trading partner requirements regarding Inbound Planning, Shipping, and Production Sequence Schedules. Each trading partner implementation manual should be evaluated for gaps between the standard processing and trading partner requirements. See: *Oracle e-Commerce Gateway User's Guide*.

Step 5: Validate Interface Data File Map for Each Trading Partner

You can adjust the layout of the interface data file or the mapping of data elements in Oracle e-Commerce Gateway to meet the needs of your trading partners for Inbound Planning and Shipping Schedules. See: *Oracle e-Commerce Gateway User's Guide* for details.

Step 6: Validate Interface Data File Business Rules by the EDI Translator

Validate that the EDI Translator is implementing the following rules for populating the interface data file for Inbound Planning, Shipping, and Production Sequence Schedules:

> **Note:** Some of the rules below are specific to Production Sequence Schedules. Ensure that these rules are implemented for the appropriate Inbound EDI schedules.

- All mapping from the EDI transaction to the interface data file is done according to the Master Spreadsheet.

- In the Test Indicator attribute of the Common Control Record (0010), a test transaction is identified as T and production by P.

- For Planning Schedule/Material Release, constant value SPSI must be placed in the Document ID attribute of the Common Control Record (0010).

- For Shipping Schedules, constant value SSSI must be placed in the Document ID attribute of the Common Control Record (0010).

- For Production Sequence Schedules, constant value PSQI must be placed in the Document ID attribute of the Common Control Record (0010).

- The standard-specific EDI transaction name identifier must be placed in the Schedule Source 1000 record. For example,

  ```
  X12 - "830", "862" or "866"


  ODETTE - "DELINS"


  EDIFACT - "DELJIT" or "DELFOR"
  ```

- The Note/Special Instruction segment is a floating segment that might occur anywhere in the transaction, but its placement in the interface data file will depend on the value of the qualifier and whether it applies to the schedule as a whole or to the scheduled item. If this segment is GEN, DEL, or PUR, then it should be loaded into record 1010. If this segment is LIN, then it should be loaded into record 2140.

  > **Note:** For Production Sequence Schedules, if the Note/Special Instruction segment is LIN, then it should be loaded into record 4030.

- The date format is CCYYMMDD HHMMSS which is 15 characters. Note the blank between the date and time. If time is irrelevant to the data field, it must be all zeros or blank.

- For Planning and Shipping Schedules, the Quantity Qualifier from the EDI transaction beginning segment (BFR05, BSS11) must be assigned by the EDI Translator application to each demand detail from the FST segment (past due, firm, or forecast requirements) in record 4000, but not with authorizations, shipment/receipt, or other information.

- For Production Sequence Schedules, the Quantity Qualifier from the EDI transaction beginning segment (BSS11) must be associated by the EDI Translator application with each requirement detail within the DTM segment loop, in the interface data file at 2000 or 4000 level unless specifically overridden by a value in QTY01 element.

- The Purchase Order Number, if specified in a segment in the header level, for example the EDI transaction beginning segment (BFR11, BSS10), must be associated by the EDI Translator application with each schedule item detail that does not have a different Purchase Order Number specified in the detail level 2000 record.

- If the JIT segment is used in a Shipping Schedule to indicate multiple requirement quantities/times in a period, each JIT segment must have its own 5000 level record. On the 5000 record, you must populate the Shipment Time and the Quantity, but leave the Ship-To Destination Code, and UOM blank.

For example, a firm demand quantity of 1000 to be delivered on 01-Nov-2004 with order number 1234 has five timed deliveries for that day. This would be indicated in the 862 as:

- FST*1000*C*D*110104**002*ON*1234
- JIT*100*0700
- JIT*150*1000
- JIT*200*1200
- JIT*250*1400
- JIT*300*1700

One 4000 record would be written to the interface data file, with the date, order number, firm demand status, and bucket (day) from the FST segment.

Five 5000 records would be written to the interface data file, with the appropriate time and quantity from the JIT segment. The quantity of all five 5000 records would total 1000.

In the RLM Demand Lines Interface, five item detail rows would be written, containing all 4000 record information combined with the 5000 record. The time from the 5000 record would be concatenated to the date from the 4000 record, yielding a date/time in Oracle standard date format. The quantity of all five item detail rows would total 1000.

If the SDQ segment is used in a Shipping Schedule to indicate multiple destinations for a single FST requirement, each pair of identification code and quantity elements (e.g. SDQ03/SDQ04 or SDQ05/SDQ06) must have its own 5000 level record. On the 5000 record, populate the Ship-To Destination Code, the Quantity, and UOM, but leave the Shipment Time blank.

For example, a firm demand quantity of 1000 to be delivered on 01-Nov-2004 with order number 1234 is to be specifically split among three different destinations: 200 to 002BDY, 300 to 002ASY, and 500 to 002DAT. This would be indicated in the 862 as:

FST*1000*C*D*110104**002*ON*1234

SDQ*EA*92*002BDY*200*002ASY*300*002DAT*500

One 4000 record would be written to the interface data file, with the date, order number, firm demand status, and bucket (day) from the FST segment.

Three 5000 records would be written to the interface data file, each with the appropriate ship-to code and quantity from the SDQ segment. The quantity of all three 4000 records would total 1000.

In the RLM Demand Lines Interface, three item detail rows would be written, containing all 4000 record information combined with the 5000 record. The ship-to code from the 5000 record would replace and override the default ship-to information, including any specified default ship-to address fields. The quantity of all three item detail rows would total 1000.

- For Production Sequence Schedules, each 3000 or 4000 record (LIN or SLN) must be assigned a unique transaction sequence number by the EDI Translator software, representing its actual sequence in the EDI transaction.

- For Production Sequence Schedules, if the DTM/LIN/SLN/PID loop is being utilized, all Subline Product Descriptions must be concatenated into a single occurrence of Notes Record 4030.

- For Production Sequence Schedules, if the DTM/LIN/SLN/PID loop is being utilized, all Subline Item Measurements must be concatenated into a single occurrence of Record 4050.

3

Oracle e-Commerce Gateway for Inbound EDI Demand

This chapter covers the following topics:

- Overview of Oracle e-Commerce Gateway for Inbound EDI Demand
- Process Flow
- Using e-Commerce Gateway for Inbound Demand
- Process Automation
- Inbound Demand Customization

Overview of Oracle e-Commerce Gateway for Inbound EDI Demand

The Oracle e-Commerce Gateway provides a bridge from the EDI translator of your choice to the Oracle Release Management Demand Processor Open Interface.

This chapter focuses on using the Oracle e-Commerce Gateway for processing inbound EDI demand schedules from your trading partners into Oracle Release Management, and addresses the following areas:

- Interface Data File Mapping, page 3-3
- Trading Partner Setup, page 3-4
- Code Conversion Setup, page 3-4
- Automating Demand Processing, page 3-10
- Viewing Exceptions and Correcting Exception Conditions, page 3-12
- Implementing Flexfields on Inbound Demand Schedules, page 3-13

Inbound Demand Transaction Types

Three types of inbound demand documents are supported by the Oracle Release Management Demand Processor:

- Planning / Material Release Schedules
- Shipping Schedules
- Production Sequence Schedules

Specific EDI documents are identified with a specific Oracle e-Commerce Gateway Transaction Type Code and mapped using the corresponding interface data file

format. There are several EDI transactions or messages that can be processed as inbound demand, having various functionality and EDI standards.

SPSI for Planning/Release

SPSI is used for Planning Schedules and Material Release Schedules, that can include both forecast and firm requirements. The following inbound EDI transactions are loaded into the interface data file using the SPSI code:

- ASC X12 Planning Schedule With Release Capability (830)
- EDIFACT Delivery Schedule (DELFOR)
- ODETTE Delivery Instruction (DELINS)

SSSI for Shipping

SSSI is used for Shipping Schedules, that contain firm delivery information and are intended by the customer to refine requirements already presented in the Planning Schedule. The following inbound EDI transactions are loaded into the interface data file using the SSSI code:

- ASC X12 Shipping Schedule (862)
- EDIFACT Delivery Just In Time (DELJIT)
- ODETTE Delivery Instruction (DELINS)
- ODETTE Delivery Just In Time (CALDEL)
- ODETTE Kanban Signal (KANBAN)

PSQI for Sequencing

PSQI is used for Production Sequence Schedules that contain demand with information to facilitate delivery and use at the customer site, such as specifying the customer production line sequence or the conveyance packing sequence. The following inbound EDI transactions are loaded into the interface data file using the PSQI code:

- ASC X12 Production Sequence (866)
- EDIFACT Delivery Just In Time (DELJIT)
- ODETTE Delivery Just In Time with production sequence (SYNCRO)
- ODETTE Delivery Just In Time with packing sequence (SYNPAC)

Process Flow

The EDI translator of your choice creates an interface data file in a specific format for the Oracle e-Commerce Gateway as it translates the EDI demand schedule document:

The Oracle e-Commerce Gateway Inbound Processor reads the demand schedule data in the interface data file and loads it into the Oracle Release Management Demand Processor interface tables using mapping defined in the transaction spreadsheet to populate the columns.

The Demand Processor then verifies the demand schedules, manages the schedule information based on Release Management processing rules, and reconciles the demand with existing sales orders or blanket sales agreement and forecasts.

Using e-Commerce Gateway for Inbound Demand

Features of the Oracle e-Commerce Gateway for Inbound Demand apply to various aspects of processing. This section describes the steps required in each aspect of the process.

Interface Data File Mapping

Trading Partner Interface Data File Mapping Evaluation

Demand Management begins when Oracle e-Commerce Gateway receives an incoming EDI demand document from a trading partner and loads it into the Demand Processor interface tables.

Oracle EDI Translation CAI Partners have developed general EDI translator data maps or templates for the three inbound demand transaction types.

It is important to evaluate the data storage and processing provided by Oracle Release Management for gaps to trading partner specific requirements for Demand, Order, Shipping, and CUM Management.

The following Interface Data File Mapping evaluation procedure is recommended when implementing Oracle e-Commerce Gateway for inbound demand schedules:

1. Examine each trading partner's EDI implementation documentation for applicable inbound demand transaction in context of the general EDI translator data maps or templates to determine if the default mapping provides a destination column for each element included in trading partner's EDI demand.

2. Examine each trading partner's EDI implementation documentation for Outbound Ship Notice/Manifest for required turnaround data elements.

3. Identify external data elements that are not represented in the destination columns.

4. Decide whether the external data elements are generic in nature (many or all trading partners use the external data) or trading partner specific in nature (the external data element is unique to one or few trading partner locations).

5. Decide which interface level and destination column would be most appropriate for the external data element, such as an appropriately named column if one exists, Descriptive Flexfields, or trading partner flexfields.

6. Decide whether validation logic within Oracle e-Commerce Gateway is desirable for the destination column; if so, define appropriate Column Rules for Rule Based Exception Processing.

7. Decide whether validation or processing logic within the Oracle Release Management Demand Processor is desirable for the destination column; if so, define appropriate trading partner specific customizations.

If external data elements, which are not represented in the destination columns, are identified, refer to Inbound Demand Customization, page 3-12.

Trading Partner Setup

e-Commerce Gateway Trading Partner Setup

Using the Oracle e-Commerce Gateway's Trading Partner form, you define customers that send or receive different EDI documents. For inbound demand, you must define the customer and the corresponding locations as an Oracle e-Commerce Gateway trading partner location and enable the inbound demand documents they will send.

Release Management Trading Partner Processing Rules

The Oracle Release Management Processing Rules form enables you to define processing rules for customers, and optionally for their related ship-to locations and customer items when the customer level rules are inappropriate. Processing rules relate to Demand Management, Demand Fences, Order Management, CUM Management, and General Rules. See: *Oracle Release Management User's Guide.*

Demand Processor Uses Both Setups

The Demand Processor verifies schedule information based on the Oracle e-Commerce Gateway Trading Partner setup in conjunction with Oracle Release Management Processing Rules.

Code Conversion Setup

Oracle e-Commerce Gateway utilizes code conversions to determine the corresponding internal value used within the Oracle Release Management Demand Processor for several external data elements occurring on the inbound demand schedule. They are applicable to all inbound demand schedule types, including:

- Planning
- Shipping
- Production Sequence

Code Conversion Categories used within the Oracle Release Management Demand Processor include the following:

- Schedule Type
- Purpose Code
- Detail Type
- Detail Subtype
- Date Type
- Quantity Type
- Unit of Measure
- Shipment Delivery Pattern

Seeded Code Conversion values are provided to link external codes used in ASC X12 and EDIFACT EDI standards with the corresponding internal value used within the Oracle Release Management Demand Processor.

Code Conversion Search Keys

You can identify unique conversion codes at the customer, customer site, or up to five levels of a search key. For example, a customer with multiple ship-to locations, each having unique carrier codes, all of which must be converted to internal carrier codes.

For more information on how to effectively use search keys, see: *Oracle e-Commerce Gateway Implementation Manual*.

Trading Partner Code Conversion Evaluation

The following Code Conversion evaluation procedure is recommended when implementing Oracle e-Commerce Gateway for inbound demand schedules:

1. Examine each trading partner's EDI implementation documentation for each applicable inbound demand transactions to determine if the seeded values will handle the trading partner's EDI demand properly in the Demand Processor.

2. Note any external values related to the Code Conversion Category that are not represented in the seeded Code Conversion values.

3. Decide which internal value most closely represents the external value.

4. Decide whether the Code Conversion is generic in nature (all trading partners that use this code have the same meaning for it) or trading partner specific in nature (trading partner locations that use this code have different meanings for it).

5. Define code conversion values as needed in the Oracle e-Commerce Gateway Code Conversion Values folder window.

Schedule Header Mandatory Code Conversion Categories

There are two Code Conversion Categories that provide internal values which occur at the header level and are mandatory for all inbound demand schedules: Schedule Types and Purpose Codes.

Schedule Type (RLM_SCHED_TYPE)

Schedule Type is used by the Demand Processor to differentiate which demand details are applicable for matching across and matching within schedule types, and to identify the hierarchical reconciliation with other schedule data.

Additional internal values are not allowed for this Code Conversion Category. However, new generic and trading partner specific external values may be cross-referenced to existing internal values.

The following example illustrates a situation where seed data for Schedule Type is not adequate. Trading partner TP1 uses the EDIFACT DELJIT message for two different schedule types; they assign element 1001 of the BGM segment with a value of 241 for Shipping Schedules and 242 for Sequenced Production Schedules. Trading partner TP2 uses 242 with DELJIT to indicate a Kanban Shipping Schedule. The necessary code conversions for RLM_SCHED_TYPE could be set up using trading partner keys as follows:

Schedule Type Examples

Internal	External 1	External 2	EDI Standard	Trading Partner
Sequenced	DELJIT	242	EDIFACT	TP1
Shipping	DELJIT	241	EDIFACT	TP1
Shipping	DELJIT	242	EDIFACT	TP2

Schedule Purpose Code (RLM_TRX_PURP)

A Schedule Purpose Code is used by the Demand Processor to determine how new demand is reconciled to old demand of the same schedule type. The Demand Processor interprets demand for each item within the schedule horizon date range based on the value of the Schedule Purpose Code.

Additional internal values are not allowed for this Code Conversion Category, however new generic and trading partner specific external values may be cross-referenced to existing internal values.

The following internal purpose code values are recognized by the Demand Processor:

- Add: Schedule demand is added to any previously established requirements that fall within the horizons of this message.

- Cancellation: Schedule demand included on the message cancels previously established requirements.

- Change: Schedule demand supersedes any previously established requirements for only those parts included on the message.

- Confirmation: The issuer's transmission to confirm an emergency requirement is communicated but not transmitted.

- Delete: Removing a part or shipment requirement sent on a previous transaction. Data for other part numbers previously transmitted and not included in this transmission must be retained.

- Original: Initial transmission related to a given transaction.

- Replace: Schedule demand supersedes any previously established requirements that fall within the horizons of this message.

- Replace All: This enables you to completely replace the existing forecast with the new demand, for all items in the forecast. This is useful for trading partners that drop the demand for an item from one forecast to the next. The purpose code Replace replaces on an item by item basis. The Demand Processor deletes the forecast for a given item and inserts new demand for that item without updating the other items on the forecast. If the customer has dropped demand for an item, with the Replace purpose code, it remains in the forecast. With Replace All, it is removed.

Oracle e-Commerce Gateway also provides the ability to define trading partner specific Code Conversions for the external schedule Purpose Code values. This feature is useful when the trading partner uses a code that does not have a seeded Code Conversion or there is a difference between the standard meaning of the purpose code in the Demand Processor and the specific use by a trading partner. For example, your trading partner sends X12 schedules with a purpose code 07 meaning Duplicate. This schedule would generate a fatal error and would not be processed. However, if you define trading partner

specific Code Conversion for the external code 07 that maps to Confirmation (one of the seven valid internal Purpose Codes) the schedule would be processed as a Confirmation.

The following illustration shows the rule for each purpose code and how it affects the resulting demand picture for a particular Ship From/Ship To/Customer Item, assuming that all Match Within Attributes are identical and aggregation of like demand occurs:

New Demand received on a Shipping Schedule:

- Date = Today, Quantity = 50

- Date = Tomorrow, Quantity = 0

Existing Order Lines within the schedule horizon from other Shipping Schedules:

- Date = Today, Quantity = 10

- Date = Tomorrow, Quantity = 20

Resulting Order Lines from Shipping Schedules within the schedule horizon for various Schedule Purpose Codes:

Example of Purpose Code Rules

Purpose Code Rule Example

Replace, Change, Original	Add	Cancellation, Delete	Confirmation
New demand replaces old demand within the schedule horizon	New demand is added to old demand if it exists	New demand is matched to and subtracted from old demand	New demand does not update old demand
Date = Today, Quantity = 50	Date = Today, Quantity = 60	Date = Today, Quantity = 0	Date = Today, Quantity = 10
Date = Tomorrow, Quantity = 0	Date = Tomorrow, Quantity = 20	Date = Tomorrow, Quantity = 20	Date = Tomorrow, Quantity = 20

Schedule Line Mandatory Code Conversion Categories

There are Code Conversion Categories that provide internal values that occur at the line level and are mandatory for all inbound demand schedules.

Date Type (RLM_DATE_TYPE)

Date Type is used by the Demand Processor to determine how the start and end date on each schedule line should be interpreted.

For Demand Detail Types (Past Due, Firm, and Forecast), the Date Type is critical because it indicates whether the schedule demand is shipment based or delivery based. The Demand Processor has a procedure that calculates shipment dates based on the system date (formerly the Schedule Horizon Start Date), date type, lead time, shipping and receiving calendars, and Ship/Delivery Pattern Codes.

The following Detail Types are information and not used in processing:

- Authorizations

- Shipped/Received Information

- Other

Additional internal values are not allowed for this Code Conversion Category. However, new generic and trading partner specific external values may be cross-referenced to existing internal values.

Detail Type (RLM_DTL_TYPE)

Detail Type is used by the Demand Processor to determine how the schedule line itself should be interpreted. The following Detail Types are supported:

- Past Due Demand

- Firm Demand

- Forecast Demand

- Authorizations

- Shipped/Received Information

- Other Information

Additional internal values are not allowed for this Code Conversion Category. However, new generic and trading partner specific external values may be cross-referenced to existing internal values.

Detail Subtype (RLM_DTL_SUBTYP)

Detail Subtype is used by the Demand Processor to determine how the schedule line should be interpreted in context of its corresponding Detail Type.

Additional internal values are not allowed for this Code Conversion Category. However, new generic and trading partner specific external values may be cross-referenced to existing internal values.

Each Detail Type has a corresponding list of valid Detail Subtypes:

- Demand Detail Types: Valid Detail Subtypes represent demand bucketing: Day, Week, Flexible, Month, or Quarter.

- Authorizations: Valid Detail Subtypes represent type of Authorizations: Finished Goods, Raw Materials, Labor & Materials, Labor, or Prior Cumulative Required.

- Shipped/Received Information: Valid Detail Subtypes represent type of information: Shipment, Receipt, or Customer CUM.

- Other Information: Valid Detail Subtypes represent type of information: Ahead/ Behind, Inventory Balance, or In Holdout.

Quantity Type (RLM_QTY_TYPE)

Quantity Type is used by the Demand Processor to determine how the quantity on a schedule line should be interpreted in context of its Detail Type and Detail Subtype. There are two valid internal values for Quantity Type: Actual and Cumulative.

If Demand schedule lines have a Cumulative Quantity Type, the Demand Processor calculates actual quantity based on the corresponding Cumulative Shipped/Received Quantity and other Demand schedule lines.

Additional internal values are not allowed for this Code Conversion Category; however, new generic and trading partner specific external values may be cross-referenced to existing internal values.

Unit of Measure (UOM)

Unit of Measure (UOM) is used by the Demand Processor to determine how the quantity on a schedule line should be interpreted.

UOM category is used in several other Oracle e-Commerce Gateway transactions. If you have other EDI transactions implemented within the Oracle e-Commerce Gateway, you probably already have the necessary UOM code conversions in place.

Since new EDI transactions are being implemented, it might be necessary to define additional Code Conversions for UOM (Unit of Measure).

Existing UOM code conversions should be evaluated to ensure that all internal and external values to be used on inbound demand transactions are defined. Additional values might be required, both generic and trading partner specific

When any new Oracle Inventory UOM Conversion is defined, corresponding UOM Code Conversions for each EDI standard must also be defined

Schedule Line Optional Code Conversion Categories

Ship Delivery Pattern (RLM_SHP_DEL_CODE) is a Code Conversion Category that provides an optional line level internal value applicable to demand Detail Types only.

Ship Delivery Pattern (RLM_SHP_DEL_CODE)

This code category specifies the days for routine shipments and deliveries. The Demand Processor has a procedure that calculates shipment dates based on the following:

- System date (formerly the Schedule Horizon Start Date)

- Date type

- Lead time

- Shipping and receiving calendars

- Shipment Delivery Pattern Codes

The internal value of this Code Conversion is the key of the Release Management Shipment Delivery Pattern Codes table. The internal value is used when the Release Management Processing Rules indicate that the EDI pattern should be used rather than the default Shipment Delivery Pattern Codes.

The seed data for Oracle e-Commerce Gateway Code Conversion includes both ANSI X12 (ele. 678) and EDIFACT (code 2015) Shipment Delivery Pattern Codes which have a meaning that can be expressed in terms of percentages on specific days of a week. Codes that reflect ambiguous days of the week (such as Monday through Thursday), and specific weeks of the month are not included in seed data.

Additional internal values are allowed for this Code Conversion Category. First, define the Shipment Delivery Pattern Code in the Release Management Shipment Delivery Pattern Codes form. Secondly, define generic or trading partner specific Code Conversions in Oracle e-Commerce Gateway as needed to map them to external EDI values.

Process Automation

Running the Oracle e-Commerce Gateway for Inbound Demand

You can use the Oracle Standard Report Submission form to launch a concurrent program in Oracle e-Commerce Gateway for a specific interface data file containing a single transaction type.

Multiple inbound demand schedules of the same transaction type may be included in an interface data file.

It is recommended that you launch the complete group of processes for inbound demand to avoid any delay in visibility of the updated trading partner demand in Oracle Order Management.

- e-Commerce Gateway

- Demand Processor

- Demand Processor Exception Report

If you run the e-Commerce Gateway and Demand Processor in a group, the concurrent processes execute sequentially, displaying the status of each concurrent request underneath the parent request.

Automating Demand Processing

The steps for receiving inbound EDI demand schedule transactions in Oracle e-Commerce Gateway and loading them from Oracle e-Commerce Gateway to Oracle Release Management can be automated.

To automate Oracle Release Management's demand processing, submit up to three periodic concurrent requests for report sets to process the Oracle e-Commerce Gateway inbound demand schedule and subsequently run the Demand Processor. You need one periodic concurrent request for each schedule type which your trading partners communicate to you:

- Inbound EDI Planning Schedules (SPSI)

- Inbound EDI Shipping Schedules (SSSI)

- Inbound EDI Production Sequence Schedules (PSQI)

The following figure details how you can automate the demand management process.

Automated Demand Management Process
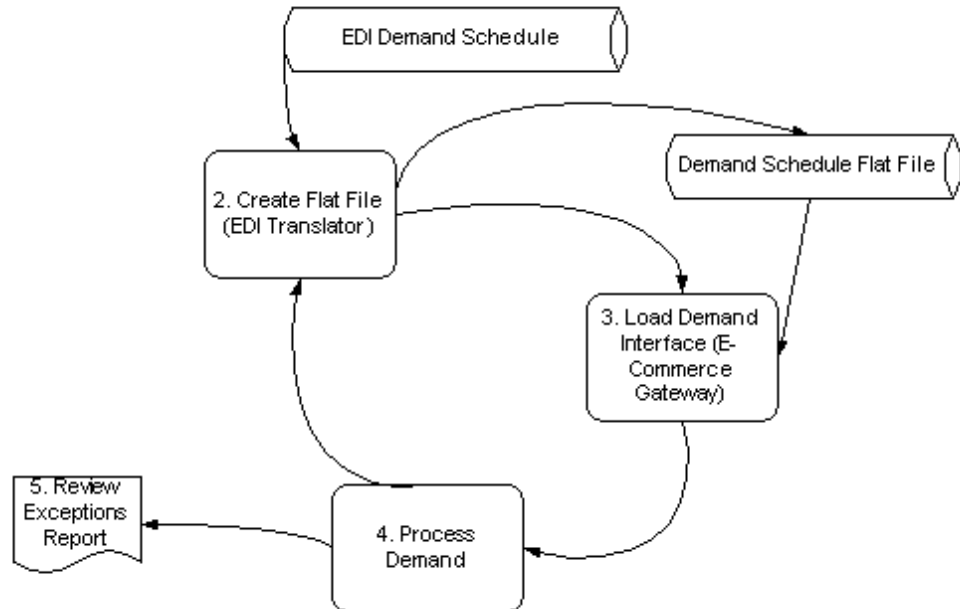
Exception Management

Inbound Demand Exception Messages

Exceptions relating to inbound demand transactions are generated by either Oracle e-Commerce Gateway or the Release Management Demand Processor.

e-Commerce Gateway

Oracle e-Commerce Gateway has Rule Based Exception Processing for inbound transactions. Using Process Rules and Column Rules for inbound demand transactions, Oracle e-Commerce Gateway validates schedule data being processed in the staging tables in the interface data file, before loading it into the Demand Processor Interface tables. When these rules are violated, exceptions are logged.

Oracle e-Commerce Gateway performs validation for the following Process Rules, with the corresponding action when violation occurs:

- Trading Partner Not Found - Skip Document

- Test/Production Flag Discrepancy - Log Only

- Invalid Translator & Location Code Combination - Skip Document

Oracle e-Commerce Gateway performs validation for the following Column Rules, with the corresponding action when violation occurs:

- Value is Required - Skip Document

- Simple Table Lookup - Skip Document
- Valueset Lookup - Skip Document
- Null Dependency - Skip Document
- Datatype Checking - Skip Document

Release Management Demand Processor

The Demand Processor generates exceptions that occur while the interface schedule is being validated, processed, archived, and reconciled with existing demand. See: Overview of Oracle Release Management Demand Processor, *Oracle Release Management User's Guide.*.

Viewing Exceptions and Correcting Exception Conditions

Exceptions relating to inbound demand transactions may be viewed and corrected within the application that generated them.

Oracle e-Commerce Gateway

Two types of data rule exceptions can be found during data validation: processing rules and column rules. After running the inbound transaction process or resubmitting transactions for re-validation, you can view exceptions in the View Staged Document window.

Oracle Release Management Demand Processor

Exceptions generated by or the Release Management Demand Processor may be viewed on the Demand Processor Exceptions Report, or online using the Release Management Workbench. Exception conditions can be corrected by following the specific instructions in the message text.

Inbound Demand Customization

Oracle e-Commerce Gateway enables you to make changes because the Oracle e-Commerce Gateway Inbound Engine is generic in nature and data driven. The program itself does not require changes. See: *Oracle e-Commerce Gateway User's Guide.*

Change Seed Data

If you need to populate a new column in the interface tables, change the default mapping, or if data storage gaps exist, the following options for destination column exist in the Release Management Demand Processor Interface tables:

- Use an appropriately named column if one exists
- Use Descriptive Flexfields for data on inbound demand schedules that only need to be carried through Oracle Order Management and Oracle Shipping Execution
- Use Trading Partner Flexfields for data on inbound demand schedules that is trading partner specific in nature and will be referenced in trading partner specific workflow customizations

The following tables must have the same definition in AOL for Descriptive Flexfield Attributes for the Oracle Release Management Demand Processor:

- **Headers**
  - RLM_INTERFACE_HEADERS
  - RLM_SCHEDULE_HEADERS
  - OE_ORDER_HEADERS
- **Lines**
  - RLM_INTERFACE_LINES
  - RLM_SCHEDULE_LINES
  - OE_ORDER_LINES

Implementing Flexfields on Inbound Demand Schedules

This section applies to implementing descriptive and trading partner flexfields on inbound demand schedules.

To comply with trading partner requirements to handle additional data on inbound demand transactions, customize the Oracle e-Commerce Gateway inbound demand interface data file definition and/or the generic inbound processor at predefined stages. Flexfields (attributes) are user defined fields in Oracle Applications. They are found in inbound and outbound transactions. You must modify the general EDI translator data maps or templates to use flexfields. See: *Oracle Application Object Library User's Guide.*

4

Oracle Release Management Profile Options

This chapter covers the following topics:

- Oracle Release Management Profile Options

Oracle Release Management Profile Options

During Implementation, you set a value for each user profile option to specify how Oracle Release Management controls access to and processes data.

Generally, your system administrator sets up and updates profile option values. The *Oracle Applications System Administration User's Guide* contains more information on profile options, including the internal names of each Release Management profile option. The following information is included here for your convenience.

This chapter assumes that you have defined the profile options for the other Oracle applications that you are using to ensure that they work properly.

Viewing and Updating Oracle Release Management Profile Options

To view and update Oracle Release Management profile options:

1. Navigate to the Find System Profiles window.

2. Enter RLM% into the Find field and click Find.

   This will return all Oracle Release Management profile options.

You can set or view the following profile options in Oracle Release Management. The table also indicates whether you (the "User") can view or update the profile option and at which System Administrator level the profile options can be updated. The System Administrator level includes User, Responsibility, Application, and Site levels. Profile options are either Optional or Required:

- *Required*: Requires you to provide a value

- *Optional*: A default value is provided that requires change only if you do not want to accept the default

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

- Updatable: You can update the profile option

- View Only: You can view the profile option value but you cannot update it

- No Update or View: You cannot view or update the profile option value

Oracle Release Management Profile Options

Profile Option	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required	Default Value
RLM: Debug Mode	Updatable	Updatable	Updatable	Updatable	Updatable	No	Null
RLM: MRP Forecast Selection List	View Only	View Only	Updatable	View Only	Updatable	No	No Default
RLM: MSC/MRP Default Assignment Set	No Update or View	No Update or View	No Update or View	No Update or View	Updatable	No	No Sourcing to be applied
RLM: Print Cum Data on Shipping Documents	Updatable	Updatable	Updatable	Updatable	Updatable	No	Yes
RLM: Workflow Enabled	Updatable	Updatable	Updatable	Updatable	Updatable	No	No

RLM: Debug Mode

Determines if a debug file is written for running the Demand Processor. Available values are:

- On: Debug mode is on

- Off or Null: Debug mode is off

The default value is Null (Off).

This profile is updatable at all levels.

RLM: MRP Forecast Selection List

Provides a means to specify the forecast source list that will house all the names of forecasts that are candidates for the inbound Automotive forecast demand items to be assigned.

The default value is none.

This profile can be set at the Site and Responsibility levels.

> **Note:** This profile option is required if you import forecast data into Oracle Advanced Planning and Scheduling using the Demand Time Fence Forecast to Planning. See Processing Rules for more information.

RLM: MSC/MRP Default Assignment Set

Determines if the Supply Chain Sourcing Rules should be used to derive the ship from organizations. If these rules should be used (the profile option is set to something other than No Sourcing to be applied) the Demand Processor looks for a unique Sourcing rule for the item. If a unique rule is found, then this is the rule that is used. If more than one rule exists for the item, then the Default Assignment Set designated in the profile option is used to determine which rule should be used.

The default is No Sourcing to be applied.

This profile is updatable only at the site level.

RLM: Print Cum Data on Shipping Documents

Determines whether or not CUM Data should be printed on shipping documents. Available values are:

- Yes: CUM Data is printed on shipping documents

- No: CUM Data is excluded from shipping documents

The default is Yes.

This profile is updatable at all levels.

RLM: Workflow Enabled

Determines whether or not the Demand Processor is enabled to run in workflow mode. Available values are:

- Yes: The Demand Processor is enabled to run in workflow mode

- No: The Demand Processor is disabled for workflow mode

The default is No.

This profile is updatable at all levels.

Other Necessary Profiles

This table includes profile options from other applications that you must set for full Oracle Release Management functionality.

You can set or view the following profile options in Oracle Release Management. The table also indicates whether you (the "User") can view or update the profile option and at which System Administrator level the profile options can be updated. The System Administrator level includes User, Responsibility, Application, and Site levels. Profile options are either Optional or Required:

- *Required*: Requires you to provide a value

- *Optional*: A default value is provided that requires change only if you do not want to accept the default

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

- Updatable: You can update the profile option

- View Only: You can view the profile option value but you cannot update it

- No Update or View: You cannot view or update the profile option value

Oracle Release Management Profile Options

Profile Option	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required	Default Value
ECE: DSNO-Enabled	No Update or View	No Update or View	No Update or View	No Update or View	Updatable	No	No default
ECE: INO-Enabled	No Update or View	No Update or View	Updatable	No Update or View	Updatable	No	No default
ECE: Input File Path	No Update or View	View Only	Updatable	View Only	Updatable	Yes	No default
ECE: Output File Path	No Update or View	No Update or View	No Update or View	View Only	Updatable	Yes	No default
ECE: PSQ I- Enabled	No Update or View	No Update or View	Updatable	No Update or View	Updatable	Yes	No default
ECE: SPSI-Enabled	No Update or View	No Update or View	Updatable	No Update or View	Updatable	Yes	No default
ECE: SSSI-Enabled	No Update or View	No Update or View	Updatable	No Update or View	Updatable	Yes	No default
OM: Invoice Num-bering Method	Updatable	No Update or View	No Update or View	No Update or View	Updatable	Yes	Automatic

ECE: DSNO Enabled

Specifies whether or not the DSNO transaction is enabled.

There is no default value.

This profile can only be set at the site level.

ECE: INO Enabled

Specifies whether or not the INO transaction is enabled at the site level.

There is no default value.

This profile can only be set at the site and responsibility levels.

ECE: Input File Path

Specifies the directory where inbound data files are expected. This value must match the actual directory on disk and that designated in the INIT.ORA file.

There is no default value.

This profile can only be set at the site and responsibility levels.

ECE: Output File Path

Specifies the directory where outbound interface data files are written. This value must match the actual directory on disk and that designated in the INIT.ORA file.

There is no default value.

This profile can only be set at the site and responsibility levels.

> **Note:** For e-Commerce Gateway, you must create inbound and outbound directories on your server, and then specify them in the INIT.ORA file and in the ECE: Inbound File Path and ECE: Outbound File Path profile options, respectively. See: Defining Data File Directories, *Oracle e-Commerce Gateway Implementation Manual.*

ECE: PSQI Enable

Determines whether or not inbound sequenced shipping schedule transaction is enabled.

There is no default value.

This profile can only be set at the site and responsibility levels.

ECE: SPSI Enabled

Determines whether or not inbound planning schedule transaction is enabled.

There is no default value.

This profile can only be set at the site and responsibility levels.

ECE: SSSI Enabled

Determines whether or not inbound shipping schedule transaction is enabled.

There is no default value.

This profile can only be set at the site and responsibility levels.

OM: Invoice Numbering Method

Determines whether invoice numbers are automatically generated or mapped to the delivery name. Available values are:

- Delivery Name: The delivery name is used as the invoice number
- Automatic: Autoinvoice, automatically creates the invoice number
- The default is Automatic.
- This profile is updatable at the site and responsibility level.

5

Oracle XML Gateway for Oracle Release Management

This chapter covers the following topics:

- Overview of Oracle XML Gateway for Oracle Release Management
- Setting Up Oracle XML Gateway for Oracle Release Management

Overview of Oracle XML Gateway for Oracle Release Management

The use of Oracle XML Gateway with Oracle Release Management enables you to receive shipping and planning transactions from any trading partner that has the capacity to produce and transmit Open Application Group (OAG)/XML based transactions.

XML transactions are received from trading partners, then are queued and handled by Oracle XML Gateway in the following way:

- Validated: Oracle XML Gateway validates the messages
- Map selection: The trading partner is recognized and the appropriate map (the relationship between the source and target data elements) is applied
- Data conversion: The data is converted from the Oracle XML Gateway to the Oracle Release Management tables

All transactions that have been successfully processed appear on the Release Management Workbench as Available to Process schedules.

Setting Up Oracle XML Gateway for Oracle Release Management

You must install and configure Oracle XML Gateway. See: *Oracle XML Gateway User's Guide.*

The following setup steps are necessary for the use of Oracle XML Gateway with Oracle Release Management:

- Defining Message Mapping, page 5-2
- Seeded Transaction Types, page 5-2
- Define Trading Partners, page 5-2
- Seeded Oracle XML Gateway Standards, page 5-3
- Define Oracle XML Gateway Code Conversions and Categories, page 5-3

- Enable XML Gateway Planning and Shipping Transactions, page 5-6

Defining Message Mapping

Message mapping is used by Oracle XML Gateway to populate the Oracle Release Management interface file with the inbound transaction information.

Oracle XML Gateway includes the Oracle XML Gateway Message Designer. The Message Designer is a repository based tool that is used to define message maps, which represents the relationship between the source and target data elements.

Oracle XML Gateway includes seeded maps for Shipping and Schedule. You modify these existing maps with the Oracle XML Gateway Message Designer with the following:

- Define the Data Source and the Data Target
- Map the Source Data Structure to the Target Data Structure
- Map the Source Data Element to the Target Data Element

See *Oracle XML Gateway User's Guide*

Seeded Transaction Types

The Define Transaction form is used to cross-reference external codes that identify a transaction in an XML message to its internal code that is recognized by the Oracle application that is processing the transaction.

The following values are seeded within Oracle XML Gateway:

- Party Type: Customer
- Transaction Type: RLM
- Transaction Subtype: SPSI and SSSI
- Transaction Description: Planning Schedule Inbound Transaction
- Standard Code: OAG
- Direction: IN
- External Transaction Type: SYNC

Define Trading Partners

Using the Oracle XML Gateway Trading Partner form, you define customers that send or receive XML documents. For inbound demand, you must define the customer and the corresponding locations as an Oracle XML Gateway trading partner location and enable the inbound demand documents that they will send.

Use the following values to define trading partners within Oracle XML Gateway:

- Trading Partner Type: Customer
- Trading Partner Name: (name of your customer)
- Trading Partner Site: (physical location of your customer)
- Company Admin Email: (your customer's e-mail)
- Transaction Type: RLM
- Transaction Subtype: SPSI and SSSI

- Standard Code: OAG

- External Transaction Type: PLANSCHD and SHIPSCHD

- External Transaction Subtype: SYNC

- Direction: IN

- Map: RLM_SPSI_OAG70_IN and RLM_SSSI_OAG70_IN

Seeded Oracle XML Gateway Standards

The following values are seeded standards within Oracle XML Gateway. You can modify them to meed your specific needs:

- Standard Code: OAG

- Standard Type: OAG

Define Oracle XML Gateway Code Conversions and Categories

Oracle XML Gateway utilizes code conversions to determine the corresponding internal value used within the Oracle Release Management Demand Processor for several external data elements occurring on the inbound demand schedule. They are applicable to all inbound demand schedule types. Oracle XML Gateway code conversion provides a method to cross-reference the codes defined in Oracle Applications to codes used by trading partners.

Seeded Code Conversion values are provided to link external codes used in ASC X12 and EDIFACT EDI standards with the corresponding internal value used within the Oracle Release Management Demand Processor.

The following table represents the Oracle XML Gateway Seeded Code Conversion categories. You can modify them to meet your specific needs:

Oracle XML Gateway Seeded Code Conversion Categories

Code Conversion Category	XML Element	Interface Column
RLM_DATE_TYPE	DATETYPE	DATE_TYPE_CODE
RLM_DTL_SUBTYPE	FLEXBKTID/BKTYPE	ITEM_DETAIL_SUBTYPE
RLM_DTL_TYPE	LINETYPE	ITEM_DETAIL_TYPE
RLM_QTY_TYPE	Not on XML Document	QTY_TYPE_CODE
RLM_SCHED_TYPE	Not on XML Document	SCHEDULE_TYPE
RLM_SCHED_PURP	SYNCIND	SCHEDULE_PURPOSE
UOM	QUANTITY.UOM	UOM_CODE

RLM_DATE_TYPE

Date Type is used by the Demand Processor to determine how the start and end date on each schedule line should be interpreted.

For Demand Detail Types (Past Due, Firm, and Forecast), the Date Type is critical because it indicates whether the schedule demand is shipment based or delivery based. The

Demand Processor has a procedure that calculates shipment dates based on the system date (formerly the Schedule Horizon Start Date), date type, lead time, shipping and receiving calendars, and Ship/Delivery Pattern Codes.

The following Detail Types are information and not used in processing:

- Authorizations

- Shipped/Received Information

- Other

Additional internal values are not allowed for this Code Conversion Category. However, new generic and trading partner specific external values may be cross-referenced to existing internal values.

RLM_DTL_SUBTYPE

Detail Subtype is used by the Demand Processor to determine how the schedule line should be interpreted in context of its corresponding Detail Type.

Additional internal values are not allowed for this Code Conversion Category. However, new generic and trading partner specific external values may be cross-referenced to existing internal values.

Each Detail Type has a corresponding list of valid Detail Subtypes:

- Demand Detail Types: Valid Detail Subtypes represent demand bucketing: Day, Week, Flexible, Month, or Quarter.

- Authorizations: Valid Detail Subtypes represent type of Authorizations: Finished Goods, Raw Materials, Labor & Materials, Labor, or Prior Cumulative Required.

- Shipped/Received Information: Valid Detail Subtypes represent type of information: Shipment, Receipt, or Customer CUM.

- Other Information: Valid Detail Subtypes represent type of information: Ahead/Behind, Inventory Balance, or In Holdout.

RLM_DTL_TYPE

Detail Type is used by the Demand Processor to determine how the schedule line itself should be interpreted. The following Detail Types are supported:

- Past Due Demand

- Firm Demand

- Forecast Demand

- Authorizations

- Shipped/Received Information

- Other Information

Additional internal values are not allowed for this Code Conversion Category. However, new generic and trading partner specific external values may be cross-referenced to existing internal values.

RLM_QTY_TYPE

Quantity Type is used by the Demand Processor to determine how the quantity on a schedule line should be interpreted in context of its Detail Type and Detail Subtype. There are two valid internal values for Quantity Type: Actual and Cumulative.

If Demand schedule lines have a Cumulative Quantity Type, the Demand Processor calculates actual quantity based on the corresponding Cumulative Shipped/Received Quantity and other Demand schedule lines.

Additional internal values are not allowed for this Code Conversion Category. However, new generic and trading partner specific external values may be cross-referenced to existing internal values.

RLM_SCHED_TYPE

Schedule Type is used by the Demand Processor to differentiate which demand details are applicable for matching across and matching within schedule types, and to identify the hierarchical reconciliation with other schedule data.

Additional internal values are not allowed for this Code Conversion Category. However, new generic and trading partner specific external values may be cross-referenced to existing internal values.

RLM_SCHED_PURP

A Schedule Purpose Code is used by the Demand Processor to determine how new demand is reconciled to old demand of the same schedule type. The Demand Processor interprets demand for each item within the schedule horizon date range based on the value of the Schedule Purpose Code.

Additional internal values are not allowed for this Code Conversion Category, however new generic and trading partner specific external values may be cross-referenced to existing internal values.

The following internal purpose code values are recognized by the Demand Processor:

- Add: Schedule demand is added to any previously established requirements that fall within the horizons of this message.

- Cancellation: Schedule demand included on the message cancels previously established requirements.

- Change: Schedule demand supersedes any previously established requirements for only those parts included on the message.

- Confirmation: The issuer's transmission to confirm an emergency requirement is communicated but not transmitted.

- Delete: Removing a part or shipment requirement sent on a previous transaction. Data for other part numbers previously transmitted and not included in this transmission must be retained.

- Original: Initial transmission related to a given transaction.

- Replace: Schedule demand supersedes any previously established requirements that fall within the horizons of this message.

UOM

Unit of Measure (UOM) is used by the Demand Processor to determine how the quantity on a schedule line should be interpreted.

Code Conversion Search Keys

You can identify unique conversion codes at the customer, customer site, or up to five levels of a search key. For example, a customer with multiple ship-to locations, each having unique carrier codes, all of which must be converted to internal carrier codes.

Enable XML Gateway Planning and Shipping Transactions

Enable the applicable XML Gateway inbound planning and shipping transactions for each trading partner.

Planning

For planning schedules, Oracle XML Gateway uses the PLANSCHD message. SYNC PLANSCHD communicates the requirement information, for example part number and quantity, between a customer and supplier.

SYNC PLANSCHD enables the addition of new requirements and the modification of previously established requirements through various SYNC Indicator values. Existing SYNC Indicator values from OAG release 6.2 include the following:

- A: For adding
- C: For change
- D: For delete
- R: For replacement

Shipping

For shipping schedules, Oracle XML Gateway uses the SHIPSCHD message. SYNC SHIPSCHD enables the following:

- Exchange of shipment schedule information
- Authorizing a shipment quantity and date for specific trading partners
- Authorizing a shipment address for specific trading partners

Typically, the ship schedule is generated by a material planning application and transmitted to an order or material planning application.

A

Automotive Upgrade Spreadsheets and Information

This appendix covers the following topics:

- Spreadsheet One
- Spreadsheet Two
- Additional Information

Spreadsheet One

Completing this spreadsheet is optional. If you choose not to load parameter values here, you must enter them manually before running the post-upgrade steps. After entering all input data, the Input Data worksheet should be exported as a comma delimited text file, with the name setupdata.txt, and stored in the directory specified in the ECE: Inbound File Path profile option

This spreadsheet contains three worksheets:

- Input Data: You can enter the Processing Rules parameter values on this worksheet. These are mandatory processing rules for Release 11*i* that cannot be derived from information in the Release 10.7/11 Automotive Extras forms.
- Help: This worksheet describes the structure for the Input Data worksheet and indicates which columns to populate for each level.
- Glossary: This worksheet lists all the parameter columns, information about the parameter, and a list of valid values when applicable. You can copy the value to the clipboard and paste it into the desired cell of the Input Data worksheet. If the parameter value can be determined using information from the CARaS environment, then this worksheet indicates the location in CARaS.

CARaS Information Relevant to Release Management Processing Rules

The CARaS environment contains some information relevant to Oracle Release Management not contained in Automotive Extras tables, for Trading Partners corresponding to Oracle Customers and CARaS Companies corresponding to Oracle Inventory organizations.

You can use the following table as a guide for completing the spreadsheet:

- Some values in CARaS might be case-sensitive. Verify the accuracy of the data that you enter in the spreadsheet.

- In Release 11*i*, forecasts may be moved either to Oracle Order Management or Oracle Advanced Planning and Scheduling

CARaS Information Guide

Source in CARaS	Spreadsheet Column	Notes
Trading Partner Profiles field TP Code	B - Trading Partner Code	-
Abbreviation Cross-References field Destination Code	C - Destination Abbreviation	-
Part Master File Maintenance field Customer Part	D - Customer Item	-
Company Options field Current Model Year	E - CUM Management Type	If Y, then CUM_BY_DATE_RECORD_ YEAR.
Company Options field PO Significance	E - CUM Management Type	If Y, then CUM_BY_PO.
Part Destination File	F - CUM Org Level Code	Ship_To_Ship_From, unless otherwise mentioned. Check your CUM setup to verify this value.
Use Transfer code CADSTC_ MNT, then field CUM Update Type	G - CUM Shipment Rule Code	-
Supplier Profiles field Supplier Id 1	H - Assigned Supplier Code	-
Company Options field Enable Firm/Planning Codes	I - Use EDI Ship/Delivery Code? (Y or N)	-
Daily/JIP Schedule Options Part Destination File	J - Shipment Delivery Rule Name	-
Part Destination File	K - ATS Pre-Horizon Disposition	-
Part Destination File	L - ATS Pre-Horizon Cutoff Days	-
Cross-Reference 1st Time Interval in Days = "S"	M - Firm Fence - Start N - Firm Fence - End	-
Cross-Reference 2nd Time Interval in Days = F	O - Forecast Fence - Start P - Forecast Fence - End	-
Part Destination File	Q - Company Code	CARaS Company Code
Abbreviation Cross-Reference Order Number	R - Order Number	-
Abbreviation Cross-Reference Order Type	S - Order Type	-

This spreadsheet should be completed with the following structure as a pre-upgrade step.

Customer Level Record

Address Level Record 1

...

Address Level Record n

Customer Item Level Record 1

...

Customer Item Level Record n

Customer Level Spreadsheet

Record Indicator	Column	Description
1000	A	Record Indicator
2000	-	-
3000	-	-
1000	B	Trading Partner Code
2000	-	-
3000	-	-
1000	C	Destination Abbreviation (leave blank for customer level and for customer item level)
2000	-	-
3000	-	-
1000	D	Customer Item (leave blank for customer level)
2000	-	-
3000	-	-
1000	E	CUM Management Type (leave blank for customer item level)
2000	-	-
3000	-	-
1000	F	CUM Org Level Code (leave blank for customer item level)
2000	-	-
3000	-	-
1000	G	CUM Shipment Rule Code (leave blank for customer item level)
2000	-	-

Record Indicator	Column	Description
3000	-	-
1000	H	Assigned Supplier Code (leave blank for customer item level)
2000	-	-
3000	-	-
1000	I	Use EDI Ship/Delivery Code? (Y or N)
2000	-	-
3000	-	-
1000	J	Shipment Delivery Rule Name
2000	-	-
3000	-	-
1000	K	ATS Pre-Horizon Disposition (leave blank for customer item level)
2000	-	-
3000	-	-
1000	L	ATS Pre-Horizon Cutoff Days (leave blank for customer item level)
2000	-	-
3000	-	-
1000	M	Firm Fence - Start
2000	-	-
3000	-	-
1000	N	Firm Fence - End
2000	-	-
3000	-	-
1000	O	Forecast Fence - Start
2000	-	-
3000	-	-
1000	P	Forecast Fence - End
2000	-	-
3000	-	-

Record Indicator	Column	Description
1000	Q	Company Code
2000	-	-
3000	-	-
1000	R	Order Number
2000	-	-
3000	-	-
1000	S	Order Type
2000	-	-
3000	-	-

Trading Partner Code

Specifies the two digit Code of Trading Partner to be upgraded.

Destination Abbreviation

Specifies the Location code for the trading partner to be upgraded.

Customer Item Number

Specifies the Customer Item Number for the Trading Partner to be upgraded.

CUM Management Type

Specifies whether or not CUM Accounting is required; if so, define applicable data elements that control accumulation, such as record keeping year, start date, purchase order, etc. If CUM Management is not enabled, select NO_CUM. Do not enter for Customer Items.

Valid Values:

- NO_CUM
- CUM_BY_PO_ONLY
- CUM_BY_DATE_ONLY
- CUM_BY_DATE_RECORD_YEAR
- CUM_BY_DATE_PO

CUM Org Level Code

Specifies the relationship between the supplier and customer business entity for accumulation if CUM Management is enabled. Do not enter for Customer Items.

Valid Values:

- SHIP_TO_SHIP_FROM
- BILL_TO_SHIP_FROM
- SHIP_TO_ALL_SHIP_FROMS

- INTRMD_SHIP_TO_SHIP_FROM

CUM Shipment Rule Code

Specifies the Rule for when shipments update the CUM quantity if CUM Management is enabled. If CUM Management is not enabled, leave this field blank. Do not enter for Customer Items.

Valid Values:

- AS_OF_CURRENT
- AS_OF_PRIOR
- AS_OF_YESTERDAY

Assigned Supplier Code

Specifies the Code by which the Customer identifies you as Supplier in the EDI demand transaction. Do not enter for Customer Items.

Use EDI S/D Code? (should be Y or N)

Specifies whether Ship Delivery Code specified on the EDI demand transaction should be used. If Y, then a valid code on the EDI demand transaction will overrule the Shipment Delivery Rule Name.

Valid Values:

- Y
- N

Shipment Delivery Rule Name

Specifies the Shipment Delivery Rule Name to be used to calculate shipment dates in the Demand Processor. This will overrule the Ship Delivery Code specified on the EDI demand transaction if: 1) Use EDI S/D Code? is N, or 2) if the Ship Delivery Code specified on the EDI demand transaction is not in the valid values list.

Shipment Delivery Rules Valid Values

Value	Description
D	Monday
E	Tuesday
F	Wednesday
G	Thursday
H	Friday
J	Saturday
K	Sunday
M	Immediately
N	As Directed

Value	Description
O	Daily Monday through Friday
P	1/2 Monday and 1/2 Thursday
Q	1/2 Tuesday and 1/2 Thursday
R	1/2 Wednesday and 1/2 Friday
S	Once anytime Monday through Friday
T	1/2 Tuesday and 1/2 Friday
U	1/2 Monday and 1/2 Wednesday
V	1/3 Monday, 1/3 Wednesday, 1/3 Friday
X	1/2 by Wednesday, balance by Friday
Y	None
Z	Mutually Defined
SG	Tuesday through Friday
SL	Monday, Tuesday and Thursday
SP	Monday, Tuesday and Friday
SX	Wednesday and Thursday
SY	Monday, Wednesday and Thursday
SZ	Tuesday, Thursday and Friday
ZZ	Mutually Defined/None
13	Monday
14	Tuesday
15	Wednesday
16	Thursday
17	Friday
18	Saturday
19	Sunday
21	As Directed
23	Daily Monday through Friday

ATS Pre-Horizon Disposition

Specifies how the Demand Processor handles past due requirements (unshipped Available To Ship Sales Order demand dated before the system date (formerly Schedule Horizon Start Date)). Do not enter for Customer Items.

Valid Values:

- REMAIN_ON_FILE
- CANCEL_AFTER_N_DAYS
- CANCEL_ALL

ATS Pre-Horizon Cutoff Days

ATS Pre-Horizon Cutoff Days is related to the ATS Pre-Horizon Disposition option of Cancel after N Days. This specifies how many days to keep the past due demand intact. Leave this field blank if you did not select option of Cancel after N Days. Do not enter for Customer Items.

Order Number

Specifies the Sales Order Number into which schedule demand will be loaded. Use the same value you specified in CARaS Abbreviation Cross-Reference field Order Number.

Order Type

Specifies the Order Type corresponding to the Sales Order Number into which schedule demand will be loaded. Use the same value you specified in CARaS Abbreviation Cross-Reference field Order Type.

Firm Fence - Start

Specifies the starting day of Firm Fence relative to the system date (formerly Schedule Horizon Start Date). Calculate this value based on the CARaS Abbreviation Cross-Reference 1st Time Interval in Days associated with Demand Policy = S.

Firm Fence - End

Specifies the Ending value of Firm Fence relative to the system date (formerly Schedule Horizon Start Date). Calculate this value based on the CARaS Abbreviation Cross-Reference 1st Time Interval in Days associated with Demand Policy = S.

Forecast Fence - Start

Specifies the Starting value of Forecast Fence relative to the system date (formerly Schedule Horizon Start Date). Calculate this value based on the CARaS Abbreviation Cross-Reference 2nd Time Interval in Days associated with Demand Policy = F.

Forecast Fence - End

Specifies the Ending value of Forecast Fence relative to the system date (formerly Schedule Horizon Start Date). Calculate this value based on the CARaS Abbreviation Cross-Reference 2nd Time Interval in Days associated with Demand Policy = F.

Spreadsheet Two

Completing this spreadsheet is optional. However, if you do not enter data at this time, you will not be able to modify it later and it will not be available on shipping documents. After entering all input data, the Input Data worksheet should be exported as a comma delimited text file, with the name carasdata.txt, and stored in the directory specified in the ECE: Inbound File Path profile option

> **Note:** Please refer to the Automotive page on Oracle *MetaLink* for sample spreadsheets and for a more detailed structure of the Input Data Worksheet.

This spreadsheet contains three worksheets:

1. Input Data: This worksheet is where you enter the turnaround data.

2. Help: This worksheet describes the structure for the Input Data worksheet and indicates which columns to populate for each level.

3. Glossary: This worksheet lists all the parameter columns, information about the parameter, and a list of valid values when applicable. You can copy the value to the clipboard and paste it into the desired cell of the Input Data worksheet. If the parameter value can be determined using information from the CARaS environment, this worksheet indicates where it is located in CARaS.

Much of the data for completing this spreadsheet is available by running Release Reports in CARaS, e.g. Release History or Firm/Planning Requirements Summary

Source in CARaS	Spreadsheet Column	Notes
-	A - Record Indicator	Record Indicator = 1000
Part Destination File	B - Requirement Ext.	-
Part Destination File	C - Assembly Line Feed Location	-
Part Master File Maintenance field Buyer Code	D - Buyer	-
Part Master File Maintenance field Engineering Change Level	E - Customer Item Engineering Change Number	-
Part Master File Maintenance field Customer Part	F - Customer Item Number	-
Part Destination File	G - Customer Item Reference Number	-
-	A - Record Indicator	Record Indicator = 2000
Part Destination File	B - Intermediate Consignee code	-
Part Destination File	C - Manufacturer Code	-
Part Master File Maintenance field Purchase Order Date	D - Purchase Order Date	-
Part Destination File	E - Purchase Order Line Number	-
-	A - Record Indicator	Record Indicator = 3000
Part Destination File	B - Release Number	-
Part Destination File	C - Returnable Container Part Number	-
Part Master File Maintenance field Supplier Id	D - Supplier Code	-
Part Master File Maintenance field Our Part Number	E - Supplier Item Number	-
Abbreviation Cross-Reference Maintenance field Interchange Id or Group Id	F - Supplier Ship-From code	Either of these values may be correct, depending on the trading partner.
Abbreviation Cross-Reference Maintenance field Destination Code	G - Customer Ultimate Destination Code	-
Part Destination File	H - Vehicle ID Number	-

This spreadsheet should be completed with the following structure before running CARaS Turnaround Attributes upgrade.

- Record 1

- Record Indicator = 1000
- Record Indicator = 2000
- Record Indicator = 3000
- Record 2
- ...
- ...
- Record N

Turnaround Attributes Spreadsheet

Record Indicator	Column	Description
1000	A	Record Indicator = 1000
2000	-	Record Indicator = 2000
3000	-	Record Indicator = 3000
1000	B	Requirement Ext
2000	-	Intermediate Consignee Code
3000	-	Release Number
1000	C	Assembly Line Feed Location
2000	-	Manufacturer Code
3000	-	Returnable Container Part Number
1000	D	Buyer
2000	-	Purchase Order Date
3000	-	Supplier Code
1000	E	Customer Item Engineering Change Number
2000	-	Purchase Order Line Number
3000	-	Supplier Item Number
1000	F	Customer Item Number
2000	-	
3000	-	Supplier Ship-From Code
1000	G	Customer Item Reference Number
2000	-	
3000	-	Customer Ultimate Destination Code
1000	H	-
2000	-	-
3000	-	Vehicle ID Number

Requirement Ext

Internal value generated for CARaS that is used to link to Oracle demand lines.

Assembly Line Feed Location

The customer's assembly identification, as sent on the LIN segment of the 866 transaction.

Buyer

The buyer that was sent in on the customer's schedule.

Customer Item Engineering Change Number

Customer part revision included on schedule.

Customer Item Number

External Customer part number Cross Reference.

Customer Item Reference Number

Internal references to the item that the customer sent on the schedule

Customer Model Number

Customer's Model Number for this sequenced detail.

Export License Date

European requirements

Export License Number

European requirements

Import License Date

European requirements

Import License Number

European requirements

Intermediate Consignee code

EDI Cross Referencing to Customer Address ID or Supplier ID; where ship-to is different from ultimate destination.

Kanban

Routing information may be specified for inclusion on customer's Kanban ship labels: facility/dock, location build area, part description, first delivery location, empty container location, beginning Kanban serial, ending Kanban serial, and pickup date/time.

Manufacturer Code

EDI Cross Referencing to Supplier Org ID.

Pool Point Location

The specific shipping location (such as pool point or airport) corresponding to the shipping location qualifier, as sent by the customer on the TD5 segment.

Purchase Order Date

Customer specified effectivity date of purchase order number included on schedule.

Purchase Order Line Number

Customer purchase order line number included on schedule.

Release Number

Customer purchase order Release number included on schedule.

Returnable Container Part Number

Returnable container specified by customer for item shipment.

Supplier code

Supplier code as specified by the customer on the schedule.

Supplier Item Number

Supplier item number specified by customer.

Supplier Ship-From code

Customer specified ship from organization code external value.

Customer Ultimate Destination Code

External ship-to address cross reference.

Additional Information

All error, warning, and informational messages are written to a log file and are also inserted into Oracle Release Management Exceptions table.

A debug file is generated to give additional information. The debug file can be used if problems or issues are encountered while running upgrade. Naming conventions for these files are as follows:

- Log File: rlmupg_N.log

- Debug File: rlmdebug_upg_N

  where N is Oracle Session ID (a unique number generated for each Oracle session). These files will be created under the directory specified by the profile ECE_OUT_FILE_PATH. (If this profile is not set correctly, then debug and log files will not be created.)

When the upgrade runs successfully, a message is printed indicating file names and their locations. This message is displayed as follows:

- Debug Information is written to /sqlcom/outbound/rlmdebug_upg_287432. Please check the log file /sqlcom/outbound/rlmupg_287432.log for upgrade messages.

- RLM Upgrade completed, see the messages listed above, if any, or check the log file for more information.

- This message can be found in log files generated while running adpatch (typically, log files of one of the workers,adwork*.log)

If upgrade terminates with an error, it will end with the following message:

- *FAILED: file RLMSTUPG.sql on worker 1 for product rlm username RLM.*

  This message will appear on the screen as well as in the file adpatch.log

  If you examine the worker log file (which is adwork01.log, in this example), it will contain a message similar to this:

  declare

  *

  ERROR at line 1:

  ORA-06501: PL/SQL: program error

  ORA-06512: at line 233

  > **Note:** If upgrade fails, a message indicating debug and log file names is not generated, even though the upgrade has generated these files with messages and information pertaining to the upgrade failure. Therefore, you must go to the directory mentioned in the profile ECE_OUT_FILE_PATH and check the latest files generated with the conventions as mentioned above.

Whenever upgrade fails, ADPATCH will halt and can be restarted after resolving the problem.

If any of the validations on file elements fail, the upgrade is stopped with failure. This enables you to correct errors and restart the upgrade from where it stopped.

The Upgrade will try to find all possible errors with any of the file elements before stopping with failure.

Defaulting rule: If any of the file elements are Null, the Upgrade will try to default the values from higher-level terms, if applicable, for example if CUM management type is not specified for Ship-to level record, it attempts to default it from customer level record.

Lower level terms are not upgraded/inserted if higher level terms were not upgraded.

Upgrade is re-runable. It will try to update already upgraded records provided that they have not been changed by end users.

The Upgrade will generate a summary message indicating the following:

- Number of setup records for which errors were encountered

- Number of setup records for which warnings were encountered

- Number of customer level setup records upgraded successfully

- Number of address level setup records upgraded successfully
- Number of customer item level setup records upgraded successfully

There are similar summary messages for Demand Upgrade and CARaS turnaround data upgrade.

Demand upgrade will not upgrade demand lines if the value for any of the mandatory columns (as per R11*i* data model) are null.

B

Viewing and Managing Demand

This appendix covers the following topics:

- Overview
- Business Flow

Overview

Viewing And Managing Demand

The focus of this chapter is viewing and managing demand using Oracle Release Management forms and reports.

Oracle Release Management is part of the Oracle integrated supply chain management solution. Release Management provides the tools needed by the supplier to manage the customer's material demand for manufacturers of subassemblies, components, and parts through the entire process flow from planning through shipping.

The Release Management process includes:

- Receiving demand schedules electronically from the customer
- Viewing and managing demand schedules at various processing states
- Processing demand through ordering and manufacturing
- Viewing and managing the orders resulting from the demand schedules
- Shipping the product
- Communicating demand fulfillment to the customer

Demand management tools related to viewing and managing demand enable the supplier to deal effectively and efficiently with both the demand schedules and the netted demand in the Sales Order and Forecast applications. Forms and reports provide visibility to individual archived demand schedules and the resulting order lines after the Demand Processor nets new schedules with the existing current demand picture.

Business Flow

The process of viewing and managing demand is an ongoing cycle with the following recurring general phases:

- Monitor Ahead/Behind status

- Examine new demand schedules

- Analyze and respond to firm demand

- Analyze and respond to forecast demand

Within these phases, certain customer environments require special handling, for example, when the customer issues demand requirements with Kanban pull signals, bar code labeling information, or Production Sequencing attributes.

Phases of Managing Demand

Using Release Management Tools for Viewing and Managing Demand

This section describes the general tasks involved in each phase of the ongoing cycle of viewing and managing demand, and describes specific actions the user can take using Oracle Release Management forms and reports.

Monitor Ahead/Behind Status

Internal vs. External Ahead/Behind Status

Ahead/Behind Status of the scheduled item can be either Internal or External:

- Internal Ahead/Behind Status is calculated by the supplier based upon the system date in context of the scheduled and actual shipment dates of firm sales order lines; it reflects all in-transit shipments.

- External Ahead/Behind Status is calculated by the customer and indicated on the demand schedule as either demand quantities with a detail type of Past Due Demand, or Shipped/Received information labeled Ahead/Behind Status; it may not reflect all in-transit shipments.

Monitor Internal Ahead/Behind Status - Release Management Workbench

You can monitor Internal Ahead/Behind status of customer items using the Release Management Workbench. Internal Ahead/Behind quantities are dynamically calculated and displayed in the Horizontal Demand window using the Ordered Quantity, Shipped Quantity, and Open Quantity for the date ranges that you specify.

Monitor External Ahead/Behind Status - Release Management Workbench

You can monitor External Ahead/Behind status of customer items using the Release Management Workbench to view the Horizontal Schedule window.

Monitor Internal Ahead/Behind Status - Demand Status Inquiry Report

You can monitor Behind status of a customer items using options of the Demand Status Inquiry Report to identify Immediate and Past Due Demand exceptions. Specify the following options and parameter values on the Standard Report Submission form:

- On the Firm/Forecast Indicator field, select Firm

- On the Shipped, Unshipped, or Both Field, select Unshipped Only

- On the Include Canceled Lines Field, select No

- To identify Immediate Demand that should be shipped today, enter the system date in both the From Requirements Date and To Requirements Date fields

- To identify Past Due Demand that should have been shipped before today, enter a date earlier than yesterday's date in the From Requirements Date field and yesterday's date in the To Requirements Date field

- Use other parameters to further tailor the report to your needs

Monitor External Ahead/Behind Status - Net Change Report

You can monitor External Behind status of customer items using the Net Change Report to compare a Trading Partner's most recent and second most recent schedules of the same type.

Examine New Demand Schedules

Interface Schedules versus Archived Schedules

Interface schedules are temporary transactions to be processed through the Demand Processor. Interface schedules are purged from the interface when processing is completed.

Archived schedules are copies of the interface schedules made after successful validation of the schedule data, but before schedule data is manipulated using the Release Management Processing Rules. Archived schedules provide a history and audit trail of Demand Processor activity.

Both interface and archived schedules can be viewed with the Release Management Workbench. The processing status of the header and lines determine which tables the schedule is being displayed from:

- Unprocessed schedules are only in the interface

- Partially processed schedules have archived header and archived processed lines; the entire schedule including the unprocessed lines remain in the interface until fully processed

- Fully processed schedules are archived; they are purged from the interface when processing is completed

Schedule versus Schedule Item Processing

Before a customer schedule can update the sales order and planning systems, it must be validated, archived, and processed by the Demand Processor.

The entire schedule does not need to pass validation to have any further processing; the Demand Processor applies following rules after validation to determine eligibility for further processing:

- If a schedule header has a fatal error, no schedule lines will be processed

- If a schedule header does not have a fatal error, schedule line details associated with a particular schedule item pass or fail validation as a group. If some of the line rows belonging to a particular schedule item have fatal errors, then all rows belonging to the schedule item are set to error status, with no further processing done on them until the errors are corrected

A schedule item is defined as:

- One LIN loop in an 830 or 862 (usually an item/Ship-From/Ship-To combination, but may be subdivided further into requirements for a particular purchase order, model year, item revision, or other Trading Partner specific attributes which are used

to separate item entities in the customer's system for issuing requirements and calculating cumulative quantities)

- One configuration in an 866 (what determines a configuration is dependent on several factors: the structure of 866 used, what product identification attributes the customer sends on the transaction, such as job, job sequence, VIN, order, use of SLN segment within LIN, etc.)

Monitoring Demand Processor Activity

Two important fields enable the user to determine when Demand Processor activity took place and to distinguish between schedules that are processed, unprocessed, or in a suspended state because they contain validation errors which are preventing processing completion. These fields are maintained at two levels, for schedule headers and corresponding schedule lines:

1. Processed Date

2. Processed Status

> **Note:** The Release Management Workbench can also display customer demand schedule transactions *before* they have been validated, archived, and processed by the Demand Processor. The schedule status and processing time stamp enable the user to distinguish processed schedules from unprocessed ones.
>
> For a discussion about using features of the Workbench to view and correct interface schedule transactions which have not yet been archived, see Overview of Oracle e-Commerce Gateway for Inbound EDI Demand and *Oracle Release Management User's Guide.*

Processed Date

Processed Date indicates the most recent date and time when the Demand Processor activity corresponding to the Processed Status took place. It is maintained at two levels, for schedule headers and each corresponding schedule line. You track the flow of error correction processing using Processed Date.

Processed Status

Processed Status indicates how far the schedule has progressed in the processing steps done by the Demand Processor. It is maintained at two levels, for schedule headers and each corresponding schedule line.

Schedule lines are grouped by schedule item. A schedule may pass or fail validation item by item, as long the header does not have fatal errors. If some of the lines belonging to a particular schedule item have fatal errors, all rows belonging to that schedule item fail validation, and no further processing is done on them until the errors are corrected.

Header Level Processed Status

The Processed Status of a schedule header reflects the status the entire schedule. Schedule Header Processed Status can have any of the following values:

Available To Process

Indicates the schedule has not yet been validated, archived, or managed through the Demand Processor.

In Process

Indicates the schedule has not yet been completely processed through the Demand Processor, and should not be viewed.

Processed with Error

Indicates the schedule has been validated and has fatal errors that prevented any further processing of the header or any corresponding lines through the Demand Processor. This schedule did not update the netted demand.

Processed Successfully

Indicates the schedule and all its corresponding lines have been completely and successfully processed through the Demand Processor and have updated the netted demand.

Partially Processed with Errors

Indicates the schedule has some lines that were fully processed and some that did not. Check the status of the corresponding lines.

Line Level Processed Status

The Processed Status of a schedule line reflects the status that line only, and is the same for all lines associated with the same schedule item. Line Processed Status can have any of the following values:

Available to Process

Indicates the schedule line has not yet been validated, archived, or managed through the Demand Processor.

In Process

Indicates the schedule line has not yet been completely processed through the Demand Processor, and should not be viewed.

Processed with Error

Indicates the schedule line has been validated and at least one schedule line in the schedule item group has fatal errors which prevented any further processing of the schedule item group through the Demand Processor. This schedule item group did not update the netted demand, but it is possible that other schedule item groups on this schedule were completely processed.

Processed Successfully

Indicates all its lines in the schedule item group have been completely and successfully processed through the Demand Processor and have updated the netted demand.

Using the Release Management Workbench

Viewing Schedules in Release Management Workbench

The Release Management Workbench contains powerful query tools to help you quickly find your demand schedules.

Queries

You can use a variety of query criteria to retrieve both regularly issued and special interim schedules. For example, to find all schedules generated today for a particular customer, select the customer and enter the system date in the Generation Date From

field, then execute the query. From the schedule header information displayed in the Schedule Summary window, you can select the desired schedules and view their details.

The following pre-seeded queries are provided:

- This week's planning, shipping, or sequenced schedules
- Today's planning, shipping, or sequenced schedules

Saved Queries

You can also save queries to facilitate the retrieval of schedules in your responsibility. If the saved query contains date ranges, you may need to adjust the dates before executing it. You could create saved queries for such schedule groupings as:

- The newest planning, shipping, or sequenced schedule for a particular customer, ship to location, and organization
- All schedule types for a particular customer, ship to location, and organization
- All schedules with a particular status (e.g. Processed with Error, Available to Process)

Horizontal Schedule

The Release Management Workbench can display the demand schedule for a Ship From/Ship To/Customer Item in a horizontal format. Status, bucket type, and date group demand. Cumulative demand quantities and cumulative shipped quantities are calculated. Customer cumulative received quantity and information concerning the last shipments received are displayed if they were included in the schedule.

Horizontal Demand

The Release Management Workbench can display the current netted demand for a Ship From/Ship To/Customer Item in a horizontal format. In contrast to the Horizontal Schedule window, status, bucket type, and date group Demand. Cumulative demand quantities, cumulative shipped quantities, and Ahead/Behind quantities are calculated. Current supplier CUM Management information is also provided.

Visibility of Release Management Exceptions

The Release Management Workbench can display information about exceptions that were generated during the most recent run of Demand Processor for the schedule if any are on file. Exceptions identify warnings and errors. When an interface schedule has an error status, data may be corrected in the Workbench and resubmitted to the Demand Processor.

Visibility of Current Demand Picture

Firm and Forecast demand from Planning, Shipping, and Sequenced Production schedules are netted into Oracle Sales Orders by the Release Management Demand Processor.

The current demand picture for each of Ship-From/Ship-To business entity will be visible to the user via the Release Management Workbench. The current ahead/behind situation will be visible in the horizontal demand picture.

Visibility of Shipment History

Shipments of the item to the customer destination will be visible in the Release Management Workbench. Additional sequencing or Kanban detail information will also be shown, such as job and job sequence number, vehicle identification, pull signal number, etc.

Container Label Information on Schedule

If your customer includes container label information on schedules, you may view it by using the Packing tab on the Non-Sequenced window.

This information may be extracted from the archived schedule and directed to a third party bar code software application using a custom consulting solution.

Easy Access to Information on Related Forms

The Release Management Workbench provides easy access to additional forms that are related to Release Management. Tools Menu links are established to the following forms:

- Release Management Processing Rules

- CUM Workbench

- Workflow Monitor

- Workflow Status

Managing CUMs

Visibility of Supply CUM

The CUM Management Workbench in Oracle Release Management displays the shipment transactions and adjustments that make up an item's CUM. A complete history of all the CUM Keys for the customer item can also be viewed in this form.

Oracle Release Management gives you the ability to inactivate CUM keys on the Cum Workbench. This allows you to inactivate CUM keys that were created in error, and to inactivate CUM keys you no longer need. If shipment or adjustment transactions exist for the CUM key, before inactivating the CUM key, the system will issue a warning, and ask for verification that you still want to inactivate this CUM key.

Inactive CUM keys are not considered for:

- CUM processing by Demand Processor

- CUM key adjustment program

- CUM calculation at Ship Confirm

The Demand Status Inquiry Report displays CUM information for the customer item enabled for CUM Management.

Visibility of Authorization History

Material authorization information from archived customer planning schedules for Ship-From/Ship-To/Customer Items will be visible in the Release Management Workbench.

If the customer is tracking CUMs, the high authorization watermark will be identified from the archived schedules. This is the quantity representing the single highest authorization level for each authorization type for the CUM period.

CUM Reconciliation When CUM Discrepancy is Detected

If the customer has CUM Management enabled, you will need to synchronize the customer and supplier cumulative quantities. Ensure that Release Management Processing Rules have been accurately defined. The Demand Processor facilitates CUM synchronization by issuing a warning whenever it detects that the customer and supplier CUM do not match.

You can identify CUM Discrepancies in two ways:

1. View Exceptions associated with any schedule using the Release Management Workbench and look for CUM Discrepancy warnings

2. Define a message category for CUM discrepancy message and print the Release Management Exception Report by selecting the category from the list of values for the parameter Message Category. You can identify CUM Discrepancies for many schedules at the same time using a parameter to limit the report to a single exception message type. CUM Discrepancy exceptions are available for reporting until they are purged.

> **Note:** You can optionally customize the Demand Management Workflow to issue an alert to the planner for the customer item when a CUM Discrepancy exception is issued.

When a CUM Discrepancy is detected, you can reconcile the customer and supplier cumulative quantities using the following procedure:

1. Calculate the difference between the customer and supplier cumulative quantities noted in the CUM Discrepancy exception.

2. Query the schedule triggering the CUM Discrepancy warning using the Release Management Workbench and examine the schedule detail lines of CUM and last shipments recognized by the customer by clicking Non-Sequenced View and selecting the Ship From/Ship To/Customer Item combination that triggered the CUM Discrepancy warning.

3. Open the Shipments window and compare the shipments noted by the customer on the schedule with actual shipments which updated the CUM.

4. Determine if in-transit shipments exist by evaluating the schedule generation date in context of the estimated arrival time of the most recent shipments; determine if these in-transit shipments account for the difference.

5. If in-transit shipments do not account for the difference, determine if the customer has indicated quantity received discrepancies by examining the details of EDI Receiving Advice transactions or verbal communication; determine if these quantity received discrepancies account for the difference; if needed, make a manual CUM Adjustment using the CUM Management Workbench.

6. If the CUM Discrepancy still cannot be explained, ask the customer to provide a report of shipment history for this item for evaluation.

Using Release Management Reports

Oracle Release Management provides six reports to facilitate demand management, that supplement the standard Oracle Order Management reports:

Demand Status Inquiry Report

The Demand Status Inquiry Report gives the current status of all sales order lines that reflect the demand from all applicable planning, shipping, and sequenced schedules from the Trading Partner that have been processed by the Demand Processor. You will be able to report for specific exception conditions using flexible selection parameters.

Net Change Report

The Net Change report compares two archived demand schedules of the same type from the same customer, and identifies the differences between them, such as demand date and quantity, cumulative quantities, authorizations, and shipment information. You will be able to tailor a report for specific exception conditions using flexible selection parameters

Release Management Exceptions Report

The Release Management Exceptions Report provides a listing of error and warning exceptions generated during the execution of the Demand Processor. You will be able to:

- Print exceptions which were generated during processing within the Demand Processor automatically after the processing has completed

- Print exceptions independently of the Demand Processor until the exceptions are purged

- Optionally suppress printing of lower levels of exceptions (warnings and information)

- Use Message Categories to specify certain types of messages to see in a specific execution of the report

- Tailor a report for specific exception conditions using flexible selection parameters

Compare Status to Demand Report

This report provides you with a reporting tool to facilitate comparison of Processed and Partially Processed Schedule to the Sales Order demand.

This report compares the requested quantity of an item in the Processed Schedule to the quantity that was interfaced into the Sales Order for the given requested date.

The Sales Order lines reflect the demand for an item for a given Schedule processed by the Demand Processor. The discrepancy between the item quantity in the given Processed Schedule and the quantity that was interfaced into the Sales Order may be due to:

- Applicable Schedule Type, Horizon, and Purpose Code

- Applicable Frozen, Firm, and Forecast Time Fences

- Applicable Shipment/Delivery Codes

- In Transit time

- Report for specific exception conditions using flexible selection parameters

Schedule / Release Report

The Schedule / Release Report presents schedule information similar to how it is displayed on the Release Management Workbench.

The report should be similar to what is presented on the RLM Workbench. Given the size of some of the schedules, this will facilitate the reconciliation process.

- Report for specific exception conditions using flexible selection parameters

Analyze and Respond to Firm Demand

Ability to Modify Current Demand Picture

Provided the user has security to modify sales orders, the dates and quantities on current sales order demand may be directly modified via the Release Management Workbench, without the time-consuming process of manually entering a customer material release transaction and launching the Release Management Demand Processor.

Using the Optional Frozen Fence

If you have established optional Frozen Fences for demand management in the Release Management Processing Rules, demand within the Frozen Fence may not accurately reflect immediate demand requirements of the customer. However, they will be visible on the archived schedule with the customer-specified status before the fence was applied. Any increase in requirements requested by the customer within the Frozen Fence will be automatically applied to the first sales order line outside of the Frozen Fence.

You should examine the Demand Processor Frozen Fence Exceptions for the most recent schedule, and determine the desired course of action for the unprocessed changes. For example, you can manually change the scheduled shipment date on the sales order lines via the Demand window of the Release Management Workbench, or select sales order lines for early shipment. If this type of intervention becomes frequently necessary, you may want to consider shortening the duration of the Frozen Fence or eliminating it.

Using the Optional Firm Fence

If you have established optional Firm Fences for demand management in the Release Management Processing Rules, the demand within the fence date range will be updated to the Sales Order. The status of the demand on the schedule will be overridden to be Authorized to Ship (ATS), and eligible for all Order Management processing through shipment and invoicing. They will be visible on the archived schedule with the customer-specified status before the fence was applied.

Evaluate Current Demand

You can examine the current demand picture that has been netted from all applicable planning, shipping, and sequenced schedules from the Trading Partner using either the Release Management Workbench or the Status Inquiry report.

In the Release Management Workbench, demand can be presented in either of two formats; a listing of the individual sales order lines, or a horizontal bucketed representation of the individual sales order lines. You can switch between the two formats using the **Demand** and **Horizontal Demand** buttons after selecting any Ship From/Ship To/Customer Item on a schedule.

You can use the following tools to evaluate the current demand picture from sales order lines:

• Open the **Demand** window in the Release Management Workbench to view a listing of all sales order lines for the selected Ship From/Ship To/Customer Item. Note that if your cursor is on the schedule line detail section of the form, you will be taken to the exact sales order line that is linked to the schedule line. If your cursor is on the ship from/ship to/customer item section of the form, all sales order lines for that combination will be displayed.

- Open the **Horizontal Demand** window in the Release Management Workbench to view a horizontal bucketed representation of all sales order lines for the selected Ship From/Ship To/Customer Item

- Print the **Demand Status Inquiry Report** with the option **Summarize By Date and Bucket** set to **No** to obtain a listing of all sales order lines for the selected Ship From/Ship To/Customer Item

- Print the **Demand Status Inquiry Report** with the option **Summarize By Date and Bucket** set to **Yes** to obtain a summary listing by date similar to the bucket contents in the Horizontal Demand window

Evaluate Changes from Previous Schedule

Once the new schedule has been archived and processed, you can compare it to customer's previous schedule to identify changes the customer has made to the demand picture, such as items included on the schedule, demand dates and quantities, cumulative quantities, authorizations, and shipment information changes.

You can evaluate changes from a previous schedule in two ways:

1. View both schedules using the Release Management Workbench looking for differences between their contents

2. Print the Net Change report

Fine Tuning Demand Tolerances

Oracle Release Management enables you to define positive and negative demand tolerance percentages that are in context of the Supplier/Customer relationship. For example, you can define specific demand tolerance percentages for all customer items shipped to particular destination from a specific supplier plant.

Release Management Demand Tolerances can be defined at any setup level: Ship From/Customer, Ship From/Customer Item, Ship From/Ship To, Ship From/Ship To/Customer Item. The order of precedence for Demand Processor processing attributes is:

- RLM Ship From/Ship To/Customer Item Rules

- RLM Ship From/Address Rules

- RLM Ship From/Customer Item Rules

- RLM Ship From/Customer Rules

Plan Shipments

You can view the Horizontal Demand for any Ship From/Ship To/Customer Item to see the summarized daily quantity of individual Sales Order Lines. This is useful when planning shipments, if multiple.

Fine Tune Release Management Processing Rules

As you analyze and respond to updated demand, you can identify situations where Release Management Processing Rules can be fine-tuned to improve the efficiency and accuracy of the Demand Management process. For example, if you have a new purchase order with the customer or address that will go into effect in the future, you can set it up on the Processing Rules form as a Future Effective Pricing Agreement. The Demand

Processor will interrogate this Pricing Contract to see when it goes into effect, and start using it automatically at that time.

Analyze and Respond to Forecast Demand

Using the Optional Forecast Fences

The archived schedule contains demand with the customer-specified status. The interface schedule is then updated according to the Forecast Fences processing rules setup.

If you have established optional OM or MRP Forecast Fences for demand management in the Release Management Processing Rules, and a customer demand dated *within* the Forecast Fence(s), the Demand Processor will be updated to the Order Management or MRP Planning as specified. However, for demand dated *after* the Forecast Fence(s), the Demand Processor will drop those demand lines; they are not updated to the Order Management or MRP Planning.

OM Forecast Fence

If you have established optional OM Forecast Fences for demand management in the Release Management Processing Rules, the demand within the fence date range will be updated to the sales order. The status of the demand on the schedule within the fence date range will be overridden to be Not Authorized to Ship (NATS), not eligible for any Order Management processing related to shipment.

Demand is matched using Matching Attributes on a line by line basis.

MRP Forecast Fence

If you have established optional MRP Forecast Fences for demand management in the Release Management Processing Rules, the demand within the fence date range will be updated to Oracle Advanced Planning and Scheduling.

Demand is not matched using Matching Attributes on a line by line basis because Oracle Advanced Planning and Scheduling does not support the same attributes into MRP as does Order Management.

MRP supports a replacement at the item level based on Forecast Designator for the Customer/Ship To combination; therefore, the schedule horizon dates are not considered.

There are three types of MRP Planning updates based on the schedule purpose code:

1. Schedule Purpose = Add - new lines will be added to the forecast designator specified on each individual line.

2. Schedule Purpose = Delete/Cancel - delete all records for the inventory item within the forecast designator.

3. Schedule Purpose = Replace/Change/Original - replace all records for the inventory item within the forecast designator

If you have established optional MRP Forecast Fences, Forecast Designators must be carefully defined with the Customer/Ship To/Bill To or Customer/Ship To or Customer. The Demand Processor generates a Fatal Error if no Forecast Designator is found, or if Multiple Designators are found for the same Customer/Ship to Combination.

Sequenced Demand

Display on Release Management Workbench

The Production Sequence transaction set can provide the receiver of goods a method to request the order in which shipments of goods arrive, or to specify the order in which the goods are to be unloaded from the conveyance method, or both. This specifies the sequence in which the goods are to enter the materials handling process, or are to be consumed in the production process, or both. Dates are always discrete, never bucketed, therefore the schedule line data for a Production Sequence schedule is different on the Release Management Workbench. For a Production Sequence line, Organization, Ship To, and Date group the schedule lines. The left portion of the window lists Ship From/Ship To/Dates included on the schedule. The right portion of the window displays corresponding schedule lines information and lines for the current Ship From/Ship To/Date, displayed in Production Sequence Number order, rather than being grouped by Item, as is the display for non-sequenced schedules.

Demand Matching Logic

The customer with a Production Sequenced environment may issue planning schedules that are less specific than the Production Sequence schedule. For example, the planning schedule may simply identify the Customer Item, but the Production Sequence schedule may identify the Customer Item, Vehicle ID, Production Sequence Number, Job Number, Receiving Dock, and Production Line.

Demand Matching Logic must be defined accurately for Matching Within Schedule Types and Matching Across Schedule Types for changes to demand in subsequent Production Sequence schedule to be reflected, and for the planning schedule to be consumed by the Production Sequence schedule.

Kanban Demand

Frequent Pull Signal Shipping Schedules

There may be little time to respond to frequently issued shipping schedules containing pull signals in a high volume Just-In-Time (JIT) customer production environment. Therefore, you must respond immediately if errors are detected by the Demand Processor when a pull signal schedule is being processed, so that the new demand can be updated to the sales orders and quickly prepared for shipment.

You can optionally customize the Demand Management Workflow to issue an alert to an appropriate employee if errors are detected on pull signal schedules.

Viewing Kanban Information

Oracle Release Management stores kanban related information in the Pull Signal Reference, Pull Signal Starting Number, and Pull Signal Ending Number fields. These fields are visible on both the archived schedule and the resulting sales order line. The Release Workbench displays this data on the References tab on the Lines window. The sales order displays this data under the Industry Attributes, in the Other tab on the Lines window. This data can be extracted by third party bar code software to print kanban labels, if required by the customer.

Schedule Purge

To purge unnecessary archived schedules from the system, use the Release Management Purge Schedule process. Information about this process is in the *Oracle Release Management User's Guide*, Reports and Processes.

C

Oracle Release Management Exceptions

This appendix covers the following topics:

- Overview
- Business Flow
- Managing Oracle Release Management Exceptions

Overview

The Oracle Release Management Demand Processor is an Oracle Open Interface that provides complete defaulting, derivation, and validation for inbound demand schedules regardless of their source. The Oracle Release Management Demand Processor can process customer demand schedules from diverse sources including:

- EDI planning, shipping, and production sequence schedules processed through the Oracle e-Commerce Gateway
- XML planning and shipping schedules processed through the Oracle XML Gateway
- Manually entered schedules via Oracle Release Management Workbench
- External system schedules loaded into the Demand Processor Interface via a custom process

This appendix addresses exceptions that occur during the processing of demand interface files by Oracle Release Management, and the features provided for handling them. The Demand Processor screens incoming demand files and the existing Oracle setup for many different exception conditions that generate error and warning messages. While the messages themselves provide sufficient information for resolving the exception conditions, this chapter provides an expanded discussion of exception processing.

See Overview of Oracle Release Management Demand Processor, *Oracle Release Management User's Guide*.

Related Topics

Overview of Oracle e-Commerce Gateway for Inbound EDI Demand, page 3-1

Business Flow

Oracle Release Management exceptions are generated at the end of the inbound demand processing flow. During this process, exception conditions are checked with resulting exception messages stored in the database. If problems exist during

demand processing, then a separate concurrent request will generate the Oracle Release Management Exceptions Report. This report will generate only if exceptions exist and will contain information needed to resolve error conditions. Warning messages will also print but will not prevent processing. If no exception conditions exist, the Oracle Release Management Exceptions Report will not generate.

The following figure displays how exceptions are generated from the inbound demand processing:

Oracle Release Management Inbound Demand EDI Processing

Managing Oracle Release Management Exceptions

This section addresses the aspects of managing Oracle Release Management Exceptions. Exception handling features can be divided into the following general areas:

- Generating Exceptions, page C-2

- Reporting Exceptions, page C-3

- Message Categories, page C-3

- Viewing Exceptions, page C-4

- Responding to Exceptions, page C-4

Generating Exceptions

Exception Severity Levels

The Oracle Release Management Demand Processor verifies inbound demand files against the data setup in the Oracle system and generates exceptions at three levels of severity:

- Information: Information messages are not caused by any exception condition, but are useful for schedule interpretation. They do not affect the demand processing.

- Warning: Warnings are caused by minimal exception conditions and are informational only. They do not affect the demand processing. However, if a warning condition arises, you might need to take subsequent action before shipping.

- Error: Errors halt demand processing for the associated schedule as a whole, or for all details related to the associated schedule item depending on whether the error is encountered at the schedule header or line level. If an error condition arises, you must resolve the data issues causing the error using the Oracle Release Management Workbench or another application form, and rerun the Demand Processor on the corrected schedule.

- Exception Message Numbers: All exceptions that can be generated by the Demand Processor are identified in the Applications Messages table, and are assigned a standard number in the format APP-nnnnn. The message number range assigned to Oracle Release Management is 226001 - 226999.

- Exception Data Attributes: Exception messages are stored with a common set of data attributes for use in resolving the issue.

When message text does not contain enough information to resolve the issue, data elements will be embedded in the message.

The Oracle Release Management Exception Report can be customized to include several extra data elements stored in the exception table.

- Occurrences of a Specific Exception: In some cases, exceptions recur on multiple schedule lines that have the same attribute that triggered the exception.

  For example, a set of twelve demand details for a ship from / ship to customer item all have the same invalid unit of measure. In this case, only one exception will be generated for the invalid unit of measure, rather than twelve exceptions.

- Old Exceptions When Reprocessing a Schedule: When a schedule is reprocessed by the Demand Processor after fatal errors are corrected, exception messages generated by the previous run of the Demand Processor are purged.

Reporting Exceptions

- Real Time Report Generation: The Oracle Release Management Exception report is generated immediately following the demand processing, if warning(s) or error(s) were generated during processing. Depending on the process default settings, the system either prints the report or saves it in a specified directory.

  When printed as part of the Oracle Release Management report set, the report includes only those schedules that were processed in the assigned Request/Batch ID.

- On-Demand Report Generation: The Oracle Release Management Exception report can be printed independently of the Demand Processor via Standard Report Submission form. Report features include:

  - Flexible report parameters such as Request ID Range, External Customer Name, Trading Partner Range, External Trading Partner Location, External Customer Item Range, Inventory Item Range, Schedule Number Range, Message Category Range, Exception Severity, and Exception Generation Date Range

  - Optionally print exceptions independently of the Demand Processor using selection parameters

  - Optionally suppress printing of lower levels of exceptions (warnings and information)

  - Optionally print occurrences a specific message category or type

- Grouping and Sorting: The exception report groups and sorts messages. Grouping occurs at the request ID, customer, schedule, and schedule line level. Within this grouping, exceptions sort in ascending order by ID.

- Exception Severity Levels: Using the Severity Level selection parameter for the report, you can optionally suppress printing of lower levels of exceptions (warnings and information).

Message Categories

Message Categories are used to organize the messages on the Exception Report. There are six predefined Message Categories, and new Message Categories can be defined and assigned to exception messages as needed.

To define message categories:

1. Using the Application Developer responsibility, navigate to the Application Object Library Lookups form.

2. Query RLM_MESSAGE_CATEGORY Lookup Type.

3. Enter a new code and message.

   Define as many Message Categories as needed.

4. Using the Oracle Release Management responsibility, navigate to the Message Category form.

   On this form you will see all of the Oracle Release Management Exception Messages. Number is the exception number, Text is the text of the exception message and Message Category is the category currently assigned to the message. The following Message Categories are currently available:

   • Action messages

   • Default

   • Data related issue

   • Matching criteria related issue

   • Non-matching criteria related issue

   • Quantity changes

   • Newly defined message categories are also available in the list of values

Viewing Exceptions

The current exceptions associated with any schedule can be viewed in the Oracle Release Management Workbench. First, query the schedule. Then, either click Exceptions from the Schedule Summary window, or click the Exceptions check box in the Schedule Details window.

The Exceptions window will display all exceptions generated for this schedule in any execution of Demand Processor:

• Request ID identifies the batch of the concurrent process that included this schedule.

• Level indicates severity of the exception

• Message Name indicates the exception code

• Line ID associates the exception with the schedule header or a specific schedule line. If the Line ID column is not populated, the exception relates to the schedule header. If populated, the exception relates to the schedule line.

Responding to Exceptions

Oracle Release Management Exception Actions in e-Commerce Gateway

Some Oracle Release Management exceptions can be corrected by making changes in the Oracle e-Commerce Gateway, such as defining additional code conversions mapping external values used by the trading partner to valid internal values that already exist.

Once the Demand Processor Interface tables contain the schedule data, making changes in the Oracle e-Commerce Gateway to correct the data will not affect the interface

schedule because it is past the point where Oracle e-Commerce Gateway processing affects it.

If the schedule header status is Processed With Errors, the schedule must be corrected using the Oracle Release Management Workbench, because part of the schedule has been fully processed. The schedule cannot be reloaded into the Oracle e-Commerce Gateway from the flat file provided by the EDI Translator without risk of duplicating data in the Oracle Release Management and Oracle Order Management system.

If the schedule header status is Processed With Errors, the schedule can be corrected in either of two ways:

1. It can be corrected using the Oracle Release Management Workbench, and re-processed through the Demand Processor.

2. It can be deleted using the Oracle Release Management Workbench, reloaded into the Oracle e-Commerce Gateway from the flat file provided by the EDI Translator, and re-processed through the Oracle e-Commerce Gateway and Demand Processor after the changes in the Oracle e-Commerce Gateway are made, such as missing code conversions are defined.

Corrections of Internal versus External Values

Several data elements have an external value from the EDI schedule and a corresponding internal value or ID that is derived by code conversion or table lookups.

Make corrections to the corresponding internal value when you are correcting a schedule using the Oracle Release Management Workbench. When the attribute has an Oracle e-Commerce Gateway code conversion, changing the external value will not correct the Demand Processor exception, because code conversions are not performed in the Demand Processor.

The following attributes have Oracle e-Commerce Gateway code conversions:

- RLM_SHP_DEL_CODE
- RLM_SCHEDULE_TYPE
- RLM_ITEM_DETAIL_TYPE
- RLM_ITEM_DETAIL_SUBTYPE
- RLM_DATE_TYPE
- RLM_QTY_TYPE
- RLM_TRX_PURP
- UOM

Demand Validation Process

The Demand Processor attempts to completely validate a schedule, and continues to validate as much as possible even after a fatal error is detected. However, some validations are dependent upon successful validation of related data. For example, if the customer ID cannot be identified, then the default Oracle Release Management Processing Rules cannot be identified either. Even though this fatal error is at the schedule header level, schedule lines will still be validated for anything that is not dependent upon the customer ID.

Therefore, responding to exceptions can become an iterative process, involving correction and reprocessing of the schedule several times before all exceptions are discovered and resolved.

Process Halting

To find as many errors as possible on the schedule in one processing run, Defaulting, Derivation, and Validation routines continue even when fatal errors are detected.

If any fatal errors occur, halting occurs after the Defaulting, Derivation, and Validation routines have completed. The Halting Level of the Demand Processor is the Ship From/Ship To/Customer Item, also known as Schedule Item.

- Fatal errors at the schedule header level halt processing for the entire schedule.

- Fatal errors at the schedule line level halt processing for all schedule lines related to the Ship From/Ship To/Customer Item associated with the fatal error.

- Scheduled items without fatal errors will be archived and processed *only* if the schedule header had no fatal errors

Depending on the specific exception, corrections may need to be made either to the schedule using the Oracle Release Management Workbench or to the setup data using a particular application form.

Order Management Process Order Exception Actions

When the Order Management Process Order API returns an error or warning message to the Demand Processor, that error or warning will be included in the Oracle Release Management Exception Report. The actions for these warnings or errors are generally within the Oracle Order Management responsibility, relating to the sales order or Oracle Order Management setup. Review the error or warning message to determine what action should be taken. The messages commonly encountered are related to price lists, processing constraints, etc.

Using the Oracle Order Management profile option OM: Debug Level, more details on the errors or exceptions encountered by the Process Order API are passed to the Demand Processor and can be viewed in the request log of the Demand Processor request.

> **Note:** Manually entered processing constraints can effect the ability of the Demand Processor to insert, delete, or update lines on a sales order. Use caution when adding processing constraints in the Oracle Order Management responsibility.

D

CUM Management

This appendix covers the following topics:

- Overview
- Business Flow
- Using CUM Management
- Special Considerations

Overview

This appendix addresses the needs for managing and using CUM accounting rules within Oracle Release Management. Although CUM Accounting is not done in many manufacturing environments, it is essential to the automotive industry, which implements cumulative material releasing and material authorizations.

The CUM quantity is the basis for the supplier's cumulative scheduled quantity to which the customer expects shipment compliance. The customer's CUM quantity is included in planning and shipping schedules sent to the supplier, along with identification of the last receipt that updated the customer's CUM. From the customer's CUM, the supplier can accurately determine where they stand in terms of shipping to the scheduled CUM, by comparing their last shipment to the customer's last receipt.

CUM Quantity Example

Quantity Type	Month 1 Amount	Month 2 Amount	Month 3 Amount
Quantity Shipped	50	75	125
CUM Quantity Shipped	50	125	250

CUM Accounting within Oracle Release Management is intended to support the customer's CUM Management requirements. Internal supplier CUM management requirements (CUM by internal part number and CUM rejected) are not a feature of Oracle Release Management.

If CUM Accounting is enabled, CUM quantities are calculated according to the customer's rules, usually as the sum of:

- Qualified shipments or receipts dated within the defined CUM Period
- CUM Adjustment transactions dated within the defined CUM Period

CUM Accounting includes the following CUM management features:

- CUM Rules
- CUM Adjustments
- CUM Discrepancy Checking / Notification
- Processing Customer-Initiated CUM Adjustments

Customer Versus Supplier CUM Synchronization

If CUM Accounting is enabled, it is imperative that the customer and supplier CUM quantities remain in synchronization.

If the supplier is participating in electronic commerce with the customer, the integrity of the CUM can be automatically monitored by both the supplier and customer. On both sides, an investigation of the cause of the discrepancy can be done. An adjustment can be made where needed before the next shipment to the customer.

Supplier Side

If the customer's CUM is included in the inbound electronic planning schedule or shipping schedule, then the customer's CUM can be compared to the supplier's CUM based on the last shipment recognized. If the supplier detects a discrepancy when the demand transaction is processed, an in-house notification can be given.

Customer Side

If the supplier's CUM is included in outbound electronic Advance Ship Notices (ASNs), the customer compares it to his CUM when the ASN is received. If there is a discrepancy, the customer can generate an electronic Receiving Advice or Application Advice transaction to notify the supplier.

To facilitate CUM Accounting, Oracle Release Management supports following features:

- CUM Rules
- CUM Adjustments
- CUM Discrepancy Checking / Notification
- Processing Customer-Initiated CUM Adjustments

For each ship from/ship to/customer item under CUM control, CUM Management can be viewed:

- In the Release Management Workbench
- In the CUM Management Workbench
- In reports pertaining to the customer's release transactions or items

Business Flow

As a supplier, you define the CUM rules for each trading partner. These rules can be set at the ship from/customer level and the ship from/ship to level. An item can be enabled or disabled for CUM management.

Oracle Release Management enables you to inactivate CUM Keys on the CUM Workbench. This enables you to inactivate CUM Keys that were created in error and to

inactivate CUM Keys you no longer need. If shipment or adjustment transactions exist for the CUM Key, before inactivating the CUM Key, the system will issue a warning and ask for verification that you still want to inactivate this CUM Key.

Inactive CUM Keys are not considered for:

- CUM processing by Demand Processor
- CUM Key adjustment program
- CUM calculation at Ship Confirm

When customers send demand schedules that include CUM information, the Demand Processor will compare the CUM sent in the schedule by the customer with the supplier CUM that exists. A warning is generated if these CUMs do not match.

The Demand Processor converts cumulative quantities to discrete quantities based on Supplier CUM (formerly, based on Customer CUM) and interfaces the demand to Oracle Order Management. The archived schedule contains the customer's CUM and any authorization information sent on the schedule.

Upon shipment, the supplier CUM for the item under CUM management is updated, and the CUM information is sent on the Advanced Shipment Notice (ASN). The CUM history, including all shipments and CUM adjustment transactions, can be viewed on the CUM Workbench.

Tools exist that enable you to create a new CUM Key, either manually or automatically, and adjust previously shipped order lines with a new CUM Key.

> **Note:** By default, a new CUM Key has active status.

The following figure displays the CUM Management process in Oracle Release Management:

CUM Management Process Flow

Using CUM Management

Using CUM Management involves the following:

Define your customer's CUM rule, page D-3

Receive Inbound Schedules with Cumulative Requirements, page D-4

Demand Processor - CUM Management Processing, page D-4

Order Management/Shipping, page D-5

View and Maintain Supplier CUM, page D-6

CUM Reset, page D-8

Define your customer's CUM rule

Each customer can have a different way of calculating CUMs. The customer's CUM rule defines how to calculate the CUM for that customer so the supplier's CUM will be in synchronization. You set up the customer's CUM rule on the Release Management

Processing Rules Details form, CUM Management tab. The CUM rule consists of the following components:

- CUM Management Type: CUM By Date, CUM By Date/PO, CUM By Purchase Order, CUM By Date/Record Keeping Year

- CUM Org Level: Ship To/Ship From, Bill To/Ship From, Intermediate Ship To/Ship From, or Ship To/All Ship From

- Shipment Rule Code: As of Current, As of Prior Shipment, As of Yesterday

- Yesterday Time Cutoff: Only applicable with Shipment Rule Code set to As of Yesterday

All items associated with a Ship-From / Ship-To business entity relationship fall under the same CUM Management rules, however, you can enable a flag on the customer item if you don't want the CUM calculated for this customer item.

Receive Inbound Schedules with Cumulative Requirements

Oracle Release Management enables you to receive electronic demand from your customer. If your customer uses CUMs, the electronic demand may include your customer's current CUM for each item. This information is stored in the Release Management Schedule Archives for each schedule and is also used in the Demand Processor to report any discrepancies between your CUM and your customer's CUM.

The Oracle Release Management supplier CUM shipped is used in the demand processor to derive new and changed demand from your customer (formerly, the customer CUM received was used).

Demand Processor - CUM Management Processing

Automatic Adjustments to the customer's demand based on in-transit shipments

The Demand Processor compares your customer's last received shipment with the last shipment you sent them to determine if there are in-transit shipments that are not accounted for in the customer's CUM. If so, it will automatically adjust the incoming demand so that the in-transit shipment is accounted for.

If they send CUM quantities, the calculation of the discrete quantities is based upon the supplier CUM (which already incorporates intransit quantities).

CUM Discrepancy Check

As part of Demand Processor, the CUM that the customer sent for an item is compared to the calculated CUM that resides in the Oracle Applications, reflecting the shipments and CUM adjustments that make up supplier's CUM for the customer's item. If the CUMs are discrepant, the Demand Processor indicating the discrepancy generates a warning exception. You then use CUM Adjustments to correct your CUM or communicate the discrepancy to your customer for further investigation.

The Demand Processor also notifies of any change in CUM Key values detected in the inbound demand transaction based on the business entity's CUM Management rules, such as change of Cumulative Start Date, Record Year code, or Purchase Order. The Demand Processor will also issue a warning if the CUM Management Type is by Purchase Order Only or By Date and Purchase Order, and there is no PO on the inbound schedule

> **Note:** The Cum Discrepancy Check is performed by the Demand Processor only if the CUM Received information is transmitted by the customer on their schedule. Also, if there is not a corresponding CUM Key on file, CUM Discrepancy Check will not be performed.

Calculate discrete quantities using the supplier CUM shipped

If the customer has indicated their demand in terms of cumulative rather than discrete quantities, a discrete quantity will be calculated so that it can be imported into Oracle Order Management and Oracle Advanced Planning and Scheduling. The CUM to discrete calculation uses the supplier CUM shipped, existing on the CUM Key, to calculate the first discrete bucket.

Formerly, the Demand Processor used the CUM Shipped/Received records on the schedule, plus a calculation for in-transit quantities, to determine the first discrete bucket. With this change, the calculation is simplified, and does not depend on the customer sending CUM Shipped/Received information in the schedule, thereby ensuring a more accurate CUM to discrete calculation.

Order Management/Shipping

CUM Calculation on your shipments

For any items under CUM management, an API is executed after a shipment has been confirmed to calculate the CUM. This API assigns a CUM Key ID to each sales order line that was shipped, thereby enabling the item's CUM to be dynamically calculated for use by the Demand Processor and the CUM Management Workbench. It also calculates the supplier's YTD CUM, and updates the shipped order line with this information

CUM Calculation for CUM enabled items includes the following events:

- The CUM is calculated based on CUM Management and Shipment Inclusion Rules defined for the Ship-From/Ship-To business entity

- The calculated CUM is stored in an Oracle Order Management sales order line industry attribute 7 and referenced on shipping documents. It is also extracted onto Departure Ship Notice Outbound (DSNO) file for shipments

- The applicable CUM Key ID is assigned to each sales order line

- The CUM Key CUM quantity & the 'pending CUM' quantity are updated based on Shipment Inclusion Rules

CUM Calculation

CUM Calculation is performed when the CUM Discrepancy Check is performed in the Demand Processor and when reporting on shipment of customer demand after the correct CUM Key has been determined wherever CUM must be shown (Shipping documents and electronic ASN).

When the CUM Management style CUM By Date Only is enabled, the supplier CUM will be calculated according to the Shipment Inclusion Rules from shipments and CUM adjustments dated since the current Cumulative Start Date associated with the Customer Ship-To/Ship-From Terms relationship or the Ship From/Customer Item relationship

When the CUM Management style CUM By Date and Record Year is enabled, the supplier CUM is calculated according to the Shipment Inclusion Rules from

shipments, and CUM adjustments dated since the current Cumulative Start Date and referencing the same Record Year as the customer demand being shipped indicates.

When the CUM Management style CUM By Date and Purchase Order is enabled, the supplier CUM is calculated according to the Shipment Inclusion Rules from shipments, and CUM adjustments dated since the current Cumulative Start Date. The same Customer Purchase Order Number is referenced as the customer demand being shipped indicates.

When the CUM Management style CUM By Purchase Order Only is enabled, the supplier CUM is calculated according to the Shipment Inclusion Rules from shipments, and CUM adjustments associated with the same Customer Purchase Order Number as the customer demand being shipped indicates.

Adjustments are immediately included in the CUM quantity, regardless of the transaction date associated with them.

Shipment Inclusion Rules do not apply to CUM Adjustment transactions.

> **Note:** The Cumulative Start Date and Purchase Order Date is derived from the latest customer inbound schedule.

Automatic CUM Key creation

The CUM Key is not associated with sales order line demand until Ship Confirmation (i.e. it is not calculated by the Demand Processor, since attributes affecting the CUM Key could be modified before shipment). The Demand Processor does not create a new CUM Key, but it will issue a warning exception for this situation if the customer demand schedule includes CUM information.

If a new CUM Key is automatically created, the data required for the CUM management type is obtained from a combination of the sales order line and the archived schedule.

View and Maintain Supplier CUM

View item CUM information within Oracle Release Management forms and reports

The Release Management Workbench displays sales order information with the appropriate item CUM information. Also, the Demand reports and the Horizontal Demand window in the Release Management Workbench displays CUM information with future and historical visibility.

View CUM information for an item on the CUM Workbench

The CUM Management Workbench displays the shipment transactions and adjustments that make up an item's CUM. A complete history of all the CUM Keys for the customer item can also be viewed in this form, on the CUM Details window.

Oracle Release Management enables you to inactivate CUM Keys on the CUM Workbench. This enables you to inactivate CUM Keys that were created in error, and to inactivate CUM Keys you no longer need. If shipment or adjustment transactions exist for the CUM Key, before inactivating the CUM Key, the system will issue a warning, and will request verification that you still want to inactivate this CUM Key.

Inactive CUM Keys are not considered for the following:

- CUM processing by Demand Processor

- CUM Key adjustment program

- CUM calculation at Ship Confirm

Also, the Demand Status Inquiry Report displays CUM information for the customer item enabled for CUM Management.

Create a new CUM Key when the customer resets the CUM

Occasionally (usually annually), the customer might reset their CUM. When they do this the Demand Processor issues a warning exception stating that CUM Key relevant data changed on the latest incoming customer schedule. You may then choose to manually create a new CUM Key on the CUM Management Workbench form, on the Create CUM Keys window, or let the system create it automatically with the next shipment.

You can also inactivate CUM Keys on the CUM Keys Details window by clearing the Active flag and adding information in the Comments field.

Manual Versus Automated CUM Key Creation

To invoke an automated CUM Reset, you must create a new CUM Key. To do so, you must first either change the value of any of the CUM Key variables on the Processing Rules Setup form or process a new customer schedule with changed CUM Key data. Then a new CUM Key must be created either manually on the CUM Management Workbench form or automatically at the time of the next shipment.

For example, when the CUM start date is a factor and it has changed on the latest customer schedule, the Demand Processor will issue a warning and a new CUM Key will be created with the next shipment.

If you want to reset the CUM Key on previously shipped order lines, you must launch the concurrent program; Adjust CUM Transactions CUM Key ID. See: Optionally adjust the CUM Key identifier on shipment transactions, page D-8.

The following identifies what happens when the CUM is reset (when a new CUM Key is created) based on CUM Management Type:

- No CUM: CUM is not reset; CUM Key is never created.

- By Date Only: When the Current Cumulative Start Date is changed for the business entity relationship

- By Date and Record Year: When either of the following attributes are changed for the business entity relationship:

  - Current Cumulative Start Date

  - Current Record Year

- By Date and Purchase Order: When either of the following attributes associated with any Customer Item for the business entity relationship are changed:

  - Current Cumulative Start Date

  - Purchase Order Number on the Sales Order Line

- By Purchase Order Only: When the customer purchase order number on the sales order line is changed for the business entity relationship.

Perform a CUM Adjustment transaction to set the current CUM

The CUM Adjustments feature on the CUM Workbench form enables you to adjust the CUM for a particular item. You can use this feature to manually set the initial CUM figure for the item after you manually created the new CUM Key or when you cut over to the Oracle Release Management Application.

> **Note:** Cum Transactions CUM Key Adjustment concurrent program is for assigning a CUM Key ID to Oracle shipments and it should not be used for adjusting a particular CUM.

CUM Reset

Optionally adjust the CUM Key identifier on shipment transactions

When a customer resets the CUM, they can back date the CUM start date so that it is in the past. When this happens, you might need to reset the CUM Key ID on the shipments and CUM adjustment transactions that have occurred since the start of the new CUM rule. Use the CUM Transactions CUM Key Adjustment concurrent program for this. It requires a CUM start date along with some other CUM Key relevant information as parameters. The program not only resets the shipment transactions and CUM adjustment transactions that are affected, but also recalculates the CUM for the old and new CUM Keys.

Special Considerations

There are certain issues that you should be aware of when using CUM Management.

CUM Management & Sourcing Rules

When you are using the Ship to/Ship from - CUM Organization Level, you should not make use of any Sourcing Rules at the same time or you will either have to constantly manually adjust the CUM Quantity or receive CUM Discrepancy Exceptions from the Demand Processor.

Return Material Authorizations

Return Material Authorizations (RMAs) do not automatically update the CUM. If you want to adjust the CUM for an RMA, you must perform a CUM Adjustment Transaction using the CUM Management Workbench.

DSP - CUM Discrepancy Warnings

Since the two CUM Key attributes, CUM Start Date and Customer Purchase Order Number, are derived from the latest customer schedule received, changes to either of these two values will automatically result in a CUM Reset/New CUM Key Creation at the time of the next shipment. Therefore, it is recommended that you check the Demand Management Exception Report for CUM Key Discrepancy Warnings regularly. In cases where there are doubts whether the change of one of these values might be a mistake in the inbound schedule, the customer should be contacted before shipping any items for that particular schedule.

If you did ship an item with the wrong CUM Key being applied, you must first create a new CUM Key (either manually or automatically after the customer sends a new

schedule with the correct CUM relevant data) and then run the Adjust CUM Transactions CUM Key ID program.

Manual Schedule Entry

As previously mentioned, the two CUM Key attributes, CUM Start Date and Customer Purchase Order Number, are derived from the customer schedule (as opposed to other CUM Management setups like CUM Org Level, etc.) that are set up in the Processing Rules form. Because changes to either of these two values will automatically result in a CUM Reset/New CUM Key Creation at the time of the next shipment, you should be very carefully when entering these values manually. Always make sure that the entered values correspond to the current CUM Key unless you explicitly want to establish a new CUM Rule/Key.

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